AB-101

ECOLOGICAL MONITORING

AT THE FLORIDA POWER & LIGHT CO.

ST. LUCIE PLANT

ANNUAL REPORT

1977

VOLUME 2: APPENDIX

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TABLE J-1A

SCIENTIFIC AND COMMON NAMES OF FISHES
COLLECTED IN THE VICINITY OF THE ST. LUCIE PLANT
DECEMBER 1975-DECEMBER 1977

ORDER SQUALIFORMES

Orectolobidae-carpet sharks

Ginglymostoma cirratum	nurse shark

Carcharhinidae-requiem sharks

Aprionodon isodon	finetooth shark
Carcharhinus maculipinnis	spinner shark
Mustelus canis	smooth dogfish
Rhizoprionodon terraenovae	Atlantic sharpnose shark

Sphyrnidae-hammerhead sharks

Sphyrna lewini	scalloped hammerhead
S. mokarran [a]	great hammerhead
S. tiburo	bonnethead

ORDER RAJIFORMES

Rhinobatidae-guitarfishes

Rhinobatos lentiginosus	Atlantic guitarfish

Torpedinidae-electric rays

Narcine brasiliensis	lesser electric ray

Dasyatidae-stingrays

Dasyatis sabina	Atlantic stingray
D. sayi	bluntnose stingray
Gymnura micrura	smooth butterfly ray

Myliobatidae-eagle rays

Aetobatus marinari	spotted eagle ray
Myliobatis freminvillei	bullnose ray
Rhinoptera bonasus	cownose ray

Mobulidae-mantas

Manta birostris	Atlantic manta

TABLE J-1A
(continued)
SCIENTIFIC AND COMMON NAMES OF FISHES
COLLECTED IN THE VICINITY OF THE ST. LUCIE PLANT
DECEMBER 1975-DECEMBER 1977

ORDER ELOPIFORMES

Elopidae-tarpons

Elops saurus	ladyfish
Megalops atlantica[a]	tarpon

ORDER ANGUILLIFORMES

Muraenidae-morays

Gymnothorax funebris[a]	green moray
G. nigromarginatus	blackedge moray

Congridae-conger eels

Ariosoma impressa	bandtooth conger
Paraconger caudilimbatus	margintail conger

Ophichthidae-snake eels

Bascanichthys terres	sooty eel
Myrophis punctatus	speckled worm eel
Mystriophis intertinctus	spotted spoon-nose eel
Ophichtus gomesi	shrimp eel
O. ocellatus	palespotted eel

ORDER CLUPEIFORMES

Clupeidae-herrings

Brevoortia smithi	yellowfin menhaden
B. tyrannus	Atlantic menhaden
B. smithi x tyrannus	menhaden (hybrid)
Harengula humeralis	redear sardine
H. pensacolae	scaled sardine
Opisthonema oglinum	Atlantic thread herring
Sardinella anchovia	Spanish sardine

TABLE J-1A
(continued)
SCIENTIFIC AND COMMON NAMES OF FISHES
COLLECTED IN THE VICINITY OF THE ST. LUCIE PLANT
DECEMBER 1975-DECEMBER 1977

ORDER CLUPEIFORMES
(continued)

Engraulidae-anchovies

Anchoa cubana	Cuban anchovy
A. hepsetus	striped anchovy
A. lamprotaenia	bigeye anchovy
A. mitchilli	bay anchovy
A. nasuta	longnose anchovy
Anchoviella perfasciata	flat anchovy
Engraulis eurystole	silver anchovy

ORDER MYCTOPHIFORMES

Synodontidae-lizardfishes

Synodus foetens	inshore lizardfish
Trachinocephalus myops	snakefish

ORDER SILURIFORMES

Ariidae-sea catfishes

Arius felis	sea catfish
Bagre marinus	gafftopsail catfish

ORDER BATRACHOIDIFORMES

Batrachoididae-toadfishes

Porichthys porosissimus	Atlantic midshipman

ORDER LOPHIIFORMES

Antennariidae-frogfishes

Antennarius ocellatus	ocellated frogfish
Histrio histrio	sargassumfish

TABLE J-1A
(continued)
SCIENTIFIC AND COMMON NAMES OF FISHES
COLLECTED IN THE VICINITY OF THE ST. LUCIE PLANT
DECEMBER 1975-DECEMBER 1977

ORDER LOPHIIFORMES
(continued)

Ogcocephalidae-batfishes

Ogcocephalus radiatus	polka-dot batfish
Ogcocephalus sp.	batfish

ORDER GADIFORMES

Gadidae-codfishes

Urophycis sp.	hake

Ophidiidae-cusk-eels

Lepophidion sp.	cusk-eel
Ophidion grayi	blotched cusk-eel
O. holbrooki	bank cusk-eel

ORDER ATHERINIFORMES

Exocoetidae-flyingfishes and halfbeaks

Cypselurus sp.(?)[a]	flyingfish

ORDER BERYCIFORMES

Holocentridae-squirrelfishes

Holocentrus sp.	squirrelfish

ORDER GASTEROSTEIFORMES

Aulostomidae-trumpetfishes

Aulostomus maculatus	trumpetfish

Fistulariidae-cornetfishes

Fistularia tabacaria	bluespotted cornetfish

Syngnathidae-pipefishes and seahorses

Hippocampus erectus	lined seahorse
Oostethus lineatus	opossum pipefish
Syngnathus lousianae	chain pipefish
S. pelagicus	sargassum pipefish
S. springeri	bull pipefish

TABLE J-1A
(continued)
SCIENTIFIC AND COMMON NAMES OF FISHES
COLLECTED IN THE VICINITY OF THE ST. LUCIE PLANT
DECEMBER 1975-DECEMBER 1977

ORDER PERCIFORMES

Centropomidae-snooks

Centropomus undecimalis	snook

Serrandidae-sea basses

Centropristis ocyurus	bank sea bass
C. philadelphica	rock sea bass
C. striata	black sea bass
Diplectrum bivittatum	dwarf sand perch
D. formosum	sand perch
Epinephelus itajara	jewfish
E. morio	red grouper
Hypoplectrus puella	barred hamlet
Mycteroperca bonaci	black grouper
M. interstitialis	yellowmouth grouper
Serraniculus pumilio	pygmy sea bass
Serranus baldwini	lantern bass

Grammistidae-soapfishes

Rypticus saponaceus	greater soapfish
R. subbifrenatus	spotted soapfish

Priacanthidae-bigeyes

Pristigenys alta	short bigeye

Apogonidae-cardinalfishes

Apogon binotatus	barred cardinalfish
A. maculatus	flamefish
A. pseudomaculatus	twospot cardinalfish
Astrapogon alutus	bronze cardinalfish
A. puncticulatus	blackfin cardinalfish
A. stellatus	conchfish
Phaeoptyx pigmentaria	dusky cardinalfish

Pomatomidae-bluefishes

Pomatomus saltatrix	bluefish

Rachycentridae-cobias

Rachycentron canadum	cobia

TABLE J-1A
(continued)
SCIENTIFIC AND COMMON NAMES OF FISHES
COLLECTED IN THE VICINITY OF THE ST. LUCIE PLANT
DECEMBER 1975-DECEMBER 1977

ORDER PERCIFORMES
(continued)

Echeneidae-remoras

Echeneis naucrates	sharksucker

Carangidae-jacks and pompanos

Alectis crinitus	African pompano
Caranx bartholomaei	yellow jack
C. crysos	blue runner
C. hippos	crevalle jack
C. latus	horse-eye jack
Chloroscombrus chrysurus	Atlantic bumper
Decapturus punctatus	round scad
Oligoplites saurus	leatherjacket
Selar crumenophthalmus	bigeye scad
Selene vomer	lookdown
Seriola dumerili	greater amberjack
S. zonata	banded rudderfish
Trachinotus carolinus	Florida pompano
T. falcatus	permit
T. goodei	palometa
Vomer setapinnis	Atlantic moonfish

Lutjanidae-snappers

Lutjanus analis	mutton snapper
L. griseus	gray snapper
L. jocu	dog snapper
L. synagris	lane snapper
Ocyurus chrysurus	yellowtail snapper
Rhomboplites aurorubens	vermilion snapper

Lobotidae-tripletails

Lobotes surinamensis	tripletail

TABLE J-1A
(continued)
SCIENTIFIC AND COMMON NAMES OF FISHES
COLLECTED IN THE VICINITY OF THE ST. LUCIE PLANT
DECEMBER 1975-DECEMBER 1977

ORDER PERCIFORMES
(continued)

Gerreidae-mojarras	
Diapterus olisthostomus	Irish pompano
D. plumieri	striped mojarra
Eucinostomus argenteus	spotfin mojarra
E. gula	silver jenny
E. lefroyi	mottled mojarra
Gerres cinereus	yellowfin mojarra
Pomadasyidae-grunts	
Anisotremus surinamensis	black margate
A. virginicus	porkfish
Haemulon aurolineatum	tomtate
H. chrysargyreum	smallmouth grunt
H. flavolineatum	French grunt
H. parrai	sailors choice
H. plumieri	white grunt
H. sciurus	bluestriped grunt
Orthopristis chrysoptera	pigfish
Sparidae-porgies	
Archosargus probatocephalus	sheepshead
A. rhomboidalis	sea bream
Calamus bajonado	jolthead porgy
Diplodus argenteus	silver porgy
Lagodon rhomboides	pinfish
Sciaenidae-drums	
Bairdiella chrysura	silver perch
B. sanctaeluciae	striped croaker
Cynoscion nothus	silver seatrout
C. regalis	weakfish
Equetus acuminatus	high-hat
E. umbrosus	cubbyu
Larimus fasciatus	banded drum

TABLE J-1A
(continued)
SCIENTIFIC AND COMMON NAMES OF FISHES
COLLECTED IN THE VICINITY OF THE ST. LUCIE PLANT
DECEMBER 1975-DECEMBER 1977

ORDER PERCIFORMES
(continued)

Sciaenidae-drums
(continued)

Leiostomus xanthurus	spot
Menticirrhus americanus	southern kingfish
M. littoralis	Gulf kingfish
Micropogon undulatus	Atlantic croaker
Odontoscion dentex	reef croaker
Pogonias cromis	black drum
Sciaenops ocellata	red drum
Umbrina coroides	sand drum

Mullidae-goatfishes

Pseudupeneus maculatus	spotted goatfish

Pempheridae-sweepers

Pempheris schomburgki	glassy sweeper

Ephippidae-spadefishes

Chaetodipterus faber	Atlantic spadefish

Chaetodontidae-butterflyfishes

Chaetodon sedentarius[a]	reef butterflyfish
Pomacanthus arcuatus	gray angelfish
P. paru	French angelfish

Pomacentridae-damselfishes

Abudefduf saxatilis	sergeant major
Pomacentrus fuscus	dusky damselfish
P. variabilis	cocoa damselfish

Scaridae-parrotfishes

Cryptotomus roseus	bluelip parrotfish
Sparisoma chrysopterum	redtail parrotfish
S. rubripinne	redfin parrotfish

Labridae-wrasses

Doratonotus megalepis	dwarf wrasse
Lachnolaimus maximus	hogfish

Mugilidae-mullets

Mugil cephalus	striped mullet
M. curema	white mullet

TABLE J-1A
(continued)
SCIENTIFIC AND COMMON NAMES OF FISHES
COLLECTED IN THE VICINITY OF THE ST. LUCIE PLANT
DECEMBER 1975-DECEMBER 1977

ORDER PERCIFORMES
(continued)

Sphyraenidae-barracudas

Sphyraena barracuda	great barracuda
S. borealis	northern sennet
S. guachancho	guaguanche

Polynemidae-threadfins

Polydactylus virginicus	barbu

Opistognathidae-jawfishes

Opistognathus sp.	jawfish

Dactyloscopidae-sand stargazers

Dactyloscopus crossotus	bigeye stargazer

Uranoscopidae-stargazers

Astroscopus y-graecum	southern stargazer

Clinidae-clinids

Labrisomus nuchipinnis	hairy blenny
Malacoctenus triangulatus	saddled blenny
Starksia ocellata	checkered blenny
Stathmonotus hemphilli	blackbelly blenny

Blenniidae-blennies

Blennius cristatus	molly miller
B. marmoreus	seaweed blenny
Hypleurochilus aequipinnis	oyster blenny
H. bermudensis	barred blenny
H. springeri	orangespotted blenny
Hypsoblennius hentzi	feather blenny

Gobiidae-gobies

Bathygobius soporator	frillfin goby
Gobiosoma ginsburgi	seaboard goby
Lophogobius cyprinoides	crested goby
Microgobius carri	Seminole goby

Acanthuridae-surgeonfishes

Acanthurus chirurgus	doctorfish

TABLE J-1A
(continued)
SCIENTIFIC AND COMMON NAMES OF FISHES
COLLECTED IN THE VICINITY OF THE ST. LUCIE PLANT
DECEMBER 1975-DECEMBER 1977

ORDER PERCIFORMES
(continued)

Trichiuridae-cutlassfishes	
Trichiurus lepturus	Atlantic cutlassfish
Scombridae-mackerels and tunas	
Auxis thazard	frigate mackerel
Euthynnus alletteratus	little tunny
Scomberomorus cavalla	king mackerel
S. maculatus	Spanish mackerel
S. regalis	cero
Stromateidae-butterfishes	
Peprilus paru	harvestfish
P. triacanthus	butterfish
Scorpaenidae-scorpionfishes	
Scorpaena albifimbria	coral scorpionfish
S. brasiliensis	barbfish
S. grandicornis	plumed scorpionfish
S. plumieri	spotted scorpionfish
Triglidae-searobins	
Prionotus carolinus	northern searobin
P. evolans	striped searobin
P. ophryas	bandtail searobin
P. roseus[b]	bluespotted searobin
P. salmonicolor	blackwing searobin
P. scitulus	leopard searobin
P. tribulus	bighead searobin
Dactylopteridae-flying gurnards	
Dactylopterus volitans	flying gurnard

[b]Delete - specimens listed as *P. roseus* in 1976 and 1977 annual reports were reidentified as *P. salmonicolor*.

TABLE J-1A
(continued)
SCIENTIFIC AND COMMON NAMES OF FISHES
COLLECTED IN THE VICINITY OF THE ST. LUCIE PLANT
DECEMBER 1975-DECEMBER 1977

ORDER PLEURONECTIFORMES

Bothidae-lefteye flounders

Ancylopsetta quadrocellata	ocellated flounder
Bothus ocellatus	eyed flounder
B. robinsi	flounder
Citharichthys macrops	spotted whiff
C. spilopterus	bay whiff
Etropus crossotus	fringed flounder
Paralichthys albigutta	Gulf flounder
P. dentatus	summer flounder
P. lethostigma	southern flounder
P. squamilentis	broad flounder
Syacium gunteri	shoal flounder
S. micrurum	channel founder
S. papillosum	dusky flounder

Soleidae-soles

Achirus lineatus	lined sole
Gymnachirus melas	naked sole

Cynoglossidae-tonguefishes

Symphurus civitatus	offshore tonguefish
S. diomedianus	spottedfin tonguefish
S. plagiusa	blackcheek tonguefish
S. urospilus	spottail tonguefish

ORDER TETRAODONTIFORMES

Balistidae-triggerfishes and filefishes

Aluterus monoceros	unicorn filefish
A. schoepfi[a]	orange filefish
A. scriptus	scrawled filefish
Balistes capriscus	gray triggerfish
Cantherhines pullus	orangespotted filefish
Monacanthus hispidus	planehead filefish

TABLE J-1A
(continued)
SCIENTIFIC AND COMMON NAMES OF FISHES
COLLECTED IN THE VICINITY OF THE ST. LUCIE PLANT
DECEMBER 1975-DECEMBER 1977

ORDER TETRAODONTIFORMES (continued)	
Ostraciidae-boxfishes	
Lactophrys quadricornis	scrawled cowfish
L. trigonus	trunkfish
Tetraodontidae-puffers	
Canthigaster rostrata	sharpnose puffer
Sphoeroides nephelus	southern puffer
S. spengleri	bandtail puffer
S. testudineus	checkered puffer
Diodontidae-porcupinefishes	
Chilomycterus schoepfi	striped burrfish
Diodon holocanthus	balloonfish
Molidae-molas	
Mola mola[a]	ocean sunfish

[a] Observational record.

TABLE J-1

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
3-4 JANUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	1	9	1
		5	18-26	40
		1	37	36
	rock shrimp	1	9	1
	blue crab	2	66-72	48
		1	107	102
	bay anchovy	1	fragment	fragment
0900-1700	blue crab	2	33-38	5
		2	61-78	45
	shrimp	1	24	11
	striped croaker	26	53-75	151
	reef croaker	1	107	22
	tomtate	4	79-102	80
	sailors choice	1	55	4
	planehead filefish	1	83	23
		2	217-232	899
	Atlantic bumper	1	61	4
		1	112	24
	barbfish	1	54	7
	bay anchovy	1	53	2
1700-0100	shrimp	3	7-17	6
		4	20-25	29
	blue crab	3	68-73	82

TABLE J-1
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
3-4 JANUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (cont.)	reef croaker	1	101	23
	striped croaker	1	72	9
	planehead filefish	1	80	23
	Atlantic thread herring	1	fragment	fragment

TABLE J-2

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
6-7 JANUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	2	10-11	2
		5	19-27	48
	blue crab	4	73-84	139
	stone crab	1	34	10
	barbfish	2	48-54	10
	striped croaker	1	116	42
	planehead filefish	1	70	14
	Atlantic bumper	1	51	2
	tomtate	1	59	3
	shoal flounder	1	100	20
	silver jenny	1	46	2
	bay anchovy	1	51	2
	scaled sardine	1	51	2
0900-1700	blue crab	2	78-89	80
		3	103-114	269
	dwarf sand perch	1	103	21
	silver jenny	1	61	5
	bay whiff	1	fragment	fragment
	croaker	1	55	4
1700-0100	rock shrimp	1	5	1

TABLE J-3

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
10-11 JANUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	3	19-28	29
	stone crab	1	13	1
	Atlantic bumper	1	74	7
	tomtate	1	59	4
	silver jenny	1	38	1
	bandtail puffer	1	57	5
	barbfish	1	51	5
0900-1700	blue crab	2	37-53	12
		4	74-95	191
	shrimp	1	17-24	13
		1	36	35
	tomtate	1	60	5
1700-0100	shrimp	2	25	15
	lane snapper	1	56	5
	Atlantic stingray	1	155	145

TABLE J-4

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
13-14 JANUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	7	8-12	7
		11	18-27	112
	rock shrimp	2	9-13	3
	blue crab	9	66-89	372
		4	92-103	257
		2	117-147	311
	striped anchovy	1	81	6
	bandtail searobin	1	133	56
	polka-dot batfish	1	164	131
0900-1700	blue crab	6	81-107	365
	planehead filefish	1	241	433
	bank cusk-eel	1	229	91
1700-0100	blue crab	3	75-86	125
		2	92-115	186
	shrimp	1	10	1
	lined sole	2	66-74	31
	chain pipefish	1	182	2
	plumed scorpionfish	1	94	42

TABLE J-5

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
17-18 JANUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	blue crab	1	23	1
		1	74	35
		2	97-108	146
	shrimp	2	25-29	32
	rock shrimp	2	9-10	2
	Atlantic bumper	1	75	8
0900-1700	blue crab	2	69-74	54
		3	98-112	250
	Atlantic bumper	1	72	6
	tomtate	1	74	10
	porkfish	1	61	7
	spotfin mojarra	1	40	1
1700-0100	blue crab	4	79-96	207
	stone crab	1	41	24
	shrimp	2	13-18	5
	Atlantic bumper	1	67	5
	bandtail puffer	1	53	5
	spotfin mojarra	1	51	3

TABLE J-6

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
20-21 JANUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	blue crab	2	28-36	4
		7	70-83	191
		2	97-112	143
	shrimp	5	9-17	8
		3	26-29	42
	Atlantic bumper	8	51-75	32
	planehead filefish	3	75-87	58
	great barracuda	1	87	5
		1	175	48
	lookdown	1	30	1
	tomtate	1	104	28
	spottedfin tonguefish	1	61	2
	flounder (*B. robinsi*)	1	68	8
	spotted whiff	1	112	22
	silver jenny	1	55	5
0900-1700	blue crab	2	72-93	94
		1	119	118
	shrimp	1	9	1
	spiny lobster	1	11	2
	sea catfish	2	129-184	109
	Atlantic bumper	1	73	7
	planehead filefish	1	82	19
	doctorfish	1	62	9
	high-hat	1	86	14
	southern stargazer	1	199	302

TABLE J-6
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
20-21 JANUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100	shrimp	10	8-18	25
	rock shrimp	1	8	1
	blue crab	2	68-73	46
	stone crab	1	32	12
	Atlantic bumper	11	52-81	67
	silver jenny	5	47-73	26
	yellowfin mojarra	1	67	9
	dwarf sand perch	3	99-103	61
	tomtate	1	47	2
		1	89	16
	high-hat	2	76-91	26
	blackcheek tonguefish	2	74-99	17
	southern stargazer	1	171	206

TABLE J-7

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
24-25 JANUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	55	9-30	220[a]
	blue crab	1	34	4
		2	62-85	60
	Atlantic bumper	29	50-80	138
		9	85-122	152
	sea catfish	2	149-157	96
	high-hat	2	78-108	41
	lined sole	2	71-77	27
	blackcheek tonguefish	1	106	15
	bay whiff	1	70	5
	great barracuda	2	71-72	5
	bigeye anchovy	2	66-71	8
	flat anchovy	2	82-83	12
	silver perch	1	107	23
	striped croaker	1	110	31
	silver jenny	1	49	2
	crevalle jack	1	230	287
	planehead filefish	1	93	37
	bandtail puffer	1	55	6
	puffer (*Lagocephalus* sp.)	1	34	2
	sailors choice	1	123	57
	tomtate	1	fragment	fragment
	bank cusk-eel	1	fragment	fragment

TABLE J-7
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
24-25 JANUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700	blue crab	5	82-106	313
	shrimp	1	16	3
	Atlantic bumper	35	50-76	168
		6	83-112	96
	redtail parrotfish	2	115-138	117
	bigeye anchovy	1	77	6
	bay anchovy	1	52	1
	rock sea bass	1	178	154
	Atlantic spadefish	1	141	159
	planehead filefish	1	74	17
	black margate	1	52	5
	scrawled cowfish	1	fragment	fragment
1700-0100	shrimp	3	10-18	5
		1	30	fragment
	Atlantic bumper	92	41-87	392
		6	90-132	113
	flat anchovy	7	82-90	40
	bigeye anchovy	2	68-72	8
	high-hat	3	79-87	39
	Atlantic midshipman	2	62-63	7
		1	142	53
	redear sardine	2	107-126	62
	sea catfish	2	132-138	63
	scrawled cowfish	1	32	4
		1	104	54

TABLE J-7
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
24-25 JANUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (cont.)	southern puffer	1	32	2
	plumed scorpionfish	1	95	40
	barbfish	1	41	3
	hogfish	1	122	81
	lined sole	1	42	3
	butterfish	1	133	51
	porkfish	1	50	3
	silver jenny	1	88	19
	yellowfin mojarra	1	134	56

[a] Estimated (fragments).

TABLE J-8

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
27-28 JANUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	122	11-21	230
	blue crab	2	53-59	24
		1	104	82
	Atlantic bumper	21	49-80	84
		8	83-125	113
	high-hat	3	76-82	36
		1	123	47
	sea catfish	3	131-133	86
	Atlantic menhaden	1	93	14
		1	fragment	fragment
	Spanish sardine	2	92-121	35
	Atlantic thread herring	1	71	6
	flat anchovy	1	82	5
	dwarf sand perch	2	103-106	48
	southern puffer	2	43-53	7
	sharksucker	1	147	96
	barbfish	1	48	3
	scrawled cowfish	1	51	3
	yellowfin mojarra	1	179	186
	spotfin mojarra	1	46	1
	silver jenny	1	48	2
	tomtate	1	92	19
	lined sole	1	46	2
	reef croaker	1	82	21
	striped croaker	1	136	62

TABLE J-8
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
27-28 JANUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900 (cont.)	leatherjacket	1	141	24
	lookdown	1	136	68
	Atlantic moonfish	1	108	30
0900-1700	shrimp	5	10-12	4
	blue crab	2	100-110	163
	Atlantic bumper	8	44-68	47
		2	106-132	47
	striped burrfish	1	75	46
		1	192	302
	southern puffer	1	206	313
	planehead filefish	1	255	604
	great barracuda	1	282	188
	lookdown	1	149	87
	sea catfish	1	149	39
	Atlantic thread herring	1	76	7
	silver jenny	1	69	8
	margintail conger	1	404	94
	summer flounder	1	240	301
1700-0100	shrimp	14	10-16	14
		2	20-29	24
	blue crab	1	121	99
	Atlantic bumper	93	49-80	88
		7	86-106	90
	Atlantic thread herring	4	48-79	19

TABLE J-8
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
27-28 JANUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (cont.)	bay anchovy	2	53-54	4
	harvestfish	2	95-98	86
	sergeant major	2	35-66	16
	frillfin goby	1	54	4
	Atlantic spadefish	1	109	93
	crevalle jack	1	140	62
	Atlantic moonfish	1	104	27
	yellowfin mojarra	1	105	36
	spotfin mojarra	1	62	5
	dwarf sand perch	1	105	23
	redear sardine	1	92	15
	flounder (*B. robinsi*)	1	80	12
	chain pipefish	1	197	3
	southern puffer	1	37	3

TABLE J-9

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
31 JANUARY-1 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	3	9-15	3
		1	29	19
	blue crab	1	72	28
	striped burrfish	1	196	256
	planehead filefish	1	25	1
	Atlantic thread herring	1	48	2
	oyster blenny	1	49	3
0900-1700	blue crab	3	70-88	106
		1	155	207
1700-0100	shrimp	27	9-21	54
		1	32	23
	blue crab	2	65-81	60
	stone crab	1	12	1
	scrawled cowfish	2	91-92	78
	sea catfish	1	170	56
	striped anchovy	1	86	8
	southern puffer	1	55	7
	flounder (*B. robinsi*)	1	64	5
	spotfin mojarra	1	51	3
	reef croaker	1	104	21

TABLE J-10

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
3-4 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700	shrimp	3	7-12	3
	blue crab	1	100	56
	high-hat	55	73-145	1331
	Atlantic bumper	38	43-101	267
	planehead filefish	12	71-129	556
		6	215-250	2475
	oyster blenny	17	25-72	63
	reef croaker	12	74-122	255
	Atlantic spadefish	8	54-79	173
		1	213	609
	porkfish	8	90-139	495
	sailors choice	7	94-162	480
	tomtate	6	102-138	287
	seaweed blenny	5	41-71	19
	hariy blenny	3	127-132	146
	blenny (*Labrisomus* sp.)	2	52-61	9
	saddled blenny	1	45	2
	barred blenny	1	40	2
	twospot cardinalfish	4	53-60	24
	flamefish	3	63-74	31
	frillfin goby	4	43-59	15
	cocoa damselfish	3	61-76	45
	spotted scorpionfish	2	130-153	230
	black margate	1	118	56

TABLE J-10
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
3-4 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700 (cont.)	lookdown	1	197	256
	striped burrfish	1	111	104
	striped anchovy	1	96	9
	anchovy	1	31	1
	spotted soapfish	1	82	17
	spotted whiff	1	110	26
	Atlantic thread herring	1	81	9
	dwarf sand perch	1	108	14
1700-0100	shrimp	8	10-18	12
		1	21	9
	rock shrimp	1	8	1
	blue crab	1	82	44
	Atlantic bumper	7	60-96	46
	oyster blenny	5	41-62	19
	high-hat	5	105-145	280
	porkfish	1	35	1
		3	86-101	109
	sailors choice	2	92-99	53
	twospot cardinalfish	2	48-58	9
	striped anchovy	2	59-94	13
	anchovy	1	36	1
	planehead filefish	1	214	377
	checkered puffer	1	164	178
	sharpnose puffer	1	47	6

TABLE J-10
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
3-4 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (cont.)	Atlantic cutlassfish	1	377	28
	sea catfish	1	146	32
	silver porgy	1	97	41
	redear sardine	1	93	13
	horse-eye jack	1	206	231
	Atlantic stingray	1	133	73
0100-0900	blue crab	1	29	2
	stone crab	1	16	1
	sailors choice	2	130-137	138
	porkfish	1	107	42
	reef croaker	1	121	35
	bandtail puffer	1	78	14

TABLE J-11

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
7-8 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	11	9-18	18
	blue crab	1	82	46
	sea catfish	1	182	79
	silver jenny	1	86	18
	spotfin mojarra	1	51	3
	lined seahorse	1	154	15
	bay anchovy	1	46	1
	bluelip parrotfish	1	72	10
0900-1700	shrimp	3	9-17	5
	rock shrimp	1	11	1
	blue crab	2	58-62	30
	stone crab	1	31	10
	Atlantic bumper	1	60	4
	southern puffer	1	45	4
	checkered puffer	1	174	213
	spotted whiff	1	135	44
	frillfin goby	1	36	1
1700-0100	shrimp	29	7-16	32
	rock shrimp	1	10	1
	doctorfish	1	184	268
	spot	1	39	1

TABLE J-11
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
7-8 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (cont.)	striped burrfish	1	152	193
	lined sole	1	93	36
	sea catfish	1	146	36
	spotted whiff	1	100	22
	bay anchovy	1	59	2
	spotfin mojarra	1	44	2
	Atlantic midshipman	1	64	4

TABLE J-12

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
10-11 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700	shrimp	13	11-21	55
		2	28-30	42
	blue crab	1	22	1
	Atlantic bumper	4	47-57	9
	Cuban anchovy	3	48-65	5
	striped anchovy	1	77	8
	anchovy	1	31	1
	silver seatrout	1	197	118
	checkered puffer	1	184	227
	Florida pompano	1	175	126
	Atlantic spadefish	1	78	31
	trunkfish (*Lactophrys* sp.)	1	22	1
1700-0145	shrimp	75	9-20	171
		22	21-33	327
	rock shrimp	1	9	1
	blue crab	1	41	6
		1	82	46
	Atlantic bumper	38	49-86	108
	bay anchovy	8	52-63	20
	Cuban anchovy	4	52-65	9
	striped anchovy	3	83-86	22
	anchovy	3	34-36	1
	Atlantic midshipman	2	50-78	9
		3	102-126	66

TABLE J-12
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
10-11 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0145 (cont.)	Atlantic thread herring	8	64-79	49
	Spanish sardine	6	104-141	135
	sea catfish	4	141-153	150
	lined sole	4	71-88	82
	blackcheek tonguefish	1	67	4
	spottedfin tonguefish	1	104	13
	offshore tonguefish	2	116-121	35
	bay whiff	1	93	15
	flounder (*B. robinsi*)	1	59	6
	dwarf sand perch	3	101-106	69
	flying gurnard	2	39-46	5
	palespotted eel	1	292	16
	shrimp eel	3	362-374	123
	crevalle jack	1 1	142 265	65 269
	Atlantic moonfish	1	75	22
	Atlantic cutlassfish	1	721	258
	doctorfish	1	111	49
	spotted soapfish	2	64-71	15
	cocoa damselfish	2	56	18
	southern puffer	1	49	6
	striped burrfish	1	99	70
	scrawled cowfish	1	61	17
	barred hamlet	1	71	10
	barbfish	1	41	3

TABLE J-12
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
10-11 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0145-0900	shrimp	189	8-22	403
		5	24-30	72
	rock shrimp	2	11	2
	blue crab	2	39-49	11
		3	68-90	111
	Atlantic bumper	17	48-64	47
	Cuban anchovy	4	42-62	6
	bay anchovy	4	54-57	8
	striped anchovy	3	88-94	29
	anchovy	2	32-36	1
	lined sole	5	75-98	117
	barbfish	2	40-77	18
		1	176	183
	spotted scorpionfish	1	103	64
	Atlantic thread herring	3	67-114	37
	dwarf sand perch	3	95-108	70
	tomtate	2	62-63	12
	barred hamlet	1	73	12
	flying gurnard	1	42	2
	goby	1	39	1
	Atlantic spadefish	1	73	22
	striped burrfish	1	109	96
	Atlantic midshipman	1	94	12
	planehead filefish	1	25	1

TABLE J-12
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
10-11 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0145-0900 (cont.)	crevalle jack	1	251	326
	bank cusk-eel	1	240	126
	silver seatrout	1	180	89
	inshore lizardfish	1	230	fragment
	Atlantic cutlassfish	1	846	512

TABLE J-13

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
14-15 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	64	8-22	138
		1	31	21
	blue crab	4	31-47	15
		1	60	14
	longnose anchovy	1050[a]	43-60	1229[a]
	Cuban anchovy	26[a]	41-54	29[a]
	silver anchovy	19[a]	54-66	41[a]
	striped anchovy	15[a]	64-97	84[a]
	bay anchovy	11[a]	55-59	27[a]
	anchovy	11[a]	22-28	1[a]
	Spanish sardine	10	33-47	8
	silver seatrout	6	192-210	718
	Atlantic bumper	3	48-62	8
		1	144	38
	butterfish	3	25-31	3
	flounder	3	16-20	1
	lined sole	1	73	17
	naked sole	1	109	36
	blackcheek tonguefish	1	133	28
	planehead filefish	1	46	4
		1	252	650
	Atlantic cutlassfish	1	218	4
		1	451	81
	striped burrfish	2	116-186	416
	scrawled cowfish	1	22	2
		2	55-71	33

TABLE J-13
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
14-15 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900 (cont.)	checkered puffer	1	229	404
	chain pipefish	1	149	2
	flamefish	1	57	6
	oyster blenny	1	48	3
	sand drum	1	50	2
	sea catfish	1	141	29
	dwarf sand perch	1	108	26
	blotched cusk-eel	1	184	45
	harvestfish	1	110	65
	leopard searobin	1	178	64
	mutton snapper	1	285	559
	barred hamlet	1	76	13
	barbfish	1	154	128
0900-1700	shrimp	5	8-18	7
		1	27	15
	blue crab	3	40-66	52
	longnose anchovy	697[a]	42-58	710[a]
	silver anchovy	12[a]	64-69	38[a]
	Cuban anchovy	8[a]	46-48	7[a]
	bay anchovy	8[a]	58-59	16[a]
	striped anchovy	4[a]	88	34[a]

TABLE J-13
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
14-15 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700 (cont.)	Atlantic bumper	37	49-82	171
		8	84-110	123
	Spanish sardine	23	30-46	14
		2	51-70	5
	Atlantic thread herring	2	79-82	17
	Atlantic spadefish	2	105-116	185
	bullnose ray	1	284	339
		1	380	687
	flounder (*B. robinsi*)	1	79	11
	flounder (bothid)	2	18-21	1
	southern puffer	1	91	30
	checkered puffer	1	194	240
	striped burrfish	1	139	150
	twospot cardinalfish	1	54	5
	planehead filefish	1	240	446
	barbfish	1	160	147
	silver seatrout	1	192	104
	crevalle jack	1	157	81
	reef croaker	1	89	16
	sailors choice	1	66	9
	tomtate	1	63	6
	butterfish	1	35	1
	blackedge moray	1	297	62

TABLE J-13
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
14-15 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100	shrimp	38	9-20	93
		2	29-30	41
	blue crab	2	76-77	62
		1	172	210
	longnose anchovy	134	47-65	154
	Cuban anchovy	10	48-59	12
	bay anchovy	4	53-56	7
	silver anchovy	2	62-64	5
	silver seatrout	4	189-214	491
	Spanish sardine	2	44-49	3
		1	128	27
	Atlantic bumper	2	84-139	53
	crevalle jack	1	254	322
	scrawled cowfish	1	64	23
	butterfish	1	23	1
	dwarf sand perch	1	102	19
	oyster blenny	1	40	2

[a] Calculated from a subsample.

TABLE J-14

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
17-18 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	5	8-10	4
	blue crab	4	35-48	23
	stone crab	1	19	2
	planehead filefish	2	239-252	980
	silver seatrout	2	194-195	225
	Cuban anchovy	1	50	2
	anchovy	2	48-53	3
	dwarf sand perch	1	100	18
	lined sole	1	79	21
	surgeonfish	1	20	1
0900-1700	blue crab	1	63	26
		2	157-160	473
	bigeye anchovy	1	71	5
	striped anchovy	1	54	2
	striped burrfish	1	100	89
	dusky flounder	1	119	36
1700-0100	shrimp	18	9-16	22
	rock shrimp	1	11	1
	blue crab	4	82-88	168
	stone crab	1	14	1
	longnose anchovy	3	47-53	2
	bay anchovy	1	59	1

TABLE J-14
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
17-18 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (cont.)	anchovy (*Engraulis* sp.)	2	69-73	4
	silver seatrout	2	206-215	271
	saddled blenny	1	46	2
	bonnethead	1	405	252
	sea catfish	1	136	29
	lined sole	1	71	13
	spotted whiff	1	107	19
	striped croaker	1	97	21

TABLE J-15

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
22-23 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-1000	shrimp	7	9-14	8
		1	20	6
		1	36	29
	blue crab	2	68-73	39
	longnose anchovy	122	46-58	149
	Cuban anchovy	36	47-69	61
	bay anchovy	21	52-60	38
	striped anchovy	4	71-88	26
	Atlantic thread herring	4	75-89	25
	Spanish sardine	1	55	1
	Atlantic bumper	2	53-55	3
	weakfish	1	214	148
	Atlantic spadefish	1	93	41
	leopard searobin	1	114	21
	tomtate	1	69	8
	striped mojarra	1	46	2
1000-1700	blue crab	3	53-72	49
	shrimp	1	10	1
	longnose anchovy	192	43-61	208
	bay anchovy	18	51-58	33
	Cuban anchovy	15	37-70	21
	striped anchovy	4	66-94	28
	silver anchovy	1	62	1
	Atlantic thread herring	29	72-94	224

TABLE J-15
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
22-23 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1000-1700 (cont.)	Spanish sardine	25	33-49	24
		1	90	9
	bullnose ray	1	344	530
	crevalle jack	1	240	294
	silver seatrout	1	195	106
1700-0100	shrimp	3	8-13	3
		2	23-24	20
	longnose anchovy	152	37-61	177
	bay anchovy	77	51-63	147
	Cuban anchovy	39	46-70	79
	striped anchovy	2	63-65	6
		1	101	13
	silver anchovy	2	62-66	3
	Spanish sardine	4	43-47	4
	crevalle jack	4	230-249	1255
	butterfish (*Peprilus* sp.)	3	22-25	1
	Atlantic bumper	2	57-58	7
	checkered puffer	1	154	140
		1	208	331
	barbfish	1	144	135
	bay whiff	1	106	26

TABLE J-16

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
24-25 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	11	9-13	11
		2	20-28	22
	blue crab	1	50	8
		1	99	76
	longnose anchovy	74	43-58	88
	bay anchovy	41	48-61	75
	Cuban anchovy	24	45-69	44
	spot	2	46-50	6
	silver jenny	1	56	5
0900-1700	longnose anchovy	46	35-57	39
	bay anchovy	12	51-58	19
	Cuban anchovy	10	51-69	21
	striped anchovy	1	92	10
	crevalle jack	2	238-240	616
		1	361	1047
	Atlantic bumper	2	55-70	10
	oyster blenny	1	51	4
	mojarra (*Diapterus* sp.)	1	43	3
1700-0100	shrimp	4	9-17	9
	blue crab	1	46	7
	longnose anchovy	65	42-57	78
	Cuban anchovy	33	45-73	65
	bay anchovy	24	47-62	45

TABLE J-16
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
24-25 FEBRUARY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (cont.)	silver anchovy	1	73	3
	Spanish sardine	1	45	1
	silver jenny	3	47-65	14
	Irish pompano	2	49-65	12
	spotfin mojarra	1	118	39
	Atlantic bumper	2	50-65	7
	spot	1	47	2
	crevalle jack	1	235	305

TABLE J-17

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
28 FEBRUARY-1 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	blue crab	1	63	15
	longnose anchovy	70	42-62	79
	bay anchovy	34	50-67	62
	Cuban anchovy	9	50-65	14
	Spanish sardine	3	50-54	6
	Atlantic bumper	1	74	8
	bronze cardinalfish	1	35	2
	Atlantic midshipman	1	60	3
	eyed flounder	1	72	9
	spotfin mojarra	1	52	2
0900-1700	blue crab	1	101	96
	longnose anchovy	255	47-62	362
	bay anchovy	65	53-64	134
	Cuban anchovy	23	49-70	54
	bigeye anchovy	7	63-75	30
	striped anchovy	1	67	4
	silver anchovy	1	69	3
	Atlantic thread herring	46	70-94	359
	Spanish sardine	31	42-57	41
		2	86-88	19
	silver seatrout	3	191-220	397
	Atlantic bumper	2	79-82	16
	crevalle jack	2	244-262	692
	butterfish	1	24	1

TABLE J-17
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
28 FEBRUARY-1 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100	shrimp	12	9-21	24
		1	31	21
	blue crab	1	68	28
		1	164	241
	stone crab	1	18	2
		1	62	59
	longnose anchovy	54	46-59	60
	Cuban anchovy	11	50-66	22
	bay anchovy	8	52-59	15
	silver anchovy	1	63	2
	Spanish sardine	1	52	2
	Atlantic thread herring	1	75	7
	crevalle jack	2	236-254	637
	Atlantic bumper	1	53	3
	Atlantic midshipman	1	169	79
	silver jenny	1	65	8
	hake (*Urophycis* sp.)	1	52	2

TABLE J-18

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
3-4 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	3	9-14	4
		1	31	18
	stone crab	1	19	3
	blue crab	1	103	84
	longnose anchovy	52	45-57	35
	bay anchovy	12	52-58	21
	Cuban anchovy	6	48-67	10
	bigeye anchovy	1	63	3
	crevalle jack	1	230	291
0900-1700	shrimp	2	11-14	3
	longnose anchovy	136	46-60	197
	bay anchovy	17	49-61	31
	Cuban anchovy	9	63-71	28
	bigeye anchovy	2	72	11
	silver anchovy	1	65	2
	Atlantic thread herring	9	70-100	78
	Spanish sardine	2	44-47	2
		1	92	9
	silver seatrout	8	198-220	1191
	weakfish	1	195	125
	Atlantic bumper	3	62-70	15
	lookdown	1	118	51
	crevalle jack	2	237-259	665

TABLE J-18
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
3-4 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700 (continued)	planehead filefish	1	250	564
	bay whiff	1	106	21
	silver jenny	1	56	4
1700-0100	shrimp	6	9-14	8
		9	19-27	90
		2	30-35	44
	rock shrimp	1	9	1
	blue crab	1	30	2
		1	76	32
	longnose anchovy	20	42-60	24
	Cuban anchovy	4	54-69	10
	bay anchovy	1	54	2
	sergeant major	1	61	13

TABLE J-19

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
7-8 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	blue crab	2	22-24	2
		2	83-105	148
	stone crab	1	17	2
	shrimp	2	14-15	4
		1	34	34
	longnose anchovy	7	48-59	9
	Cuban anchovy	1	54	1
	Spanish sardine	2	47-48	3
	crevalle jack	5	244-264	1725
		1	345	791
	butterfish	1	27	2
0900-1700	longnose anchovy	7	41-54	7
	Cuban anchovy	3	49-67	5
	bay anchovy	3	54-59	5
1700-0100	shrimp	2	13-14	4
		1	32	22
	blue crab	1	98	62
	longnose anchovy	9	47-57	11
	Cuban anchovy	3	51-67	6
	bay anchovy	3	55-56	6
	Spanish sardine	1	44	1
	crevalle jack	2	238-240	642
		1	362	804
	bandtail puffer	2	84-91	38

TABLE J-19
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
7-8 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (continued)	planehead filefish	1	101	37
	striped croaker	1	69	8
	sailors choice	1	52	4
	lined seahorse	1	67	1

TABLE J-20

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
10-11 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	4	10-12	3
		5	21-29	59
	rock shrimp	1	9	1
	blue crab	1	91	53
	longnose anchovy	18	46-58	24
	bay anchovy	4	49-55	5
	Cuban anchovy	1	55	1
	Spanish sardine	1	41	1
	lined seahorse	1	79	3
	Atlantic bumper	1	79	8
0900-1700	longnose anchovy	958[a]	43-58	1102[a]
	bay anchovy	572[a]	49-60	905[a]
	Cuban anchovy	40[a]	52-62	54[a]
	bigeye anchovy	20[a]	68-74	77[a]
	striped anchovy	7[a]	67	20[a]
	silver anchovy	7[a]	68	11[a]
	Spanish sardine	226	43-92	438
	Atlantic thread herring	60	58-85	434
	Atlantic bumper	38	50-75	113
	striped croaker	11	61-82	92
	silver seatrout	5	184-212	608
	tomtate	4	66-76	37
	Irish pompano	3	62-81	23
	silver porgy	1	31	1

TABLE J-20
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
10-11 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700 (continued)	sand drum	1	64	5
	bluespotted cornetfish	1	96	1
	butterfish	1	25	1
	spotfin mojarra	1	50	3
	oyster blenny	1	29	1
1700-0130	shrimp	5	21-32	80
	blue crab	1	96	65
	longnose anchovy	77	45-60	82
	bay anchovy	28	54-62	50
	Cuban anchovy	3	60-67	8
	Spanish sardine	8	43-76	17
	southern stargazer	1	199	357
	offshore tonguefish	1	118	17
	lined sole	1	65	3
	Irish pompano	1	76	13
	striped croaker	1	68	7
	mullet	1	28	1

[a] Calculated from a subsample.

TABLE J-21

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
14-15 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	1	11	1
		6	18-25	45
		1	34	28
	blue crab	1	63	15
	crevalle jack	1	274	386
		1	374	895
	spotted whiff	2	93-106	34
	lined sole	1	57	7
	longnose anchovy	2	49-57	5
	silver seatrout	1	212	165
	tomtate	1	62	6
	sand drum	1	54	3
0900-1700	shrimp	3	18-23	23
	blue crab	1	67	22
	stone crab	1	16	2
	longnose anchovy	2	45-57	2
	bay anchovy	1	55	2
	Atlantic bumper	1	65	4
	crevalle jack	1	236	259
	bandtail puffer	1	84	15
	chain pipefish	1	300	12
	lined seahorse	1	105	4
	eyed flounder	1	74	9

TABLE J-21
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
14-15 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100	shrimp	5	14-21	31
		2	26-34	43
	blue crab	1	64	17
		1	173	194
	stone crab	1	29	8
	longnose anchovy	8	51-61	14
	bigeye anchovy	1	65	4
	crevalle jack	1	251	321
		1	364	890
	lined sole	2	71-92	57
	tomtate	2	72-86	24
	spotfin mojarra	1	51	3
	lane snapper	1	46	3
	bandtail puffer	1	59	8
	Atlantic midshipman	1	121	31

TABLE J-22

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
17-18 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700	shrimp	1	10	1
	spotfin mojarra	12	36-73	63
	silver jenny	2	37-52	6
	longnose anchovy	7	40-57	8
	Cuban anchovy	4	54-68	11
	bigeye anchovy	4	65-70	15
	spot	3	56-64	19
	Spanish sardine	1	55	2
	Atlantic thread herring	1	80	9
	bandtail puffer	1	81	22
	crevalle jack	1	370	892
	Atlantic spadefish	1	128	109
	sea catfish	1	139	39
	lined sole	1	83	16
	dusky flounder	1	114	34
1700-0100	shrimp	1	9	1
		1	22	9
	blue crab	1	65	21
	silver jenny	39	41-77	226
	spotfin mojarra	5	33-64	17
	lined sole	2	46-61	19
		2	73-90	46
	mullet	2	28-30	1

TABLE J-22
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
17-18 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (continued)	longnose anchovy	2	49-54	3
	spot	1	52	3
	northern searobin	1	56	4
	Atlantic spadefish	1	62	4
	crevalle jack	1	370	890
0100-0900	shrimp	1	11	1
		3	22-24	31
	blue crab	1	71	28
		1	159	181
	silver jenny	67	37-78	354
	spotfin mojarra	18	35-58	36
	crevalle jack	1	267	358
		3	375-386	2932
	Atlantic bumper	1	71	6
	pinfish	1	25	1
	mullet	1	29	1
	Irish pompano	1	61	6
	sea catfish	1	148	48
	lined sole	1	48	6
	eyed flounder	1	85	15
	spotted whiff	1	127	32

TABLE J-23

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
21-22 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	3	10-14	3
		4	20-24	37
	blue crab	1	70	26
		1	102	72
	silver jenny	7	65-83	59
	spotfin mojarra	1	52	3
	Atlantic bumper	5	56-85	33
	crevalle jack	2	376-380	1790
	longnose anchovy	4	54-56	6
	Atlantic thread herring	1	76	8
	bay whiff	3	84-123	62
	mullet	2	27-31	1
	bandtail puffer	1	87	21
	seaweed blenny	1	59	4
0900-1700	blue crab	2	30-65	32
	Atlantic bumper	188	53-111	1861
	crevalle jack	1	246	311
	silver jenny	125	52-91	1199
	spotfin mojarra	3	39-82	24
	Spanish sardine	19	51-65	68
		2	105	39
	Atlantic thread herring	14	74-95	142

TABLE J-23
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
21-22 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700 (continued)	longnose anchovy	9	52-60	17
	reef croaker	1	95	18
	sailors choice	1	82	17
	spotted scorpionfish	1	84	29
	silver porgy	1	32	1
1700-0100	blue crab	1	51	11
	spiny lobster	1	6	1
	silver jenny	7	50-76	55
	spotfin mojarra	1	73	9
	mottled mojarra	1	43	2
	Atlantic bumper	3	69-78	24
	crevalle jack	1	352	800
	longnose anchovy	2	49-61	4
	bandtail puffer	2	61-79	23
	lined sole	1	39	3
	silver porgy	1	31	1
	mullet	1	29	1

TABLE J-24

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
24-25 MARCH

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	35	5-17	59
		14	18-29	162
		4	31-33	85
	rock shrimp	1	10	6
	blue crab	2	26-29	4
		1	62	15
		1	100	82
	stone crab	2	27-28	13
	silver jenny	17	44-73	115
	spotfin mojarra	2	42-53	5
	Atlantic bumper	4	64-73	22
	crevalle jack	2	241-249	588
	Atlantic spadefish	3	128-138	418
	longnose anchovy	2	51-57	3
	Cuban anchovy	1	65	3
	planehead filefish	1	230	400[a]
	northern searobin	1	59	5
	bay whiff	1	109	25
	spotted whiff	1	107	22
	bandtail puffer	1	87	19
0900-1700	shrimp	2	8-12	2
		1	32	24
	blue crab	1	106	92
		1	159	247

TABLE J-24
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
24-25 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700 (continued)	silver jenny	188	43-114	1689
	spotfin mojarra	18	57-87	156
	mottled mojarra	3	38-42	4
	Irish pompano	1	61	6
	longnose anchovy	43	50-61	33
	bay anchovy	1	54	2
	Spanish sardine	21	46-67	51
	Atlantic thread herring	9	69-90	75
	Atlantic bumper	2	62-78	13
	reef croaker	2	83-118	56
	spot	1	32	1
	striped croaker	1	110	30
	sailors choice	1	49	4
	mullet	1	29	1
	harvestfish	1	126	67
	butterfish	1	40	3
1700-0100	shrimp	1	15	3
	rock shrimp	1	6	1
	blue crab	1	101	63
	silver jenny	108	39-94	856
	spotfin mojarra	14	37-62	41
	mottled mojarra	5	35-44	7
	Irish pompano	1	55	5

TABLE J-24
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
24-25 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (continued)	crevalle jack	1	235	267
		1	390	1002
	longnose anchovy	2	52-56	3
	Spanish sardine	1	47	1
	lined seahorse	1	76	5
	silver porgy	1	30	1

[a] Estimated.

TABLE J-25

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
28-29 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	2	11-13	2
		1	20	7
		1	31	19
	blue crab	1	98	78
	spotfin mojarra	3	39-57	6
	mottled mojarra	1	40	1
	silver jenny	1	66	7
	bay whiff	2	95-99	32
	crevalle jack	1	372	816
	dwarf sand perch	1	93	18
0900-1700	stone crab	1	17	2
	silver jenny	47	62-103	489
	spotfin mojarra	1	37	1
		2	62-90	20
	mottled mojarra	1	32	1
	oyster blenny	1	47	3
	pinfish	1	34	1
	bay whiff	1	38	1
1700-0100	shrimp	8	9-15	13
		6	18-27	60
		1	32	27
	blue crab	1	168	286
	stone crab	1	16	1

TABLE J-25
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
28-29 MARCH 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (continued)	silver jenny	14	49-88	113
	spotfin mojarra	4	37-74	17
	Spanish sardine	2	48-49	3
	Atlantic bumper	1	76	7
	spotted whiff	1	117	36
	lined sole	1	76	22
	longnose anchovy	1	55	2
	leopard searobin	1	59	5
	searobin	1	51	3

TABLE J-26

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
31 MARCH-1 APRIL

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	blue crab	1	27	1
		2	62-99	93
	silver jenny	5	56-72	27
	spotfin mojarra	3	36-55	7
	crevalle jack	2	253-262	777
	pinfish	1	43	2
	longnose anchovy	1	53	1
0900-1700	silver jenny	18	47-76	110
	spotfin mojarra	6	37-59	15
	sand drum	2	50-56	6
	crevalle jack	1	262	342
	lane snapper	1	54	5
1700-0230	stone crab	3	15-26	12
	shrimp	2	9-15	3
	silver jenny	24	44-83	158
	spotfin mojarra	3	47-61	11
	longnose anchovy	3	56-57	5
	Cuban anchovy	1	68	2
	sand drum	1	60	4
	pinfish	1	34	1
	Atlantic bumper	1	92	14
	tomtate	1	64	6
	bighead searobin	1	131	44

TABLE J-27

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
11-12 APRIL 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700	shrimp	7	10-16	13
		7	20-30	68
	blue crab	3	6-35	5
		3	68-95	138
	silver jenny	211	47-108	1850
	spotfin mojarra	21	35-68	41
		1	110	33
	mottled mojarra	1	42	2
	Irish pompano	1	58	6
	longnose anchovy	6	54-59	11
	Cuban anchovy	1	56	2
	Spanish sardine	2	67	6
	pinfish	4	35-62	13
	ocellated frogfish	1	239	982
	jawfish	1	112	33
	pygmy sea bass	1	53	4
	bank cusk-eel	1	209	80
	orange filefish	1	50	1
	Atlantic bumper	1	67	6
	sand drum	1	71	6
	blackcheek tonguefish	1	137	26
	spotted whiff	1	86	12
	bay whiff	1	88	12
	eyed flounder	1	54	3

TABLE J-27
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
11-12 APRIL 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100	shrimp	14	9-16	17
		1	23	10
	blue crab	1	31	3
		3	83-101	204
	stone crab	1	58	74
	pinfish	28	30-47	40
	silver jenny	22	38-78	96
	spotfin mojarra	12	35-54	21
	silver porgy	6	32-35	8
	Atlantic bumper	4	62-91	31
	crevalle jack	1	267	278
		2	354-381	1844
	spotted whiff	5	96-114	122
	flounder (*B. robinsi*)	3	37-44	5
	fringed flounder	2	98-111	45
	eyed flounder	1	53	4
	offshore tonguefish	1	130	23
	lined sole	1	74	16
	pigfish	2	38-40	4
	tomtate	1	116	40
	longnose anchovy	2	55-58	4
	eel (congrid)	1	fragment	fragment
	bluelip parrotfish	1	66	6
	dusky cardinalfish	1	41	2
	planehead filefish	1	223	387
	barbfish	1	74	17

TABLE J-27
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
11-12 APRIL 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (continued)	leopard searobin	1	147	45
	northern searobin	1	45	2
	bandtail puffer	1	87	20
	lane snapper	1	52	4
	lined seahorse	1	62	2
0100-0900	shrimp	4	10-19	13
	blue crab	2	106-116	185
	pinfish	14	26-48	21
	crevalle jack	1	358	858
	lined sole	1	72	22

TABLE J-28

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
14-15 APRIL 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	2	fragments	fragments
		1	16	4
	pinfish	17	27-42	67
	silver jenny	14	35-78	69
	spotfin mojarra	4	42-44	7
	longnose anchovy	4	56-57	7
	searobin	3	54-60	12
	bay whiff	3	45-94	21
	crevalle jack	3	249-364	1640
	Atlantic bumper	2	80-97	27
	dwarf sand perch	1	66	5
	Spanish sardine	1	80	6
0900-1700	silver jenny	14	37-78	104
	spotfin mojarra	4	39-62	9
	Atlantic bumper	8	67-88	62
	pinfish	6	29-41	8
	silver porgy	2	31	2
	longnose anchovy	4	55-57	7
	bandtail puffer	2	73	25
1700-0100	shrimp	5	10-12	4
	blue crab	1	30	2
		1	151	145
	stone crab	1	36	16

TABLE J-28
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
14-15 APRIL 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (continued)	spotfin mojarra	16	37-49	30
	silver jenny	9	39-100	80
	bay whiff	4	33-60	9
		1	105	22
	pinfish	5	34-41	9
	silver porgy	1	37	2
	sheepshead	1	246	685
	crevalle jack	1	235	245
	sailors choice	1	56	6
	longnose anchovy	1	58	2

TABLE J-29

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
19-20 APRIL 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	3	9-11	2
		2	18-20	10
	blue crab	3	43-64	31
	barbfish	1	73	13
	silver porgy	1	39	1
	eyed flounder	1	51	4
	whiff	1	48	1
	bandtail puffer	1	35	2
0900-1700	blue crab	4	33-56	22
		1	89	73
	shrimp	2	9-17	6
	crevalle jack	1	388	773
	sea catfish	1	147	52
	eyed flounder	1	44	2
	spotfin mojarra	1	43	2
1700-0100	shrimp	5	7-11	3
	rock shrimp	1	13	2
	blue crab	2	28-33	4
		1	80	28
	spotfin mojarra	17	38-62	37
	silver jenny	1	49	3

TABLE J-29
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
19-20 APRIL 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (continued)	pinfish	16	25-42	77
	silver porgy	1	25	1
	bay whiff	2	40-51	3
	eyed flounder	1	40	2
	trunkfish	1	71	28
	sailors choice	1	152	97
	Atlantic midshipman	1	150	56
	leopard searobin	1	43	1
	seaweed blenny	1	43	2

TABLE J-30

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
24-25 APRIL 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	5	10-14	6
		1	20	7
	rock shrimp	1	14	2
	blue crab	5	22-39	9
		2	74-91	80
	pinfish	10	29-39	11
	silver porgy	6	27-40	8
	bay whiff	5	36-60	8
	lined sole	2	69-91	40
	eyed flounder	2	42-43	3
	fringed flounder	1	85	15
	flounder (*B. robinsi*)	1	45	2
	blackcheek tonguefish	1	127	28
	offshore tonguefish	1	111	14
	oyster blenny	2	36-53	5
	feather blenny	1	87	22
0900-1700	blue crab	2	41-61	19
	silver porgy	2	32-38	3
	lined sole	1	83	7
	seaweed blenny	1	49	3

TABLE J-30
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
24-25 APRIL 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0130	shrimp	1	10	1
	silver porgy	1	37	2
	flounder (*B. robinsi*)	1	39	2
	striped burrfish	1	117	136

TABLE J-31

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
25-26 APRIL 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0130-0900	shrimp	3	9-16	5
	rock shrimp	1	9	1
	blue crab	1	32	3
	crevalle jack	1	244	254
	bighead searobin	1	73	6
	bay whiff	1	44	1
0900-1700	blue crab	1	90	49
	silver porgy	1	25	1
1700-0130	shrimp	3	10-16	8
	bay whiff	3	44-53	6
	eyed flounder	1	44	2
	flounder (*B. robinsi*)	1	39	1
	silver porgy	2	32-37	2
	pinfish	1	32	1
	bandtail puffer	1	40	3
	crevalle jack	1	239	234
	barbfish	1	51	7

TABLE J-32

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
28-29 APRIL 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	2	10-16	4
	eyed flounder	1	44	2
	flounder (*B. robinsi*)	1	46	2
0900-1700	shrimp	1	9	1
	bay whiff	2	36-37	1
	silver porgy	1	41	2
1700-0100	blue crab	1	43	4
	stone crab	1	19	2
	Atlantic spadefish	1	138	171

TABLE J-33

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
2-3 MAY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	5	8-12	6
	blue crab	1	88	44
	crevalle jack	2	340-369	1489
	searobin	2	36-51	4
	lined sole	1	68	15
	Gulf flounder	1	85	10
	bay whiff	1	52	2
0900-1700	blue crab	1	103	69
	bighead searobin	1	39	1
1700-0100	shrimp	3	7-9	2
		1	19	6
	crevalle jack	2	237-248	542
	seaweed blenny	1	37	1
	bighead searobin	1	38	1
	bay whiff	1	55	2
	flounder (*B. robinsi*)	1	43	2

TABLE J-34

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
5-6 MAY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	3	8-9	2
	stone crab	1	24	5
	crevalle jack	1	376	664
	pinfish	1	38	2
	bay whiff	1	52	2
	spotted whiff	1	40	1
0900-1700	blue crab	1	146	147
	crevalle jack	4	349-362	2896
1700-0100	shrimp	9	7-10	7
	blue crab	1	24	2
	pinfish	6	34-46	10
	pigfish	4	30-34	3
	crevalle jack	3	246-361	1670
	bay whiff	2	44-48	3
	oyster blenny	1	34	1

TABLE J-35

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
9-10 MAY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	1	8	1
	crevalle jack	1	358	613
	lined sole	1	69	15
	pigfish	1	35	1
0900-1700	crevalle jack	5	360-370	3571
	pigfish	1	34	1
1700-0100	shrimp	2	9-17	4
	rock shrimp	1	8	1
	blue crab	1	35	3
		1	79	40
	crevalle jack	2	352-374	1317
	seaweed blenny	1	32	1

TABLE J-36

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
12-13 MAY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100	shrimp	50	9-17	69
		3	19-22	18
	rock shrimp	3	7-12	4
	blue crab	3	26-30	5
	crevalle jack	1	253	295
		6	335-392	4264
	Atlantic cutlassfish	1	955	748
	lined sole	1	94	31
0100-0900	shrimp	11	8-17	18
		2	18-20	17
	rock shrimp	1	5	1
	blue crab	4	22-38	8
	crevalle jack	1	356	657
	pigfish	1	37	1
	whiff	1	57	3
0900-1700	blue crab	1	83	38
	crevalle jack	2	360-380	decomposed
	striped croaker	1	113	35
	sargassumfish	1	31	3

TABLE J-37

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
16-17 MAY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	22	8-15	23
	crevalle jack	2	248-253	482
		5	355-380	3630
	pigfish	1	29	1
	fringed flounder	1	59	5
0900-1700[a]	crevalle jack	1	368	701
	spotfin mojarra	1	37	1
	bluelip parrotfish	1	44	2
1700-0100	shrimp	7	8-16	9
	crevalle jack	7	352-388	5436
	bay whiff	1	60	4

[a] Circulating pumps operated inconsistently during this time period.

TABLE J-38

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
19-20 MAY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	23	8-17	32
	spiny lobster	1	8	1
	crevalle jack	3	361-364	1987
	rock sea bass	1	52	3
	pigfish	1	40	2
0900-1700	shrimp	1	8	1
	stone crab	1	33	12
	crevalle jack	6	355-370	3993
	pinfish	1	41	2
	oyster blenny	1	40	2
1700-0100	shrimp	5	9-11	5
		1	19	5
	stone crab	1	38	22
	crevalle jack	6	360-381	4179
	rock sea bass	2	48-49	6
	seaweed blenny	1	47	2

TABLE J-39

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
23-24 MAY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700	blue crab	1	27	1
		1	161	204
	crevalle jack	1	270	294
		2	360-365	1425
	seaweed blenny	1	32	1
	hairy blenny	1	52	4
1700-0100	shrimp	5	8-16	9
	crevalle jack	1	240	228
		4	355-370	2890
	lined sole	1	64	13
0100-0900	shrimp	4	8-13	6
	blue crab	1	27	2
	crevalle jack	4	355-380	2889

TABLE J-40

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
26-27 MAY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	4	8-14	6
	rock shrimp	1	11	2
	crevalle jack	6	355-380	3936
0900-1700	blue crab	1	84	37
		1	146	168
	shrimp	1	12	2
	seaweed blenny	2	39-40	3
	lined seahorse	1	38	1
	eyed flounder	1	38	1
1700-0100	shrimp	5	9-17	11
	rock shrimp	1	10	1
	crevalle jack	1	257	268
		2	361-365	1447

TABLE J-41

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
31 MAY-1 JUNE 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	15	8-15	25
	crevalle jack	1	364	689
		1	ca. 375	fragment
	pigfish	1	47	3
0900-1700	blue crab	1	74	29
	crevalle jack	1	242	224
		1	358	618
		1	fragment	fragment
	hairy blenny	2	61-64	11
	pinfish	1	38	3
1700-0200	shrimp	13	9-17	25
	rock shrimp	2	8-10	2
	crevalle jack	1	233	213
		1	370	714
	eyed flounder	2	38-47	4
	bay whiff	1	45	2
	silver porgy	1	42	2

TABLE J-42

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
2-3 JUNE 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	31	7-16	49
		3	19	17
	rock shrimp	1	7	1
	spiny lobster	2	10-14	5
	crevalle jack	1	235	214
		5	362-374	3280
	blue runner	1	355	587
	eyed flounder	1	44	2
	flounder (*B. robinsi*)	1	49	3
	silver porgy	1	38	2
	pinfish	1	42	2
0900-1700	shrimp	1	13	3
	spiny lobster	1	11	2
	eyed flounder	1	49	3
1700-0200	shrimp	12	9-16	22
	blue crab	1	27	2
	crevalle jack	2	372-386	1538
		2	fragments	fragments

TABLE J-43

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
6-7 JUNE 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	17	8-14	24
	spiny lobster	1	13	1
	crevalle jack	1	262	299
		1	360	739
0900-1700	shrimp	3	11-13	5
	crevalle jack	2	340-366	1124
	sailors choice	1	29	1
1700-0100	shrimp	4	8-12	5
	blue crab	1	69	25
	spiny lobster	1	12	3
	crevalle jack	1	282	300
		1	407	1144
		1	fragment	fragment
	planehead filefish	1	36	2
	bluelip parrotfish	1	60	5

TABLE J-44

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
9-10 JUNE 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	12	10-13	18
	crevalle jack	1	246	297
		2	354-376	1391
	great barracuda	1	420	386
	sheepshead	1	32	1
0900-1700	shrimp	3	9-12	4
	blue crab	2	161-168	466
	stone crab	1	46	25
	crevalle jack	1	364	689
	Atlantic spadefish	1	215	454
1700-0100	shrimp	2	13-15	5
	cravalle jack	3	372-412	2399
	eyed flounder	1	38	1

TABLE J-45

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
13-14 JUNE 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	12	9-15	17
	blue crab	1	35	2
	spiny lobster	1	11	2
	crevalle jack	1 2	237 348-371	218 decomposed
0900-1700	shrimp	1	8	1
	sheepshead	1	31	1
1700-0100	shrimp	9	7-14	12
	blue crab	1	147	138
	oyster blenny	1	47	3

TABLE J-46

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
16-17 JUNE 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	6	9-15	9
0900-1700	nothing collected	-	-	-
1700-0100	shrimp	1	11	1

TABLE J-47

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
23-24 JUNE 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100	shrimp	1	12	1
	stone crab	1	42	23
	white grunt	1	137	77
	tomtate	1	117	39
	seahorse	1	58	2
0100-0900	shrimp	7	8-17	10
	blue crab	1	24	1
0900-1700	tomtate	159	87-132	6220
	sailors choice	1	127	61
	seaweed blenny	8	40-57	19
	hairy blenny	4	47-76	17
	oyster blenny	1	38	1
	striped croaker	2	108-139	82

TABLE J-48

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
24-25 JUNE 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100	shrimp	2	8-12	2
	stone crab	1	16	1
	oyster blenny	2	32-35	2
	tomtate	1	104	27
0100-0900	shrimp	10	9-16	14
	tomtate	5	99-109	135
	crevalle jack	1	246	237
		1	327	635
	oyster blenny	1	32	1
0900-1800	spiny lobster	1	13	3
	tomtate	3	98-109	84

TABLE J-49

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
27-28 JUNE 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	4	9-13	6
	blue crab	1	49	7
	mojarra (*Diapterus* sp.)	1	ca.180	fragment
0900-1700	bluelip parrotfish	3	26-46	4
	hairy blenny	1	72	10
1700-0200	shrimp	23	9-16	39
	blue crab	1	51	10
	stone crab	1	60	60
	bluelip parrotfish	2	55-61	8
	Atlantic spadefish	1	258	1001
	Atlantic moonfish	1	30	1

TABLE J-50

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
30 JUNE-1 JULY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	20	9-16	36
	blue crab	2	30-37	5
		2	50-62	18
	crevalle jack	2	252-274	320
		1	384	761
	chain pipefish	1	122	1
	seahorse	1	79	3
0900-1700	redfin parrotfish	1	42	2
	Atlantic thread herring	1	29	1
1700-0100	shrimp	11	8-14	14
		1	18	5
	blue crab	1	35	3
	crevalle jack	2	262-265	537

TABLE J-51

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
5-6 JULY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	15	9-13	14
	bigeye anchovy	1	43	1
0900-1700	shrimp	17	10-16	33
	crevalle jack	1	267	426
	lined seahorse	1	86	5
1700-0100	shrimp	2	9-14	4

TABLE J-52

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
7-8 JULY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	28	6-16	41
	stone crab	1	60	77
	spotfin mojarra	1	46	2
0900-1700	shrimp	1	9	1
	hairy blenny	2	88-91	36
	oyster blenny	1	37	1
	seaweed blenny	1	50	3
	bluelip parrotfish	1	41	2
1700-0100	shrimp	18	6-15	30
	rock shrimp	1	9	1
	oyster blenny	2	38-46	4
	seaweed blenny	1	48	3

TABLE J-53

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
11-12 JULY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	26	8-15	39
	stone crab	1	42	20
	eyed flounder	1	58	5
0900-1700	shrimp	2	8-11	2
	bluelip parrotfish	1	52	4
	oyster blenny	1	35	1
1700-0100	shrimp	22	7-13	23
	stone crab	2	46-54	85

TABLE J-54

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
14-15 JULY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	143	7-16	240
	bluelip parrotfish	2	46-48	5
0900-1700	shrimp	13	10-14	23
	spiny lobster	1	14	6
1700-0100	shrimp	183	7-17	257
	spiny lobster	1	15	7
	hairy blenny	4	81-94	63
	silver porgy	1	61	8
	spotfin mojarra	1	43	2
	sailors choice	1	48	3
	lesser electric ray	1	271	311

TABLE J-55

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
18-19 JULY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	177	8-18	241
	spotfin mojarra	3	40-59	10
	pigfish	1	59	6
0900-1700	shrimp	1	12	2
	rock shrimp	1	8	1
	spotfin mojarra	14	27-53	23
	silver jenny	7	46-82	34
	redtail parrotfish	2	43-48	4
	redfin parrotfish	1	44	2
	bluelip parrotfish	1	57	4
	reef croaker	1	39	1
	rock sea bass	1	84	5
1700-0100	shrimp	16	6-14	15
	blue crab	1	60	12
	reef croaker	3	33-42	4
	bandtail puffer	1	52	4
	planehead filefish	1	20	1
	filefish (*Monacanthus* sp.)	1	23	1

TABLE J-56

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
21-22 JULY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0800-1600	shrimp	16	8-14	19
	blue crab	1	21	3
	bluelip parrotfish	1	70	8
1600-0030	shrimp	12	7-12	11
	reef croaker	2	36-37	2
	spotfin mojarra	1	33	1
	oyster blenny	1	55	4
0030-0800	shrimp	64	8-13	61
	blue crab	1	65	18
	reef croaker	7	33-39	6
	spotfin mojarra	2	46-52	5

TABLE J-57

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
25-26 JULY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0000-0800	shrimp	29	9-13	37
	rock shrimp	1	6	1
	spiny lobster	2	12-23	18
	bluelip parrotfish	1	68	7
	filefish (*Aluterus* sp.)	1	78	1
0800-1600	shrimp	3	10-16	6
	rock shrimp	1	10	1
	scrawled cowfish	1	20	2
1600-0015	shrimp	87	7-20	108
	redtail parrotfish	1	47	3
	flamefish	1	41	2

TABLE J-58

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
28-29 JULY 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0000-0800	shrimp	40	9-17	64
	rock shrimp	1	9	1
	blue crab	4	32-59	32
		3	64-86	75
	redtail parrotfish	3	41-50	7
	lane snapper	1	181	153
	plumed scorpionfish	1	60	9
	hairy blenny	1	63	5
	sailors choice	1	50	4
	silver jenny	1	34	1
	flounder	1	42	2
0800-1600	shrimp	6	10-14	10
	blue crab	3	41-49	22
		2	63-82	53
	silver jenny	2	38-39	3
	spotfin mojarra	1	48	3
	sailors choice	1	50	4
	oyster blenny	1	40	2
1600-0030	shrimp	65	7-15	84
	flounder	1	43	1

TABLE J-59

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
1-2 AUGUST 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0000-0800	shrimp	133	8-18	189
	blue crab	4	22-39	8
		7	50-65	67
	stone crab	2	22-23	6
	redtail parrotfish	1	45	2
	plumed scorpionfish	1	44	4
	chain pipefish	1	159	2
	lookdown	1	14	1
	searobin	1	ca.37	fragment
0800-1600	shrimp	2	12-13	4
	blue crab	1	72	25
	spotfin mojarra	3	31-49	5
	silver jenny	1	63	7
	bluelip parrotfish	1	40	1
	seaweed blenny	1	59	4
1600-0000	shrimp	5	8-13	8
	silver jenny	1	36	2
		1	89	16
	spotfin mojarra	1	29	1
	planehead filefish	1	29	2

TABLE J-60

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
4-5 AUGUST 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0825-1700	shrimp	45	10-14	68
	blue crab	2	47-53	17
	lined seahorse	1	103	4
	bandtail puffer	1	34	1
	northern sennet	1	114	7
	bluelip parrotfish	1	51	3
	spotfin mojarra	1	36	1
	oyster blenny	1	33	1
1700-0100	shrimp	6	10-13	10
	searobin	3	36-41	4
	spotted whiff	1	68	6
0100-0900	shrimp	45	7-15	71
	planehead filefish	1	34	2

TABLE J-61

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
8-9 AUGUST 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700	shrimp	8	10-13	11
	blue crab	1	16	1
	tomtate	106	56-82	811
	sailors choice	3	41-59	11
	spotfin mojarra	14	31-55	18
	silverjenny	5	37-51	11
	redtail parrotfish	1	70	9
	bluelip parrotfish	1	37	1
	seaweed blenny	1	fragment	fragment
	oyster blenny	1	33	1
	striped croaker	1	50	2
	reef croaker	1	42	1
1700-0100	shrimp	245	8-15	346
	tomtate	8	61-76	57
	spotfin mojarra	7	30-42	6
	searobin	2	40-45	3
	reef croaker	2	34-45	2
	hairy blenny	1	114	33
	lined sole	1	43	4

TABLE J-61
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
8-9 AUGUST 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	169	8-15	238
	blue crab	2	44-68	24
	striped croaker	2	39	3
	spotfin mojarra	2	37-50	3
	tomtate	1	82	13
	ocellated frogfish	1	125	122

TABLE J-62

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
11-12 AUGUST 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700	shrimp	73	9-16	108
	stone crab	1	18	2
	reef croaker	1	73	8
	tomtate	1	61	5
	grunt	1	ca.66	fragment
1700-0100	shrimp	541	9-16	749
	blue crab	1	53	10
	tomtate	3	61-70	16
	striped croaker	2	36-40	2
	sand perch	1	53	3
	leopard searobin	1	39	1
	twospot cardinalfish	1	38	2
0100-0900	shrimp	443	7-16	551
	blue crab	1	29	1
		2	41-61	26
	searobin	2	34-37	2
	silver jenny	1	ca.43	2
	dwarf sand perch	1	49	2
	tomtate	1	71	8
	reef croaker	1	43	2
	eel	1	83	1

TABLE J-63

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
15-16 AUGUST 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	246	7-16	314
	blue crab	20	21-57	110
		8	61-90	183
	stone crab	1	26	6
	spiny lobster	1	16	2
	tomtate	8	55-74	40
	mojarra	1	39	2
	dwarf sand perch	1	58	4
	redtail parrotfish	2	53-60	8
	inshore lizardfish	1	113	10
	hairy blenny	1	91	17
	lined sole	1	88	24
	eyed flounder	1	51	3
0900-1700	shrimp	8	10-13	11
	blue crab	1	38	4
		5	54-63	65
	tomtate	28	48-74	129
	sailors choice	1	44	2
	silver jenny	3	36-51	5
	reef croaker	1	ca.46	fragment

TABLE J-63
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
15-16 AUGUST 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100	shrimp	63	8-14	70
	tomtate	13	53-71	59
	spotfin mojarra	1	39	1
	reef croaker	1	78	9
	bluelip parrotfish	1	42	2
	seaweed blenny	1	48	3

TABLE J-64

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
17-18 AUGUST 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1100-1900	blue crab	2	25-29	3
		2	52-57	18
	shrimp	1	10	1
	Atlantic cutlassfish	1	963	930
	tomtate	1	62	4
	dwarf sand perch	1	49	2
1900-0300	shrimp	20	9-13	22
	blue crab	2	33-39	6
	tomtate	8	53-80	50
0300-1100	shrimp	66	10-15	78
	blue crab	10	30-61	57
		1	66	20
	tomtate	512	51-88	2960
	sailors choice	2	42-51	5
	reef croaker	8	42-56	14
	sand perch	1	51	2
	silver jenny	1	53	4
	gray triggerfish	1	54	7
	bandtail puffer	1	52	4

TABLE J-65

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
22-23 AUGUST 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	74	9-14	111
	rock shrimp	3	6-10	2
	blue crab	21	30-76	241
	tomtate	9	57-80	59
	bay whiff	1	70	6
	oyster blenny	1	70	7
	planehead filefish	1	37	2
0900-1700	shrimp	2	11-12	2
	blue crab	1	41	4
	tomtate	15	47-77	97
1700-0100	shrimp	4	8-10	4
	blue crab	3	25-59	21
	tomtate	7	57-70	41
	bay whiff	1	84	12
	orangespotted blenny	1	38	1
	bandtail puffer	1	53	3
	herring	1	52	3

TABLE J-66

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
25-26 AUGUST 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	11	10-12	13
	tomtate	1	56	3
	oyster blenny	1	47	3
	bay whiff	1	85	10
	chain pipefish	1	90	4
0900-1700	shrimp	5	11-12	6
	blue crab	1	55	5
	tomtate	307	52-83	1957
	sailors choice	1	49	3
	reef croaker	3	63-71	16
1700-0100	shrimp	18	9-15	26
	blue crab	3	45-63	26
	tomtate	9	55-74	56
	bandtail puffer	1	62	9
	silver jenny	1	54	4
	northern sennet	1	129	10

TABLE J-67

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
29-30 AUGUST 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	219	9-19	421
		3	22-25	27
		1	42	47
	blue crab	93	20-64	352
		6	67-97	184
	spiny lobster	1	27	15
	tomtate	24	52-80	121
	sand perch	2	56-64	8
	bay whiff	1	37	1
	bluelip parrotfish	1	52	3
	dusky cardinalfish	1	40	2
	chain pipefish	1	275	12
	spotfin mojarra	1	38	2
0900-1700	blue crab	21	28-56	96
		10	62-86	194
		1	103	61
	shrimp	1	12	2
	rock shrimp	1	9	1
	tomtate	7448	54-132	44038
	sailors choice	5	47-69	24
	white grunt	1	44	2

TABLE J-67
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
29-30 AUGUST 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700 (continued)	spotfin mojarra	10	54-66	43
	reef croaker	2	46-76	8
	oyster blenny	2	90-96	47
	northern sennet	1	153	22
	trumpetfish	1	220	5
	yellowtail snapper	1	51	3
	Atlantic bumper	1	57	4
	twospot cardinalfish	1	40	2
1700-0100	shrimp	169	9-23	365
	bluecrab	6	26-53 96	22 43
	tomtate	42	49-77	263
	sand perch	5	50-55	13
	reef croaker	3	41-70	11
	seaweed blenny	2	41-46	4
	frillfin goby	1	33	1
	northern sennet	1	144	19
	bluelip parrotfish	1	60	6
	planehead filefish	1	43	4
	twospot cardinalfish	1	36	2

TABLE J-67
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
29-30 AUGUST 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (continued)	Cuban anchovy	1	47	1
	flat anchovy	1	72	4
	Spanish sardine	1	61	3
	spotfin mojarra	1	51	4
	spotted whiff	1	67	6
	chain pipefish	1	236	8

TABLE J-68

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
1-2 SEPTEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	84	8-18	170
	blue crab	7	28-50	29
		5	64-80	107
		1	103	85
	tomtate	4	52-79	22
	bandtail puffer	1	42	3
	flounder (*Bothus* sp)	1	54	2
	anchovy	1	52	1
	pipefish	1	65	1
	bluelip parrotfish	1	54	2
0900-1700	shrimp	13	12-15	29
	blue crab	7	22-53	32
		1	63	17
	tomtate	1190	46-157	13070
	sailors choice	7	45-78	45
		7	131-163	758
		1	186	204
	bluestriped grunt	2	147-184	276
	white grunt	1	40	2
		1	153	132
	smallmouth grunt	1	81	13
	porkfish	4	49-77	37
		21	118-178	3078

TABLE J-68
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
1-2 SEPTEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700 (continued)	seaweed blenny	28	35-63	69
	hairy blenny	21	69-114	357
		2	151-161	195
	oyster blenny	17	27-73	80
	barred blenny	1	51	4
	saddled blenny	1	48	2
	checkered blenny	3	28-33	2
	reef croaker	15	64-86	101
	high-hat	12	94-124	326
	cubbyu	4	122-159	323
	striped croaker	2	47-57	7
	silver jenny	8	46-76	55
	spotfin mojarra	3	58-74	20
	sand perch	3	41-51	7
	dwarf sand perch	1	73	8
	rock sea bass	1	90	20
	sergeant major	1	79	29
	dusky damselfish	1	30	1
	yellowtail snapper	1	77	13
	twospot cardinalfish	1	60	7
	flamefish	1	43	3

TABLE J-68
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
1-2 SEPTEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700 (continued)	jack (*Caranx* sp.)	1	37	2
	northern sennet	1	161	30
	scrawled filefish	1	43	1
	planehead filefish	1	216	342
	southern puffer	1	185	193
1700-0100	shrimp	28	11-16	55
	blue crab	4 3	25-47 57-68	16 46
	stone crab	1	14	1
	tomtate	14 5	53-82 113-153	89 323
	porkfish	4	101-157	480
	dwarf sand perch	7	63-83	47
	sand perch	3	49-54	8
	hairy blenny	5	73-144	170
	seaweed blenny	3	32-60	7
	oyster blenny	3	31-61	9
	barred blenny	1	28	1
	Atlantic spadefish	1	215	567
	twospot cardinalfish	1	32	1
	redtail parrotfish	1	48	3

TABLE J-68
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
1-2 SEPTEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (continued)	doctorfish	1	189	306
	leopard searobin	1	94	12
	cubbyu	1	140	76

TABLE J-69

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
6-7 SEPTEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	178	10-17	413
	rock shrimp	1	8	1
	blue crab	5	35-42	18
	tomtate	66	51-68	224
	white grunt	1	41	2
	Cuban anchovy	5	50-56	6
	longnose anchovy	4	49-52	3
	silver jenny	2	60-67	10
	spotfin mojarra	1	33	1
	dwarf sand perch	2	67-70	10
	bluespotted cornetfish	1 1	96 fragment	1 fragment
	lesser electric ray	1	47	11
	searobin	1	64	5
	striped croaker	1	41	2
	dusky cardinalfish	1	36	1
	scrawled filefish	1	109	14
0900-1700	shrimp	9	12-15	18
	blue crab	2	18-21	2

TABLE J-69
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
6-7 SEPTEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700 (continued)	tomtate	42	50-79	2
	sailors choice	1	51	4
	silver jenny	51	41-78	269
	spotfin mojarra	11	43-65	42
	dwarf sand perch	2	68-73	13
	scaled sardine	2	72-80	17
	jack (*Caranx* sp.)	1	68	7
	bluelip parrotfish	1	77	11
	oyster blenny	1	67	10
	twospot cardinalfish	1	47	4
	barred cardinalfish	1	42	3
1700-0100	shrimp	55	9-15	98
	blue crab	7	23-58	23
	tomtate	25	49-69	82
	sailors choice	1	37	1
	dwarf sand perch	3	51-69	10
	oyster blenny	1	54	4
	twospot cardinalfish	1	40	2
	bandtail puffer	1	46	4

TABLE J-69
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
6-7 SEPTEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700 (continued)	silver jenny	51	41-78	269
	spotfin mojarra	11	43-65	42
	dwarf sand perch	2	68-73	13
	scaled sardine	2	72-80	17
	jack (*Caranx* sp.)	1	68	7
	bluelip parrotfish	1	77	11
	oyster blenny	1	67	10
	twospot cardinalfish	1	47	4
	barred cardinalfish	1	42	3
1700-0100	shrimp	55	9-15	98
	blue crab	7	23-58	23
	tomtate	25	49-69	82
	sailors choice	1	37	1
	dwarf sand perch	3	51-69	10
	oyster blenny	1	54	4
	twospot cardinalfish	1	40	2
	bandtail puffer	1	46	4

TABLE J-70

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
8-9 SEPTEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	19	10-16	45
	blue crab	1	36	4
	spiny lobster	1	35	30
	tomtate	31	53-74	113
		1	113	27
	dwarf sand perch	1	68	6
	inshore lizardfish	1	93	8
	seaweed blenny	1	53	4
0900-1700	shrimp	5	11-14	9
	blue crab	2	75-98	92
	tomtate	41	42-78	183
	silver jenny	8	44-70	48
	spotfin mojarra	2	63-64	11
	dwarf sand perch	1	62	4
	yellowtail snapper	1	44	2
	redtail parrotfish	1	38	1
	planehead filefish	1	76	17
	orangespotted filefish	1	52	5

TABLE J-70
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
8-9 SEPTEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100	shrimp	17	11-14	33
	blue crab	3	30-56 91	16 44
	tomtate	50	53-74	126
	sailors choice	1	43	2
	longnose anchovy	12	51-55	14
	Cuban anchovy	1	53	2
	silver jenny	2	48-58	7
	striped croaker	1	48	2
	bigeye scad	1	89	10
	oyster blenny	1	44	3
	twospot cardinalfish	1	38	1
	sargassumfish	1	57	20

TABLE J-71

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
12-13 SEPTEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700	shrimp	14	11-16	29
	blue crab	2	35-53	12
	tomtate	42	39-79	232
	reef croaker	3	73-82	29
	oyster blenny	1	70	9
	inshore lizardfish	1	105	10
1700-0100	shrimp	22	8-15	47
	rock shrimp	2	6-8	1
	blue crab	1	27	2
	tomtate	25	52-82	121
	white grunt	1	44	2
	dwarf sand perch	3	59-70	15
	sand perch	1	45	2
	bandtail puffer	2	47-70	14
0100-0900	shrimp	39	11-15	90
	blue crab	2	54-62	24
	spiny lobster	1	11	3

TABLE J-71
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
12-13 SEPTEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900 (continued)	tomtate	19	54-78	99
	dwarf sand perch	2	61-62	8
	silver jenny	1	53	4
	longnose anchovy	1	53	1
	jack (*Caranx* sp.)	1	27	1
	redtail parrotfish	1	54	4
	polka-dot batfish	1	144	92

TABLE J-72

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
15-16 SEPTEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	59	10-16	115
	blue crab	3	51-60	32
	tomtate	8	62-77	46
	sailors choice	1	65	7
	silver jenny	1	46	2
	redtail parrotfish	1	8	8
0900-1700	shrimp	4	10-14	8
	tomtate	5	53-82	37
	silver jenny	1	50	3
	spotfin mojarra	1	42	2
1700-0100	shrimp	5	11-13	8
	rock shrimp	1	6	1
	blue crab	2	38-60	12
	tomtate	45	55-86	244
	dwarf sand perch	6	61-68	29
	silver jenny	2	48-54	6

TABLE J-73

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
19-20 SEPTEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	20	10-13	40
	rock shrimp	1	7	1
	tomtate	62	58-83	346
	silver jenny	1	35	1
	longnose anchovy	1	56	2
0900-1700	rock shrimp	1	11	2
	tomtate	10	57-82	67
	sailors choice	1	68	11
1700-0100	shrimp	6	10-13	9
	tomtate	44	58-81	261

TABLE J-74

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
22-23 SEPTEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0930	shrimp	3	8-13	5
	tomtate	45	55-83	243
	cocoa damselfish	1	fragment	fragment
	hairy blenny	1	120	45
0930-1730	shrimp	1	15	3
	tomtate	51	57-84	300
1730-0100	shrimp	10	10-14	19
	rock shrimp	2	9-11	2
	blue crab	2	34-67	25
	stone crab	1	13	1
	tomtate	28	55-81	159
	Atlantic croaker	1	326	541
	oyster blenny	1	49	3

TABLE J-75

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
11-12 OCTOBER 1977[a]

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1750	blue crab	2	51-63	24
	tomtate	1	78	8
	hairy blenny	1	85	16
	bandtail puffer	1	57	7
1750-0100	shrimp	1	15	3
	spotfin mojarra	1	58	4
0100-0900	shrimp	4	14-16	13
	dwarf sand perch	2	50-66	10
	reef croaker	1	44	2
	bandtail puffer	1	85	19

[a]The plant was off-line from late September to mid-October.

TABLE J-76

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
13-14 October 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	9	10-16	30
	longnose anchovy	3	51-53	3
	anchovy	4	ca.50	ca.4
	bandtail puffer	2	61-73	16
	tomtate	1	55	4
	white grunt	1	42	1
	black sea bass	1	229	352
	sand perch	1	99	20
0900-1700	shrimp	6	10-15	13
	longnose anchovy	12	47-53	14
	bigeye anchovy	1	56	2
	tomtate	2	54-72	12
		1	154	103
	white mullet	1	324	fragment
	seaweed blenny	1	66	6
1700-0100	shrimp	3	13-17	11
	blue crab	1	59	15
	stone crab	1	14	1
	spiny lobster	1	33	32

TABLE J-76
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
13-14 October 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (continued)	longnose anchovy	1	54	2
	dwarf sand perch	1	59	3
	bandtail puffer	1	66	9

TABLE J-77

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
17-18 October 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	17	11-17	50
	blue crab	1	54	12
	silver jenny	2	49-51	6
	sailors choice	1	91	20
	planehead filefish	1	32	1
	bull pipefish	1	102	1
	Atlantic moonfish	1	26	1
0900-1700	blue crab	1	82	28
	spiny lobster	1	5	1
1700-0100	shrimp	4	13-15	12
	blue crab	1	52	10
	tomtate	1	81	13
	plumed scorpionfish	1	68	17

TABLE J-78

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
20-21 October 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	3	10-18	7
	Atlantic bumper	17	15-28	3
	Cuban anchovy	1	57	2
	spotfin mojarra	1	37	1
0900-1700	shrimp	1	13	1
	tomtate	1	77	6
1700-0100	shrimp	5	13-19	17

TABLE J-79

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
24-25 OCTOBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	2	12-16	6
		3	19-22	21
	blue crab	1	62	19
	silver jenny	12	44-54	32
	spotfin mojarra	2	53-106	30
	tomtate	4	62-75	33
	Cuban anchovy	1	54	2
	longnose anchovy	1	52	2
	anchovy	2	50-51	2
	Atlantic bumper	2	30-32	1
	lined seahorse	1	71	4
	dwarf sand perch	1	fragment	fragment
0900-1700	shrimp	2	15	7
		3	18-22	21
	blue crab	1	37	4
		1	63	17
	sailors choice	4	46-60	16
	tomtate	3	76-84	34
	longnose anchovy	2	50-52	3
	silver jenny	1	60	5
	spotfin mojarra	1	58	4
	lined seahorse	1	73	2
	Atlantic bumper	1	31	1
1700-0100	shrimp	7	11-17	24
		5	19-26	47
	blue crab	5	44-59	73
	silver jenny	4	42-66	21

TABLE J-79
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
24-25 OCTOBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (continued)	spotfin mojarra	4	50-69	20
	dwarf sand perch	2	61-70	12
	sailors choice	1	49	3
	planehead filefish	1	30	2
	anchovy	1	53	2

TABLE J-80

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
27-28 OCTOBER

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1230-2100	blue crab	4	41-58	35
		2	64	36
	spiny lobster	1	10	2
	bay anchovy	14	54-61	38
	scaled sardine	1	57	3
	sailors choice	1	52	3
	oyster blenny	1	54	4
	hamlet	1	55	fragment
	chain pipefish	1	164	2
2100-0500	shrimp	5	9-16	8
		1	25	12
	rock shrimp	1	9	1
	blue crab	3	52-57	32
0500-1230	blue crab	3	60-65	47
	stone crab	1	15	1
	bay anchovy	2	54-57	5
	longnose anchovy	1	54	2
	sailors choice	2	46-53	6
	lane snapper	1	88	17

TABLE J-81

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
31 OCTOBER-1 NOVEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0930	shrimp	2	12-15	5
	blue crab	1	61	16
	tomtate	1	69	6
	silver jenny	1	52	3
0930-1730	nothing collected	-	-	-
1730-0100	shrimp	4	10-16	8
		2	18-19	10
	silver jenny	6	35-56	20
	spotfin mojarra	3	57-87	25
	striped anchovy	2	54-56	3
	anchovy	1	30	1
	dwarf sand perch	2	64-68	10

TABLE J-82

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
3-4 NOVEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	36	8-16	40
		7	18-23	48
		3	32-40	84
	blue crab	3	31-41	13
		2	66-68	35
	dwarf sand perch	3	64-66	16
	Cuban anchovy	2	33-52	2
	planehead filefish	2	25-33	2
	bandtail puffer	1	75	11
	lined seahorse	1	51	1
	speckled worm eel	1	89	1
	bay whiff	1	91	12
	tomtate	1	58	4
	sailors choice	1	57	4
	reef croaker	1	48	2
	sand drum	1	42	2
0900-1730	shrimp	2	10-16	4
		2	18-23	13
	blue crab	2	53-71	35
	longnose anchovy	12	49-58	17
	Cuban anchovy	4	57-58	7
	bigeye anchovy	2	58-62	5
	flat anchovy	1	49	1
	anchovy	3	32-34	1
	scaled sardine	1	60	4
	tomtate	1	62	4
	dwarf sand perch	1	56	6
	seaweed blenny	1	71	7

TABLE J-82
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
3-4 NOVEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1730-0100	shrimp	22	8-16	30
		1	21	9
	blue crab	1	64	17
	spiny lobster	1	6	1
	dwarf sand perch	4	67-68	23
	longnose anchovy	2	52-53	1
	tomtate	1	62	5
	sailors choice	1	50	2
	silver jenny	1	61	7
	Atlantic bumper	1	36	1
	bay whiff	1	70	7
	leopard searobin	1	68	6
	coral scorpionfish	1	ca. 69	fragment
	eel	1	80	1

TABLE J-83

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
7-8 NOVEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	68	8-16	73
		1	23	8
	blue crab	1	32	3
		3	69-91	95
	stone crab	1	11	1
	barbfish	43	28-80	199
	coral scorpionfish	2	38-49	6
	searobin	1	74	8
	sand drum	13	25-48	12
	croaker	2	20-21	1
	bank cusk-eel	15	161-248	953
	blotched cusk-eel	1	261	128
	dwarf sand perch	7	67-73	45
	tomtate	3	62-63	14
	Atlantic bumper	3	32-41	3
	lookdown	1	29	1
	longnose anchovy	1	55	1
	anchovy	2	31-32	1
	barred hamlet	2	50-64	11
	silver jenny	1	57	5
	spotfin mojarra	1	60	4
	blackedge moray	1	398	73
	oyster blenny	1	29	1
	planehead filefish	1	33	2
	bluespotted cornetfish	1	118	1

TABLE J-83
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
7-8 NOVEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700	blue crab	1	44	5
		3	68-85	81
	shrimp	1	9	1
		1	27	25
		1	43	44
	spiny lobster	1	6	1
	longnose anchovy	30	52-58	45
	bigeye anchovy	22	58-68	55
	Spanish sardine	1	42	1
	reel croaker	2	77-93	8
	sand drum	3	54-78	16
	barbfish	2	40-48	6
	dwarf sand perch	1	71	7
	sharksucker	1	367	317
	lookdown	1	201	25
	hairy blenny	1	107	31
	palespotted eel	1	266	13
	shrimp eel	1	315	25
1700-0100	shrimp	22	8-14	17
		1	21	8
	rock shrimp	1	11	2
	blue crab	1	81	37
	barbfish	13	40-53	50
	searobin	1	48	3
	bank cusk-eel	4	173-208	213
	blotched cusk-eel	1	211	59
	tomtate	2	58-67	12

TABLE J-83
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
7-8 NOVEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (continued)	longnose anchovy	2	55-56	3
	bigeye anchovy	1	56	2
	spotted whiff	2	53-64	8
	dwarf sand perch	1	70	6
	sand perch	1	ca. 110	fragment
	lookdown	1	101	26
	reef croaker	2	27-56	7
	gafftopsail catfish	1	276	343
	silver jenny	1	57	5
	surgeonfish	1	22	1
	polka-dot batfish	1	59	6
	palespotted eel	1	243	9

TABLE J-84

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
10-11 NOVEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0930	shrimp	13	8-18	27
	rock shrimp	1	9	1
	blue crab	2	61-66	36
	stone crab	2	21-24	8
	tomtate	7	51-76	36
	barbfish	3	41-46	11
	bandtail puffer	1	66	9
	scrawled cowfish	1	192	262
	planehead filefish	1	37	2
	bandtooth conger	1	226	21
0930-1700	shrimp	1	15	3
	spiny lobster	1	7	1
	tomtate	3	67-79	21
	bigeye anchovy	2	50-62	5
	longnose anchovy	1	56	1
	barbfish	2	36-46	6
	spotted scorpionfish	1	179	260
	bandtail puffer	1	57	5
	sand drum	2	48-83	11
	seahorse	1	47	1
1700-0100	shrimp	8	9-16	18
		2	18-19	13
	silver jenny	9	48-83	55
	barbfish	2	36-48	7
	bandtail puffer	1	83	7
	longnose anchovy	1	54	2
	sea catfish	1	184	103

TABLE J-85

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
14-15 NOVEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	27	8-17	33
		2	18-24	15
	rock shrimp	1	9	1
	blue crab	2	63-78	55
	tomtate	2	52-66	7
	sailors choice	1	69	6
	porkfish	1	46	3
	Atlantic bumper	2	40-45	3
	barbfish	1	35	2
	planehead filefish	1	50	5
	guaguanche	1	65	2
0900-1700	blue crab	2	49-52	17
		1	97	57
	shrimp	1	11	1
	tomtate	6	60-78	33
	silver jenny	1	65	7
	barbfish	1	35	2
	southern puffer	1	179	161
	Atlantic bumper	1	112	20
	dusky flounder	1	79	10
	oyster blenny	1	34	1
1700-0100	shrimp	6	9-14	7
		3	18-20	18
	blue crab	2	28-49	9
	tomtate	8	62-73	45
	Atlantic croaker	1	124	37
	striped croaker	1	30	1

TABLE J-85
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
14-15 NOVEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (continued)	high hat	1	61	5
	lookdown	1	97	28
	sand perch	1	69	6
	barbfish	1	39	3
	bandtail puffer	1	79	15

TABLE J-86

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
17-18 NOVEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	24	9-18	52
	rock shrimp	2	10	3
	blue crab	3	44-60	29
		1	96	51
	tomtate	7	53-76	38
	lookdown	4	24-42	6
	Atlantic moonfish	2	24-25	1
	Atlantic bumper	1	31	1
	orange filefish	3	28-82	11
	planehead filefish	1	44	4
	silver seatrout	3	32-40	2
	high-hat	1	77	10
	harvestfish	2	22-26	2
	silver jenny	1	48	3
	sand perch	1	95	19
	Atlantic cutlassfish	1	68	1
	searobin	1	42	2
	anchovy	1	27	1
0900-1700	shrimp	2	11-18	6
		1	37	41
	blue crab	1	81	42
	tomtate	1	77	11
1700-0100	shrimp	3	8	1
	blue crab	2	52-67	30
	tomtate	5	62-86	38
	silver jenny	2	43-44	5

TABLE J-86
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
17-18 NOVEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100 (continued)	longnose anchovy	1	56	2
	lined seahorse	1	115	8
	bank cusk-eel	1	ca. 190	fragment

TABLE J-87

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
21-22 NOVEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	5	9-15	10
	blue crab	1	86	45
	spotfin mojarra	1	47	2
	barbfish	1	52	6
0900-1700	blue crab	4	45-61	38
	shrimp	3	9-12	4
	tomtate	2	63-70	10
	reef croaker	1	64	6
1700-0100	shrimp	19	9-18	41
	rock shrimp	1	7	1
	blue crab	1	68	16
	longnose anchovy	1	43	1
	silver jenny	1	45	3
	blackwing searobin	1	49	3
	barbfish	1	48	4
	balloonfish	1	65	23

TABLE J-88

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
22-23 NOVEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	11	10-18	21
	rock shrimp	1	10	1
	blue crab	1	27	2
	stone crab	2	34-35	32
	tomtate	1	71	6
	high-hat	1	78	11
	sardine	1	71	7
	bank cusk-eel	1	223	73
0900-1700	blue crab	2	68-70	49
	tomtate	1	72	7
	bigeye anchovy	1	66	4
	oyster blenny	1	50	3
1700-0100	shrimp	19	8-17	42
	tomtate	5	61-78	27
	silver jenny	4	45-53	12
	spotfin moharra	3	46-55	10
	barbfish	1	33	2

TABLE J-89

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
28-29 NOVEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	3	11-16	6
	stone crab	2	35-45	35
0900-1700	blue crab	1	90	59
	tomtate	2	64-77	14
1700-0100	shrimp	2	9-19	6
	spotfin mojarra	2	40-44	3
	reef croaker	1	81	9
	planehead filefish	1	44	3

TABLE J-90

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
1-2 DECEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700	tomtate	2	64-85	17
1700-0100	shrimp	2	8-10	2
	lined seahorse	1	82	2
	bank cusk-eel	1	213	59
0100-0900	shrimp	8	9-16	15
	stone crab	1	48	29
	searobin	1	56	4
	bull pipefish	1	107	1
	blackedge moray	1	300	50

TABLE J-91

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
5-6 DECEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	2	11-12	4
	spotfin mojarra	1	45	3
0900-1700	flamefish	1	51	3
1700-0100	shrimp	4	9-13	7
	rock shrimp	1	9	1
	stone crab	1	13	1

TABLE J-92

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
8-9 DECEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0900-1700	shrimp	1	16	4
	hairy blenny	1	116	38
1700-0100	shrimp	18	9-17	45
	blue crab	1	44	6
	silver jenny	2	37-44	5
	spotfin mojarra	1	47	3
	high-hat	1	82	9
	flamefish	1	52	5
0100-0900	shrimp	10	9-16	24
		1	19	6
	blue crab	1	42	5
		3	75-94	132
	stone crab	2	34-40	33
	lined seahorse	1	66	2
	bay whiff	1	83	12

TABLE J-93

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
13-14 DECEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100	shrimp	5	10-15	10
		4	18-26	33
	rock shrimp	1	11	1
	blue crab	2	36-40	8
		2	78-99	109
	spiny lobster	1	12	2
	longnose anchovy	5	55-56	7
	Cuban anchovy	4	51-53	6
	sailors choice	1	52	3
	silver jenny	1	64	6
	frillfin goby	1	41	2
	Atlantic spadefish	1	59	15
	planehead filefish	1	63	10
	dusky cardinalfish	1	41	2
	lined sole	1	26	1
0100-0900	shrimp	81	8-17	101
		6	19-24	45
	blue crab	28	28-48	41
		7	69-92	244
	tomtate	8	51-77	36
	sailors choice	1	57	4
	Cuban anchovy	4	51-55	6
	longnose anchovy	3	49-54	4
	bighead searobin	2	38-46	5
		1	208	217
	northern searobin	2	43-46	4
	searobin	1	46	3

TABLE J-93
(continued)
RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
13-14 DECEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900 (continued)	barbfish	1	41	3
		1	176	202
	chain pipefish	2	198-290	8
	spotfin mojarra	2	39-52	5
	silver jenny	1	43	3
	planehead filefish	1	30	1
	southern stargazer	1	187	253
	offshore tonguefish	1	95	10
0900-1700	shrimp	3	9-11	4
	blue crab	3	23-36	5
	stone crab	1	40	23
	longnose anchovy	38	46-60	57
	Cuban anchovy	12	48-51	17
	tomtate	2	52-64	8
	bandtail puffer	1	38	2

TABLE J-94

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
14-15 DECEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1700-0100	shrimp	9	10-15	20
		3	19-28	40
	rock shrimp	1	10	2
	blue crab	4	25-41	10
		2	73-94	74
	Cuban anchovy	2	51-52	3
	tomtate	1	62	5
	spotfin mojarra	1	43	2
	scaled sardine	1	77	10
	northern searobin	1	61	4
0100-0900	shrimp	30	9-16	47
		2	21-23	19
	rock shrimp	2	6-11	2
	blue crab	5	20-49	15
		1	109	102
	stone crab	2	15-18	5
	northern searobin	2	40-48	5
	barbfish	1	49	6
	Cuban anochovy	1	57	2
	Gulf kingfish	1	41	2
	eel	1	98	1
0900-1700	shrimp	3	12-18	12
	blue crab	1	35	3
		1	121	178
	Atlantic croaker	1	151	63
	lined sole	1	79	21

TABLE J-95

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
19-20 DECEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	8	11-16	22
	rock shrimp	1	10	2
	blue crab	3	25-37	7
	black sea bass	1	230	441
	blackwing searobin	1	68	8
0900-1700	shrimp	1	12	1
		1	25	12
	rock shrimp	1	12	2
	stone crab	1	35	4
	sea catfish	1	243	274
1700-0100	shrimp	14	9-16	32
		4	19-22	31
	rock shrimp	1	10	1
	blue crab	2	26-58	14
		1	101	61
	stone crab	1	30	10
	tomtate	1	67	5
	lined sole	1	34	1
	inshore lizardfish	1	104	8
	checkered blenny	1	36	1

TABLE J-96

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
22-23 DECEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	1	16	5
		1	32	26
	rock shrimp	1	10	2
	blue crab	2	97-108	152
	blackwing searobin	3	38-60	9
	northern searobin	1	51	3
	bighead searobin	1	41	3
	Cuban anchovy	2	55-58	4
	tomtate	1	60	6
	high-hat	1	76	8
	spotfin mojarra	1	38	2
0900-1700	shrimp	3	9-13	7
		1	21	10
	high-hat	1	86	12
1700-0100	shrimp	4	9-16	12
	blue crab	1	32	3
		1	109	94
	northern searobin	1	41	3

TABLE J-97

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
27-28 DECEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	2	13-19	10
	rock shrimp	2	10-12	4
	blue crab	1	52	9
	tomtate	2	62-63	10
	spotfin mojarra	1	62	6
0900-1700	shrimp	2	12-18	8
	blue crab	1	30	3
		2	78-86	77
	tomtate	2	57-67	10
	longnose anchovy	1	50	2
	Cuban anchovy	1	53	2
	flounder (*B. robinsi*)	1	74	12
	twospot cardinalfish	1	52	4
1700-0100	shrimp	5	9-18	11
	blue crab	4	21-51	12
	tomtate	4	57-82	25
	longnose anchovy	1	49	1
	Cuban anchovy	1	55	2
	spotfin mojarra	1	54	6
	bandtail puffer	1	73	12
	bay whiff	1	86	14

TABLE J-98

RESULTS OF IMPINGEMENT AT THE ST. LUCIE PLANT
29-30 DECEMBER 1977

Time	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0100-0900	shrimp	2	10-12	3
	blue crab	7	24-44	14
	spiny lobster	1	45	86
	tomtate	4	53-71	19
	lookdown	2	42-84	25
	longnose anchovy	1	56	2
	Cuban anchovy	1	50	1
	anchovy	1	31	1
	northern sennet	1	48	1
	oyster blenny	1	41	2
	eel	1	52	1
0900-1700	tomtate	4	58-71	20
	Cuban anchovy	1	49	2
	Atlantic cutlassfish	1	269	11
1700-0100	shrimp	5	12-17	17
	rock shrimp	2	12-13	5
	blue crab	1	23	2
	tomtate	4	62-73	23
	Cuban anchovy	3	48-59	5
	longnose anchovy	2	48-58	4
	anchovy	1	29	1
	cocoa damselfish	1	44	4

TABLE J-99

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
27-28 JANUARY 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-	-	-
	B	sheepshead	3	182-208	853
		spot	2	199-270	822
		Atlantic menhaden	2	220-250	560
		ladyfish	1	385	566
		butterfish	1	157	109
		Atlantic spadefish	1	118	137
		gray snapper	1	218	189
		bluespotted searobin	1	242	306
14	S	nothing collected	-	-	-
	B	lane snapper	4	198-218	1020
		Atlantic croaker	1	318	594
		spot	1	165	594
		pigfish	1	220	378
		black margate	1	278	964
		ladyfish	1	390	734
		Atlantic spadefish	1	118	128
		smooth dogfish	1	555	510
15	S	nothing collected	-	-	-
	B	spot	3	256-272	1866
		ladyfish	2	401-424	1300
		great barracuda	1	580	1362
		Atlantic croaker	1	320	566
		pinfish	1	210	336

TABLE J-99
(continued)
INSHORE GILL NET COLLECTIONS AT ST. LUCIE
27-28 JANUARY 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
16	S	nothing collected	-	-	-
	B	silver jenny	1	60	5

[a] S = Surface; B = Bottom.

TABLE J-100

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
28-29 JANUARY 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-	-	-
	B	Atlantic spadefish	2	121-140	308
		spot	2	200-206	518
		Atlantic croaker	1	215	294
		great barracuda	1	522	1248
		silver porgy	1	204	343
		bonnethead	1	430	341
14	S	sheepshead	1	183	280
	B	nothing collected	-	-	-
15	S	great barracuda	1	433	650
	B	pinfish	2	178-218	532
		spot	1	194	196
		Atlantic spadefish	1	133	168
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-101

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
16-17 FEBRUARY 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-	-	-
	B	blue crab	1	103	89
		smooth dogfish	7	531-614	3835
		bonnethead	2	474-500	786
		scalloped hammerhead	1	699	1700
		sheepshead	1	220	476
		butterfish	1	163	118
		spot	1	218	125
14	S	Atlantic bumper	1	252	210
	B	yellowfin menhaden	1	214	239
15	S	nothing collected	-	-	-
	B	smooth dogfish	15	519-617	8598
		black sea bass	1	274	603
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-102

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
17-18 FEBRUARY 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-	-	-
	B	butterfish	1	135	57
		mutton snapper	1	344	980
14	S	nothing collected	-	-	-
	B	Atlantic spadefish	1	148	185
		butterfish	1	142	79
		nurse shark	1	1400[b]	-
15	S	nothing collected	-	-	-
	B	smooth dogfish	1	537	509
		pinfish	1	224	413
		planehead filefish	1	193	242
		butterfish	1	157	113
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

[b] Estimated (released alive).

TABLE J-103

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
22-23 MARCH 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	silver porgy	2	198-199	663
	B	silver porgy	3	204-212	1313
14	S	nothing collected	-	-	-
	B	black margate	2	163-165	334
			3	241-310	2538
		Atlantic spadefish	3	116-132	387
		sheepshead	2	247-250	1105
		gray snapper	2	241-244	912
		striped mullet	1	393	1149
15	S	nothing collected	-	-	-
	B	Atlantic bumper	1	202	156

[a] S = Surface; B = Bottom.

TABLE J-104

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
23-24 MARCH 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	crevalle jack	1	369	805
	B	striped mullet	1	310	545
14	S	nothing collected	-	-	-
	B	nothing collected	-	-	-
15	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a]S = Surface; B = Bottom.

TABLE J-105

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
26-27 APRIL 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	blue runner	1	284	547
	B	Atlantic spadefish	19	131-153	3405
		Florida pompano	1	227	362
		black margate	1	237	542
		lane snapper	1	270	560
15	S	crevalle jack	1	349	756
	B	Atlantic spadefish	7	122-174	1634
		Atlantic bumper	1	214	177
		black margate	1	259	166
		Atlantic cutlassfish	1	fragment	fragment
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a]S = Surface; B = Bottom.

TABLE J-106

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
27-28 APRIL 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-	-	-
	B	Atlantic spadefish	10	128-145	1589
15	S	nothing collected	-	-	-
	B	crevalle jack	1	381	926
		smooth dogfish	1	579	569
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom

TABLE J-107

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
19-20 MAY 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-	-	-
	B	Atlantic spadefish	2	130-142	331
		lane snapper	1	221	339
15	S	nothing collected	-	-	-
	B	nothing collected	-	-	-
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-108

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
20-21 MAY 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-	-	-
	B	nothing collected	-	-	-
15	S	nothing collected	-	-	-
	B	black margate	3	250-264	2139
		sheepshead	2	254-257	1318
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-109

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
8-9 JUNE 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total Weight (g)
13	S	nothing collected	-	-	-
	B	sheepshead	1	271	808
		Atlantic spadefish	1	142	193
15	S	nothing collected	-	-	-
	B	Atlantic spadefish	9	126-157	1552
			1	198	448
		Atlantic bumper	2	191-201	271
		bluefish	1	320	479
		Atlantic croaker	1	289	423
		pinfish	1	201	293
		bluespotted searobin	1	249	318
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-110

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
9-10 JUNE 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total Weight (g)
13	S	nothing collected	-	-	-
	B	nothing collected	-	-	-
15	S	nothing collected	-	-	-
	B	Atlantic spadefish	8	130-155	1552
		Atlantic bumper	1	250	226
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-111

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
13-14 JULY 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total Weight (g)
13	S	nothing collected	-	-	-
	B	Atlantic bumper	2	221-260	468
		lane snapper	1	214	302
15	S	nothing collected	-	-	-
	B	shameface crab	1	119	285
		Atlantic bumper	6	200-265	1071
		Atlantic spadefish	3	132-170	649
		lane snapper	1	207	308
		Gulf kingfish	1	296	434
		smooth dogfish	1	674	860
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-112

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
14-15 JULY 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total Weight (g)
13	S	nothing collected[b]	-	-	-
	B	nothing collected	-	-	-
15	S	nothing collected	-	-	-
	B	nothing collected	-	-	-
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

[b] Nets covered with drifting algae.

TABLE J-113

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
17-18 AUGUST 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	Atlantic bumper	1	231	195
	B	Atlantic spadefish	1	177	285
15	S	nothing collected	-	-	-
	B	lane snapper	6	212-273	2755
		sailors choice	3	184-205	749
		Atlantic spadefish	2	132-156	381
		Atlantic croaker	1	284	430
		sea catfish	1	297	389
		white mullet	1	341	807
		striped mullet	1	332	644
		planehead filefish	1	232	449
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-114

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
18-19 AUGUST 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-	-	-
	B	nothing collected	-	-	-
15	S	nothing collected	-	-	-
	B	lane snapper	1	213	312
		white mullet	1	324	457
		black drum	1	391	1694
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a]S = Surface; B = Bottom.

TABLE J-115

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
19-20 SEPTEMBER 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-		-
	B	spiny lobster	1	133	1050
		lane snapper	8	227-260	3029
		Atlantic spadefish	5	108-168	1085
			1	215	569
		black margate	2	228-310	1458
		porkfish	1	202	336
		pigfish	1	264	496
		white mullet	1	ca. 330	fragment
		crevalle jack	1	293	632
		sheepshead	1	305	1130
		hogfish	1	285	690
		Atlantic guitarfish	1	650	- [b]
15	S	nothing collected	-	-	-
	B	Atlantic spadefish	4	130-163	806
		pigfish	1	248	431
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

[b] No weight, released alive in surf.

TABLE J-116

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
20-21 SEPTEMBER 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-	-	-
	B	pinfish	3	219-254	1344
		lane snapper	1	ca. 240	fragment
		yellowmouth grouper	1	274	557
15	S	nothing collected	-	-	-
	B	lane snapper	1	234	355
		Atlantic spadefish	1	173	306
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-117

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
17-18 OCTOBER 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-	-	-
	B	nothing collected	-	-	-
15	S	nothing collected	-	-	-
	B	nothing collected	-	-	-
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-118

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
18-19 OCTOBER 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-	-	-
	B	nothing collected	-	-	-
15	S	nothing collected	-	-	-
	B	nothing collected	-	-	-
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-119

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
7-8 NOVEMBER 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-	-	-
	B	crevalle jack	6	309-368	5050
		white mullet	3	307-342	2180
		pinfish	2	231-248	995
		black margate	1	189	258
			1	ca. 225	fragment
		porkfish	2	162-210	498
		hogfish	1	255	751
		spot	1	204	228
		sea catfish	1	248	294
15	S	nothing collected	-	-	-
	B	speckled crab	1	144	217
		crevalle jack	22	285-440	ca. 20400
		lane snapper	13	199-252	4534
		gray snapper	2	218-255	859
		white mullet	5	324-337	3762
		blackwing searobin	4	245-290	1488
		pinfish	2	234-243	996
		spot	2	270-282	1318
		sailors choice	3	199-229	838
		black margate	2	244-253	1104
		porkfish	1	201	311
		Atlantic guitarfish	1	590	760
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-120

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
8-9 NOVEMBER 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-	-	-
	B	pinfish	6	216-258	2739
		crevalle jack	3	252-320	1976
		lane snapper	2	236-284	976
		black margate	2	230-275	1312
		porkfish	1	210	326
		pigfish	1	223	291
		Atlantic spadefish	1	127	169
		bullnose ray	1	506	1816
15	S	nothing collected	-	-	-
	B	pinfish	4	242-257	2179
		sheepshead	1	320	984
		white mullet	3	321-330	2439
		black margate	2	184-249	795
		spot	2	254-272	1152
		lane snapper	1	231	345
		crevalle jack	1	523	2951
		blackwing searobin	1	242	276
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-121

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
7-8 DECEMBER 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	Atlantic bumper	1	220	158
	B	striped mullet	4	386-420	5506
		white mullet	4	290-360	2542
		pinfish	4	226-246	1914
		sheepshead	2	210-274	1075
		sea catfish	3	250-296	1118
		crevalle jack	1	310	744
		black margate	1	192	224
		striped mojarra	1	211	297
15	S	nothing collected	-	-	-
	B	black margate	2	252-264	1315
		pigfish	1	252	500
		lane snapper	1	271	541
		black drum	1	264	525
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-122

INSHORE GILL NET COLLECTIONS AT ST. LUCIE
8-9 DECEMBER 1977

Station number	Depth[a]	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
13	S	nothing collected	-	-	-
	B	striped mojarra	2	213-232	703
		white mullet	2	309-312	1595
		Atlantic bumper	1	214	174
		lane snapper	1	244	482
		spotted scorpionfish	1	178	236
15	S	nothing collected	-	-	-
	B	white mullet	1	331	788
		sheepshead	1	306	989
		porkfish	1	208	381
16	S	nothing collected	-	-	-
	B	nothing collected	-	-	-

[a] S = Surface; B = Bottom.

TABLE J-123

OFFSHORE GILL NET COLLECTIONS AT THE ST. LUCIE PLANT
27 JANUARY 1977

Station	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	bluefish	139[a]	247-353	5.9×10^4[a]
	Spanish mackerel	8[a]	275-360	2040[a]
	yellowfin menhaden	1	284	429
	Florida pompano	1	212	267
	Atlantic sharpnose shark	1	575	2156
	smooth dogfish	1	695	1816
	scalloped hammerhead	1	474	1300
	bonnethead	1	399	501
1	bluefish	166[a]	258-330	6.9×10^4[a]
	Spanish mackerel	5	292-356	945
	bonnethead	3	370-403	1445
	yellowfin menhaden	2	254-259	767
	inshore lizardfish	1	383	574
2	spinner shark	2	929-1010	2.4×10^4
	Spanish mackerel	1	362	409
3	banded rudderfish	1	275	480
4	nothing collected	-	-	-
5	yellowfin menhaden	5	218-235	1517
	spinner shark	3	584-755	1.4×10^4
		2	794-960	2.0×10^4

TABLE J-123
(continued)
OFFSHORE GILL NET COLLECTIONS AT THE ST. LUCIE PLANT
27 JANUARY 1977

Station	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
5 (cont.)	gray triggerfish	2	107-111	132
	bluefish	1	274	404
	sharksucker	1	122	9

[a]Adjusted to 30 minutes fishing and 10 minutes net retrieval time.

TABLE J-124

OFFSHORE GILL NET COLLECTIONS AT THE ST. LUCIE PLANT
24 FEBRUARY 1977

Station	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	Spanish mackerel	1	501	908
1	blue runner	3	216-237	769
	Spanish mackerel	1	503	908
2	leopard searobin	1	145	42
3	nothing collected	-	-	-
4	Atlantic manta	1	915[a]	-
5	nothing collected	-	-	-

[a] Estimated width (released alive).

TABLE J-125

OFFSHORE GILL NET COLLECTIONS AT ST. LUCIE
25 MARCH 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	blue runner	2	206-221	432
1	Atlantic bumper	37	156-211	3298
	banded rudderfish	6	345-366	5334
	gafftopsail catfish	6	309-421	6583
	blue runner	3	219-337	1657
	spinner shark	1	1680	45670
	finetooth shark	1	1254	13620
2	nothing collected	-	-	-
3	nothing collected	-	-	-
4	Spanish mackerel	1	539	1165
	Atlantic sharpnose shark	1	556	
5	banded rudderfish	3	327-352	2542
	blue runner	1	304	598

TABLE J-126

OFFSHORE GILL NET COLLECTIONS AT THE ST. LUCIE PLANT
25 APRIL 1977

Station	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	Spanish mackerel	15	348-486	9109
	Atlantic bumper	13	148-178	994
	blue runner	1	231	180
1	Spanish mackerel	6	368-450	4489
	blue runner	1	307	620
2	king mackerel	2	530-554	2610
	blue runner	1	171	439
3	bluefish	1	270	343
	little tunny	1	347	681
	sharksucker	1	569	1135
4	blue runner	3	283-296	1489
	sharksucker	1	372	428
5	banded rudderfish	6	357-392	6485
	sand perch	1	211	217
	blue runner	1	286	500

TABLE J-127

OFFSHORE GILL NET COLLECTIONS AT THE ST. LUCIE PLANT
20 MAY 1977

Station	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	Spanish mackerel	4	377-423	2408
1	blue runner	1	256	392
	sharksucker	1	103	5
2	Spanish mackerel	1	383	532
	blue runner	1	271	404
3	nothing collected	-	-	-
4	nothing collected	-	-	-
5	dusky flounder	1	177	103

TABLE J-128

OFFSHORE GILL NET COLLECTIONS AT THE ST. LUCIE PLANT
9 JUNE 1977

Station	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	blue runner	2	255-261	741
		2	304-323	1496
1	nothing collected	-	-	-
2	nothing collected	-	-	-
3	round scad	3	149-160	203
	Spanish sardine	1	172	95
	sharksucker	1	483	680
4	little tunny	1	364	830
5	blue runner	1	254	370

TABLE J-129

OFFSHORE GILL NET COLLECTIONS AT THE ST. LUCIE PLANT
15 JULY 1977

Station	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	frigate mackerel	3	429-438	4719
	blue runner	3	264-306	1442
	barbfish	1	137	96
1	blue runner	9	218-262	2636
		3	270-336	1855
	dusky flounder	1	201	156
2	blue runner	2	257-263	786
	gray triggerfish	1	158	166
3	nothing collected	-	-	-
4	nothing collected	-	-	-
5	blue runner	1	302	597
	gray triggerfish	1	158	167

TABLE J-130

OFFSHORE GILL NET COLLECTIONS AT THE ST. LUCIE PLANT
18 AUGUST 1977

Station	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	nothing collected	-	-	-
1	blue runner	1 2	242 314-322	307 1327
2	nothing collected	-	-	-
3	nothing collected	-	-	-
4	spot	32	152-182	3808
5	blue runner	3	259-296	1371

TABLE J-131

OFFSHORE GILL NET COLLECTIONS AT THE ST. LUCIE PLANT
20 SEPTEMBER 1977

Station	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	blue runner	2	227-252	604
1	blue runner	2	304-307	1243
2	nothing collected	-	-	-
3	nothing collected	-	-	-
4	nothing collected	-	-	-
5	blue runner	1	234	303

TABLE J-132

OFFSHORE GILL NET COLLECTIONS AT THE ST. LUCIE PLANT

20 OCTOBER 1977

Station	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	Spanish mackerel	31	318-415	19395
	king mackerel	17	307-377	7064
	Atlantic bumper	19	149-191	1931
	ladyfish	2	358-391	1027
	Atlantic thread herring	2	168-180	202
	bluefish	1	370	1000
	spot	1	169	140
	sea catfish	1	221	184
1	blue crab	1	133	113
	Spanish mackerel	12	263-457	6191
	bluefish	9	263-399	6056
	Atlantic bumper	41	151-210	2034
	crevalle jack	3	170-180	512
	Florida pompano	3	182-238	1017
	Atlantic moonfish	1	163	111
	Atlantic croaker	2	211-275	651
	ladyfish	2	442-479	1792
	spinner shark	1	710	2385
2	Spanish mackerel	172	341-489	104511
	Atlantic bumper	38	152-210	3865
	blue runner	3	282-291	1696
	crevalle jack	1	254	464
	bluefish	2	209-408	1333
	sea catfish	2	212-231	445
	gafftopsail catfish	2	337-411	2312
	sheepshead	1	228	437
	sharksucker	1	429	317

TABLE J-132
(continued)
OFFSHORE GILL NET COLLECTIONS AT THE ST. LUCIE PLANT
20 OCTOBER 1977

Station	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
3	Spanish mackerel	1	416	806
4	king mackerel	10	373-386	4786
	Spanish mackerel	2	389-411	1485
	bluefish	2	376-397	2356
	ladyfish	1	513	1249
5	Spanish mackerel	71	291-488	50703
	Atlantic bumper	63	137-205	6951
	Florida pompano	2	201-210	521
	blue runner	1	261	401
	crevalle jack	1	224	289
	bluefish	10	252-461	5107
	Atlantic menhaden	4	234-280	1445
	Atlantic thread herring	1	174	10
	gafftopsail catfish	3	262-346	1852
	pigfish	2	178-198	343
	sheepshead	2	191-213	585
	sharksucker	1	336	280
	scalloped hammerhead	1	1040	ca. 20000
	blackwing searobin	1	134	46

[a] Adjusted to 30 minutes fishing and 10 minutes net retrieval time.

TABLE J-133

OFFSHORE GILL NET COLLECTIONS AT THE ST. LUCIE PLANT
2 DECEMBER 1977[a]

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	banded rudderfish	22	317-352	13428
	blue runner	7	261-372	4157
1	blue runner	4	227-267	1512
2	blue runner	3	232-249	862
	frigate mackerel	1	353	778
3	nothing collected	-	-	-
4	nothing collected	-	-	-
5	spinner shark	1	690	1816

[a]November sample delayed due to inclement weather.

TABLE J-134

OFFSHORE GILL NET COLLECTIONS AT THE ST. LUCIE PLANT
9 DECEMBER 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	nothing collected	-	-	-
1	Spanish mackerel	9	323-380	4075
	blue runner	1	242	311
	sea catfish	1	200	103
2	Spanish mackerel	66	409-540	70788
3	nothing collected	-	-	-
4	nothing collected	-	-	-
5	nothing collected	-	-	-

TABLE J-135

TRAWL COLLECTIONS AT ST. LUCIE
6 JANUARY 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	inshore lizardfish	1	288	277
	pigfish	1	132	71
	juvenile fish	1	14	1
1	sea catfish	4	148-193	288
	lane snapper	1	167	120
	polka-dot cusk-eel	1	214	54
	bank cusk-eel	1	98	6
	offshore tonguefish	1	111	14
2	inshore lizardfish	3	229-257	397
	leopard searobin	3	129-172	163
	dusky flounder	1	104	18
	flounder (*Bothus* sp.)	1	15	1
3	inshore lizard fish	1	234	116
	spotted whiff	1	126	32
4	leopard searobin	5	144-156	213
	inshore lizardfish	2	224-318	442
	dusky flounder	2	93-95	27
5	pigfish	4	146-184	421
	leopard searobin	2	149-160	91
	inshore lizardfish	1	261	167
	spottedfin tonguefish	1	204	11
	polka-dot cusk-eel	1	92	5
	bank cusk-eel	1	101	6
	bandtooth conger	1	223	16

TABLE J-136

TRAWL COLLECTIONS AT ST. LUCIE
22 FEBRUARY 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	pigfish	1	198	184
1	Atlantic spadefish	22	89-135	2538
	pigfish	1	180	120
2	nothing collected	-	-	-
3	snakefish	1	103	15
	bigeye stargazer	1	35	1
4	rock sea bass	3	99-141	132
	pigfish	2	187-195	358
	leopard searobin	2	157-187	160
	bank cusk-eel	1	171	41
	coral scorpionfish	1	74	17
	Atlantic spadefish	1	130	145
	naked sole	1	109	43
5	nothing collected	-	-	-

TABLE J-137

TRAWL COLLECTIONS AT ST. LUCIE
16 MARCH 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	nothing collected	-	-	-
1	Atlantic spadefish	4	125-134	582
	pigfish	1	178	136
2	nothing collected	-	-	-
3	flounder (*Bothus* sp.)	9	16-26	2
	cusk-eel (*Lepophidium* sp.)	3	81-89	6
	stargazer (*Dactyloscopus* sp.)	2	24-27	1
	bighead searobin	1	28	1
4	nothing collected	-	-	-
5	flounder (*Bothus* sp.)	19	16-28	3
	Atlantic spadefish	2	116-125	225
	rock sea bass	1	109	29
	pigfish	1	213	220

TABLE J-138

TRAWL COLLECTIONS AT ST. LUCIE
26 APRIL 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	nothing collected	-	-	-
1	juvenile fish	1	18	1
2	Atlantic spadefish	2	109-132	251
	leopard searobin	1	64	5
	cardinalfish (*Astrapogon* sp.)	1	16	1
3	lizardfish	1	33	1
	searobin	1	16	1
4	nothing collected	-	-	-
5	leopard searobin	2	52-56	5
		1	154	44
	searobin	2	52-56	5
	blackcheek tonguefish	1	140	26

TABLE J-139

TRAWL COLLECTIONS AT ST. LUCIE
17 MAY 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	sand drum	3	46-84	17
	bay whiff	3	16-46	3
		1	95	13
	blackcheek tonguefish	1	127	19
	tonguefish	1	48	1
	leopard searobin	1	74	6
	cusk-eel (*Ophidion* sp.)	1	49	1
	rock sea bass	1	38	1
1	sand perch	9	18-29	3
	leopard searobin	2	75-81	15
	bluespotted searobin	1	57	4
	rock sea bass	2	39-42	3
	mojarra	2	22-23	1
	bay whiff	1	40	1
	pigfish	1	153	87
	tomtate	1	124	52
	bandtooth conger	1	109	2
2	leopard searobin	2	45-53	4
	eyed flounder	2	54-55	7
	spotted whiff	1	123	24
	bandtooth conger	1	97	1
	bronze cardinalfish	1	17	1
	squirrelfish	1	17	1
	Atlantic midshipman	1	22	1

TABLE J-139
(continued)
TRAWL COLLECTIONS AT ST. LUCIE
17 MAY 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
3	flounder (*B. robinsi*)	5	30-49	9
	spotted whiff	1	104	16
	spottail tonguefish	1	145	38
	leopard searobin	4	68-82	30
	sand perch	1	34	1
	cusk-eel (*Ophidion* sp.)	1	44	1
4	bronze cardinalfish	2	17-18	1
	twospot cardinalfish	2	20-22	1
	sand perch	2	15-18	1
	flounder (*B. robinsi*)	1	56	4
	planehead filefish	1	22	1
5	sand perch	1	44	2
	rock sea bass	1	36	1
	high-hat	1	22	1
	dusky flounder	1	174	101
	blackbelly blenny	1	10	1

TABLE J-140

TRAWL COLLECTIONS AT ST. LUCIE
20 JUNE 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	mojarra	6	10-18	1
	dwarf sand perch	1	47	2
1	tomtate	1	126	65
	flounder	2	13-15	1
	herring	1	22	1
	mojarra	1	14	1
	juvenile fish	5	7-15	1
2	sand perch	19	16-33	4
	leopard searobin	3	57-80	14
		1	106	16
	eyed flounder	2	43-52	5
		2	90	41
	flounder (*B. robinsi*)	1	29	1
		3	70-91	41
	spotted whiff	1	111	27
	twospot cardinalfish	2	16-20	1
	stargazer (*Dactyloscopus* sp.)	1	ca. 44	fragment
	blotched cusk-eel	1	195	53
	Seminole goby	1	34	1
3	leopard searobin	1	25	1
		5	51-85	36
	eyed flounder	4	19-48	5
	flounder (*Bothus* sp.)	1	16	1
	flounder (*B. robinsi*)	1	38	1

TABLE J-140
(continued)
TRAWL COLLECTIONS AT ST. LUCIE
20 JUNE 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
3 (cont.)	dusky flounder	2	36-38	2
	stargazer (*Dactyloscopus* sp.)	2	23-52	2
	blotched cusk-eel	2	60	4
	cusk-eel (*Lepophidium* sp.)	1	67	1
	snakefish	1	161	70
4	sand perch	11	15-35	3
	leopard searobin	3	106-127	92
	searobin	1	17	1
	eyed flounder	1	35	1
		3	63-111	57
	flounder (*B. robinsi*)	2	58-68	13
	spotted whiff	1	47	2
	flatfish?	3	9-14	1
	mojarra	4	10-16	1
	stargazer (*Dactyloscopus* sp.)	1	49	2
	twospot cardinalfish	1	15	1
	high-hat	1	22	1
	juvenile fish	3	14-16	1
5	sand perch	9	17-24	3
	dwarf sand perch	2	55-61	10
	leopard searobin	2	173-192	180
	eyed flounder	2	50-95	28
	spottedfin tonguefish	1	109	14
	bank cusk-eel	1	162	30
	blackedge moray	1	279	40

TABLE J-141

TRAWL COLLECTIONS AT ST. LUCIE
20 JULY 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	sand perch	11	20-48	8
		1	63	4
	tomtate	11	14-25	2
	spotfin mojarra	9	24-55	9
	mojarra	7	12-17	1
	barbfish	2	23-34	2
	leopard searobin	1	139	37
	cardinalfish	1	15	1
	planehead filefish	1	81	20
	redtail parrotfish	1	41	2
	bank cusk-eel	1	70	2
	eyed flounder	1	367	400
	whiff	1	17	1
	flounder (Bothidae)	3	15-17	1
1	tomtate	69	16-68	138
	sand perch	3	27-34	1
	dwarf sand perch	1	48	2
	cusk-eel (*Lepophidion* sp.)	4	41-71	2
	flounder (*Bothus* sp.)	3	16-17	1
	flounder (*B. robinsi*)	1	17	1
	bandtooth conger	1	96	1
	inshore lizardfish	1	36	1
	parrotfish	1	15	1
	leopard searobin	1	107	7
	spotfin mojarra	1	27	1

TABLE J-141
(continued)
TRAWL COLLECTIONS AT ST. LUCIE
20 JULY 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1 (cont.)	filefish	1	11	1
	juvenile fish	2	10-14	1
2	sand perch	13	19-45	8
		2	56-88	8
	eyed flounder	6	58-110	75
	flounder (*B. robinsi*)	2	76-80	14
	flounder (*Bothus* sp.)	8	11-16	1
	flounder (Bothidae)	6	12-14	1
	flounder (*Syacium* sp.)	3	32-45	2
	bandtooth conger	4	92-112	5
	coral scorpionfish	1	47	1
	barbfish	1	21	1
	blotched cusk-eel	1	77	3
	inshore lizardfish	1	35	1
	snakefish	1	132	30
	lesser electric ray	1	165	481
	planehead filefish	1	34	2
	Seminole goby	1	27	1
3	eyed flounder	4	29-54	6
	flounder (*B. robinsi*)	3	30-53	5
		1	96	16
	flounder (*Bothus* sp.)	1	ca.70	fragment
	spotted whiff	1	67	4
	snakefish	1	157	63
	leopard searobin	1	81	9

TABLE J-141
(continued)
TRAWL COLLECTIONS AT ST. LUCIE
20 JULY 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
4	bluelip parrotfish	2	27-32	1
		2	63-110	47
	polka-dot batfish	1	162	105
	bank cusk-eel	1	182	34
	Seminole goby	1	20	1
	sand perch	1	16	1
5	sand perch	3	13-16	1
	hogfish	1	14	1
	dwarf wrasse	1	10	1
	bluelip parrotfish	1	22	1
	cardinalfish	1	15	1
	planehead filefish	1	13	1
	juvenile fish	4	9-17	1

TABLE J-142

TRAWL COLLECTIONS AT ST. LUCIE
24 AUGUST 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	mojarra	3	18-21	1
	twospot cardinalfish	2	16-17	1
	whiff	1	43	1
	flounder *(B. robinsi)*	1	19	1
	leopard searobin	1	104	15
1	tomatate	5	44-58	19
	mojarra	2	17-19	1
	gray triggerfish	1	70	11
	snakefish	1	96	11
	flamefish	1	15	1
	flounder (Bothidae)	4	11-18	1
	juvenile fish	8	10-15	1
2	eyed flounder	6	68-108	103
	dusky flounder	1	204	70
	leopard searobin	5	93-131	114
	sand perch	2	27-35	1
	barbfish	2	30-48	5
	gray triggerfish	1	55	8
	jawfish	1	41	1
	bank sea bass	1	51	4
	goby	1	19	1
3	snakefish	2	54-90	11
	inshore lizardfish	1	82	4

TABLE J-142
(continued)
TRAWL COLLECTIONS AT ST. LUCIE
24 AUGUST 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
3 (cont'd)	sand perch	1	54	3
	eyed flounder	1	72	8
	flounder (Bothidae)	2	11-14	1
	juvenile fish	2	19-20	1
4	lepard searobin	1	53	3
	spotted goatfish	1	49	1
	bluelip parrotfish	1	45	2
	goby	1	17	1
	parrotfish	1	9	1
	flounder (Bothidae)	1	18	1
5	barbfish	2	45-69	13
	dwarf sand perch	1	51	2
	sand perch	1	38	1
	spottedfin tonguefish	1	121	15
	conchfish	1	30	1
	filefish	1	401	1600
	seahorse	1	150	15

TABLE J-143

TRAWL COLLECTIONS AT ST. LUCIE
19 SEPTEMBER 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	mojarra	76	15-23	9
	spotfin mojarra	5	30-81	32
	tomtate	30	16-24	4
	lane snapper	2	20-27	1
	twospot cardinalfish	2	19	1
	sand perch	1	26	1
	goby	1	14	1
	lepard searobin	1	158	52
	spotted whiff	1	48	2
	cusk-eel	1	53	1
	blackedge moray	1	350	70[a]
1	tomtate	14	19-21	4
	mojarra	9	16-19	1
2	sand perch	12	18-63	20
	lepard searobin	1	40	1
		1	131	43
	barbfish	2	49-73	4
	snakefish	2	132-134	67
	lizardfish	1	34	1
	dusky flounder	2	35-63	4
	eyed flounder	1	62	4
	flounder *(B. robinsi)*	1	96	14
	blackedge moray	1	360	70[a]

[a]Estimated weight.

TABLE J-143
(continued)
TRAWL COLLECTIONS AT ST. LUCIE
19 SEPTEMBER 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
3	leopard searobin	2	149-171	114
	searobin	1	34	1
	snakefish	2	109-121	42
	inshore lizardfish	1	178	45
	lizardfish	1	36	1
	flounder *(B. robinsi)*	2	93-109	38
	eyed flounder	1	73	8
	flounder *(Bothus sp.)*	2	18-40	1
	stargazer	1	58	2
4	inshore lizardfish	2	37-39	1
		1	207	72
	sand perch	2	15-22	1
	dwarf sand perch	1	61	4
	leopard searobin	1	133	33
	eyed flounder	1	61	5
	coral scorpionfish	1	53	6
	cusk-eel	1	49	1
	stargazer	1	48	1
	bandtooth conger	1	90	1
5	tomtate	20	15-21	2
	sand perch	17	16-39	4
	leopard searobin	4	100-152	128
	dwarf sand perch	3	49-54	8
	lane snapper	3	18-20	1
	mojarra	2	20	1

TABLE J-143
(continued)
TRAWL COLLECTIONS AT ST. LUCIE
19 SEPTEMBER 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
5 (cont'd)	Seminole goby	2	24-26	1
	cardinalfish (*Astrapogon* sp.)	2	19-21	1
	twospot cardinalfish	1	19	1
	barbfish	2	39-54	8
	coral scorpionfish	1	30	1
	eyed flounder	2	52-98	24
	flounder (*B. robinsi*)	1	105	20
	spottedfin tonguefish	1	137	24
	high-hat	1	14	1
	gray angelfish	1	46	5
	short bigeye	1	23	1
	scrawled cowfish	1	61	18
	planehead filefish	1	45	3

TABLE J-144

TRAWL COLLECTIONS AT ST. LUCIE
20 OCTOBER 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	nothing collected	-	-	-
1	anchovy	5	17-29	1
	lane snapper	1	23	1
	planehead filefish	1	22	1
	flounder *(Bothus* sp.*)*	1	11	1
	juvenile fish	1	8	1
2	anchovy	3	36-38	1
	inshore lizardfish	1	33	1
		1	276	195
	flounder *(B. robinsi)*	1	72	8
	leopard searobin	1	77	8
	Seminole goby	1	17	1
3	flounder *(B. robinsi)*	3	40-47	15
	eyed flounder	1	112	38
	snakefish	2	101-136	52
	leopard searobin	1	171	79
	cusk-eel *(Lepophidion* sp.*)*	1	41	1
4	leopard searobin	2	147-162	107
	northern searobin	1	76	8
	inshore lizardfish	1	36	1
	eyed flounder	1	108	33
	flounder *(B. robinsi)*	1	95	20
	flounder *(Bothus* sp.*)*	1	13	1

TABLE J-144
(continued)
TRAWL COLLECTIONS AT ST. LUCIE
20 OCTOBER 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
5	sand perch	4	20-44	3
		1	174	124
	barbfish	5	36-68	7
	twospot cardinalfish	4	17-24	1
	blackfin cardinalfish	1	31	2
	pigfish	2	179-198	339
	leopard searobin	2	158-162	112
	inshore lizardfish	1	31	1
	Gulf flounder	1	257	304
	bandtail puffer	1	82	27
	orange filefish	1	114	30

TABLE J-145

TRAWL COLLECTIONS AT ST. LUCIE
9 NOVEMBER 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	seatrout	16	14-25	3
	croaker	6	11-20	1
	sand drum	2	65-76	13
	kingfish	1	13	1
	anchovy	2	32-33	1
	flounder (*Bothus* sp.)	2	14-15	1
	lookdown	1	12	1
	pigfish	1	192	192
	bank cusk-eel	1	224	85
	cusk-eel	1	45	1
	inshore lizardfish	1	85	1
1	seatrout	536	12-28	104
	croaker	221	9-21	33
	kingfish	8	13-33	2
	banded drum	2	179-182	346
	high-hat	1	14	1
	leopard searobin	1	154	47
	searobin	16	10-24	2
	spotted whiff	4	27-66	9
		3	81-112	50
	whiff	4	13-15	1
	bank cusk-eel	2	141-178	55
		5	209-260	439
			60	
	blotched cusk-eel	2	97-144	29
		2	201-229	151
	cusk-eel	2	46-49	1
	anchovy	5	26-29	1

TABLE J-145
(continued)
TRAWL COLLECTIONS AT ST. LUCIE
9 NOVEMBER 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
1 (continued)	lesser electric ray	2	110-142	354
	filefish	2	8-9	1
	margintail conger	2	123-148	7
	pigfish	1	172	121
	silver jenny	1	73	10
	dwarf sand perch	1	105	21
	lane snapper	1	16	1
2	flounder	2	14-16	1
	leopard searobin	1	160	51
	Atlantic midshipman	1	46	1
3	flounder	5	11-16	1
	dusky flounder	1	112	27
		1	235	230
	anchovy	3	16-18	1
	snakefish	2	134	64
4	leopard searobin	2	142-181	92
	flounder	2	15-16	1
	spotfin mojarra	1	99	25
5	seatrout	54	14-23	8
	Atlantic midshipman	16	20-71	41
	planehead filefish	14	9-10	1
		2	107-142	138
	leopard searobin	6	134-173	276
	searobin	10	9-17	1

TABLE J-145
(continued)
TRAWL COLLECTIONS AT ST. LUCIE
9 NOVEMBER 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
5 (continued)	coral scorpionfish	10	42-68	70
	barbfish	3	41-68	21
	pigfish	6	164-195	1042
	bank cusk-eel	1	74	3
	silver jenny	5	127-187	149
		5	53-114	61
	anchovy	4	22-24	1
	sand perch	3	12-34	2
		1	71	7
	sea catfish	1	220	160
		2	300-312	990
	dusky flounder	2	71-98	23
	bandtail puffer	1	84	19
	balloonfish	1	11	1
	gray angelfish	1	77	22
	goby (*Microgobius* sp.)	1	17	1
	jawfish	1	61	5

TABLE J-146

TRAWL COLLECTIONS AT ST. LUCIE
14 DECEMBER 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
0	sand drum	3	98-163	133
	sea catfish	2	189-200	219
	pigfish	2	158-181	231
	blackwing searobin	2	120-131	74
	barbfish	1	152	116
	spotted whiff	1	110	20
	dusky flounder	1	89	11
	bandtooth conger	1	162	6
1	blackwing searobin	5	82-154	225
	leopard searobin	3	172-180	212
	pigfish	2	173-198	370
	lane snapper	1	113	41
	gray snapper	1	179	97
	sea catfish	1	238	198
	bandtooth conger	1	181	10
	bank cusk-eel	1	187	53
2	Atlantic midshipman	3	70-104	27
	leopard searobin	2	157-176	110
	northern searobin	1	33	1
	blotched cusk-eel	2	124-179	57
	bank cusk-eel	1	181	39
	spottedfin tonguefish	1	103	12
3	leopard searobin	5	143-162	246
	inshore lizardfish	4	179-380	827
	snakefish	2	144-182	123

TABLE J-146
(continued)
TRAWL COLLECTIONS AT ST. LUCIE
14 DECEMBER 1977

Station number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
3 (continued)	flounder (*B. robinsi*)	4	68-114	76
	flounder	1	14	1
	spotted whiff	2	46-110	23
	blotched cusk-eel	1	72	4
4	leopard searobin	2	142-146	81
	blackwing searobin	1	166	94
	dusky flounder	2	122-229	214
	eyed flounder	1	90	18
	inshore lizardfish	1	304	308
5	leopard searobin	6	136-170	282
	spottedfin tonguefish	4	80-134	45
	eyed flounder	1	81	11
	fringed flounder	1	82	11
	bandtooth conger	2	139-261	10
	cusk-eel	1	40	1
	Atlantic midshipman	1	64	5
	inshore lizardfish	1	316	264
	pigfish	1	197	196
	coral scorpionfish	1	64	12

TABLE J-147

BEACH SEINE COLLECTIONS AT ST. LUCIE
7 JANUARY 1977

Station number	Replicate number	Species	Number of individuals	Range of standard lengths (mm)	Weight (g)
6	1	nothing collected	-	-	-
	2	Gulf kingfish	1	154	56
	3	Gulf kingfish	1	102	16
7	1	nothing collected	-	-	-
	2	nothing collected	-	-	-
	3	nothing collected	-	-	-
8	1	nothing collected	-	-	-
	2	nothing collected	-	-	-
	3	speckled crab	1	120	113

TABLE J-148

BEACH SEINE COLLECTIONS AT ST. LUCIE
17 FEBRUARY 1977

Station number	Replicate number	Species	Number of individuals	Range of standard lengths (mm)	Weight (g)
6	1	nothing collected	-	-	-
	2	sea catfish	1	144	46
	3	sea catfish	1	147	46
7	1	nothing collected	-	-	-
	2	nothing collected	-	-	-
	3	nothing collected	-	-	-
8	1	nothing collected	-	-	-
	2	Gulf kingfish	2	157-168	125
		Atlantic thread herring	1	167	95
	3	Florida pompano	1	182	158

TABLE J-149

BEACH SEINE COLLECTIONS AT ST. LUCIE
18 MARCH 1977

Station number	Replicate number	Species	Number of individuals	Range of standard lengths (mm)	Weight (g)
6	1	sand drum	1	70	7
	2	Gulf kingfish	1	141	46
	3	nothing collected	-	-	-
7	1	nothing collected	-	-	-
	2	nothing collected	-	-	-
	3	nothing collected	-	-	-
8	1	nothing collected	-	-	-
	2	nothing collected	-	-	-
	3	nothing collected	-	-	-

TABLE J-150

BEACH SEINE COLLECTIONS AT ST. LUCIE
29 APRIL 1977

Station number	Replicate number	Species	Number of individuals	Range of standard lengths (mm)	Weight (g)
6	1	Gulf kingfish	4	94-157	103
	2	sand drum	3	30-42	3
			2	71-94	23
		Gulf kingfish	3	94-151	85
			1	207	135
		anchovy	2	26-28	1
		juvenile fish	15	21-28	1
	3	Gulf kingfish	2	40-54	4
			2	144-170	124
		striped mojarra	1	164	117
		sand drum	1	32	1
7	1	nothing collected	-	-	-
	2	sand drum	5	31-69	16
		Gulf kingfish	1	109	20
		anchovy	12	27-31	2
		juvenile fish	3	20-26	1
	3	nothing collected	-	-	-
8	1	sand drum	1	71	7
	2	nothing collected	-	-	-
	3	nothing collected	-	-	-

TABLE J-151

BEACH SEINE COLLECTIONS AT ST. LUCIE
16 MAY 1977

Station number	Replicate number	Species	Number of individuals	Range of standard lengths (mm)	Weight (g)
6	1	Gulf kingfish	6	56-73	29
	2	Florida pompano	1	26	1
		sand drum	1	46	2
	3	Gulf kingfish	1	64	4
7	1	scaled sardine	2	137-139	109
		Florida pompano	1	26	1
		palometa	1	201	252
	2	sand drum	1	101	21
	3	Florida pompano	3	28-43	4
		Gulf kingfish	1	222	166
			1	ca. 320	escaped
8	1	sand drum	2	71-74	15
	2	Gulf kingfish	2	63-75	11
		sand drum	1	105	22
	3	Gulf kingfish	1	181	93

TABLE J-152

BEACH SEINE COLLECTIONS AT ST. LUCIE
16 JUNE 1977

Station number	Replicate number	Species	Number of individuals	Range of standard lengths (mm)	Weight (g)
6	1	sand drum	21	36-86	90
		striped anchovy	4	35-50	4
		Atlantic moonfish	1	29	1
		striped mojarra	1	155	109
	2	sand drum	32	35-71	82
		striped anchovy	27	32-44	16
		Atlantic thread herring	8	155-172	591
		Florida pompano	5	40-60	19
		northern sennet	1	362	264
		striped mojarra	1	179	180
	3.	striped anchovy	15	35-44	9
		Atlantic thread herring	5	28-42	5
		sand drum	7	35-71	23
		striped mojarra	1	162	122
7	1	white mullet	1	220	204
		sand drum	1	55	3
		Atlantic thread herring	1	56	4
	2	sand drum	3	66-77	27
		Florida pompano	1	83	18

TABLE J-152
(continued)
BEACH SEINE COLLECTIONS AT ST. LUCIE
16 JUNE 1977

Station number	Replicate number	Species	Number of individuals	Range of standard lengths (mm)	Weight (g)
7 (cont.)	3	Florida pompano	1	56	6
		speckled crab	2	51-54	16
8	1	Gulf kingfish	1	113	26
			1	204	140
		speckled crab	1	38	3
	2	sand drum	1	75	9
		speckled crab	1	33	2
	3	speckled crab	1	37	3

TABLE J-153

BEACH SEINE COLLECTIONS AT ST. LUCIE
27 JULY 1977

Station number	Replicate number	Species	Number of individuals	Range of standard lengths (mm)	Weight (g)
6	1	scaled sardine	8	75-83	79
		Gulf kingfish	3	81-94	29
		sand drum	2	48-71	9
		Florida pompano	1	59	6
		speckled crab	1	56	12
	2	sand drum	6	42-61	14
		Gulf kingfish	4	52-69	16
		Atlantic thread herring	3	80-89	33
		silver porgy	1	58	7
		guaguanche	1	487	816
		speckled crab	1	71	23
	3	sand drum	4	39-47	7
		speckled crab	1	116	106
7	1	scaled sardine	1	48	2
			34	71-92	345
		Gulf kingfish	1	68	6
	2	Gulf kingfish	3	47-66	9
			4	71-92	30
		sand drum	5	46-81	29
			1	125	39
		speckled crab	1	53	9

TABLE J-153
(continued)
BEACH SEINE COLLECTIONS AT ST. LUCIE
27 JULY 1977

Station number	Replicate number	Species	Number of individuals	Range of standard lengths (mm)	Weight (g)
7 (cont.)	3	Gulf kingfish	10	49-69	39
			2	81-87	20
		sand drum	1	60	5
8	1	speckled crab	1	78	35
	2	scaled sardine	24	68-93	235
		silver jenny	1	29	1
	3	scaled sardine	6	29-42	6
			8	64-81	65
		spotfin mojarra	6	25-38	5
		silver jenny	1	38	2

TABLE J-154

BEACH SEINE COLLECTIONS AT ST. LUCIE
26 AUGUST 1977

Station number	Replicate number	Species	Number of individuals	Range of standard lengths (mm)	Weight (g)
6	1	Gulf kingfish	2	41-72	7
			5	82-102	58
		speckled crab	1	65	18
	2	scaled sardine	65	63-85	690
		Gulf kingfish	10	57-96	96
		sand drum	6	69-75	48
		permit	1	38	2
		sheepshead	1	212	294
		speckled crab	2	61-65	33
	3	Gulf kingfish	1	39	1
			11	78-130	185
			1	221	176
		scaled sardine	4	65-79	34
		sand drum	3	73-82	28
		permit	1	36	2
7	1	Gulf kingfish	5	92-112	87
		sand drum	5	90-119	98
	2	Gulf kingfish	5	85-93	60
		sand drum	5	82-93	67
	3	Gulf kingfish	2	81-89	22
		sand drum	1	96	19
8	1	barbu	12	87-148	477

TABLE J-154
(continued)
BEACH SEINE COLLECTIONS AT ST. LUCIE
26 AUGUST 1977

Station number	Replicate number	Species	Number of individuals	Range of standard lengths (mm)	Weight (g)
8 (cont'd.)		sand drum	2	123-127	78
		permit	1	61	9
	2	barbu	3	103-109	80
		Florida pompano	1	214	268
		permit	1	48	4
	3	nothing collected	-	-	-

TABLE J-155

BEACH SEINE COLLECTIONS AT ST. LUCIE
23 SEPTEMBER 1977

Station number	Replicate number	Species	Number of individuals	Range of standard lengths (mm)	Weight (g)
6	1	sand drum	6	33-61	10
			21	75-98	289
			7	100-118	168
		Gulf kingfish	5	39-71	22
			6	93-121	131
		spotfin mojarra	2	74-79	21
		guaguanche	1	339	320
		barbu	1	92	15
		speckled crab	1	101	55
	2	spotfin mojarra	6	73-80	63
		silver jenny	1	77	14
		guaguanche	1	348	372
	3	Gulf kingfish	2	38-51	4
			1	98	15
		sand drum	1	84	12
7	1	permit	9	44-56	46
		spotfin mojarra	5	59-84	52
		silver jenny	1	63	7
		Gulf kingfish	3	117-125	91
		sand drum	1	62	5
	2	permit	9	42-57	53
		palometa	2	158-174	292
		Gulf kingfish	4	95-113	74
			1	182	83

TABLE J-155
(continued)
BEACH SEINE COLLECTIONS AT ST. LUCIE
23 SEPTEMBER 1977

Station number	Replicate number	Species	Number of individuals	Range of standard lengths (mm)	Weight (g)
		sand drum	3	31-36	3
		silver jenny	2	63-66	14
		spotfin mojarra	1	74	10
	3	spotfin mojarra	16	68-83	174
		silver jenny	6	64-80	57
		Gulf kingfish	2	51-57	6
		permit	2	47-50	9
		palometa	1	139	77
		speckled crab	1	48	6
8	1	spotfin mojarra	15	71-92	161
		silver jenny	1	80	13
		permit	1	37	11
	2	spotfin mojarra	4	72-77	42
	3	spotfin mojarra	4	71-84	44
		permit	1	48	5
		sand drum	1	33	1

TABLE J-156

BEACH SEINE COLLECTIONS AT ST. LUCIE
27 OCTOBER 1977

Station Number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
6	Gulf kingfish	3	30-56	5
		6	80-93	62
		9	102-129	210
	sand drum	3	74-128	75
	permit	2	42-77	16
	Gulf kingfish	4	77-108	50
	sand drum	2	77-114	37
		1	152	66
	speckled crab	1	78	34
	Gulf kingfish	4	83-114	59
		1	136	40
	sand drum	2	111-116	57
7	lookdown	1	94	21
	Florida pompano	1	131	61
	Gulf kingfish	5	73-91	53
		2	108-123	50
	sea catfish	3	164-184	246
	crevalle jack	3	125-127	134
	Florida pompano	1	156	97
	palometa	1	187	199
	speckled crab	3	40-46	12
	Atlantic thread herring	1	92	12
	Florida pompano	1	136	63
8	Florida pompano	1	125	58
	speckled crab	1	38	3
	Gulf kingfish	1	110	20
		1	214	176
	Florida pompano	1	122	48
		1	171	144

TABLE J-156
(continued)
BEACH SEINE COLLECTIONS AT ST. LUCIE
27 OCTOBER 1977

Station Number	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
8 (cont'd)	crevalle jack	2	111-121	75
	blue runner	1	117	31

TABLE J-157

BEACH SEINE COLLECTIONS AT ST. LUCIE
9 NOVEMBER 1977

Station number	Replicate	Species	Number of individuals	Range of standard lengths (mm)	Total weight (g)
6	1	Atlantic bumper	7	156-170	520
		Gulf kingfish	1	97	15
		broad flounder	1	183	134
	2	Gulf kingfish	1	92	11
	3	Atlantic bumper	5	157-171	364
7	1	Gulf Kingfish	1	99	15
		Florida pompano	1	89	18
	2	palometa	2	181-188	379
	3	nothing collected	-	-	-
8	1	palometa	1	184	166
		barbu	1	186	136
	2	nothing collected	-	-	-
	3	nothing collected	-	-	-

TABLE J-158

BEACH SEINE COLLECTIONS AT ST. LUCIE
15 DECEMBER 1977

Station number	Replicate number	Species	Number of individuals	Range of standard lengths (mm)	Weight (g)
6	1	Gulf kingfish	1	97	12
			1	172	70
		southern kingfish	1	187	101
		speckled crab	2	49-56	18
	2	nothing collected	-	-	-
	3	Atlantic bumper	32	141-171	2136
		striped mojarra	4	154-179	663
		southern kingfish	1	186	64
7	1	speckled crab	2	47-89	65
	2	southern kingfish	1	243	246
		sand drum	1	218	209
	3	bullnose ray	2	354-363	1245
		southern kingfish	1	213	210
8	1	Gulf kingfish	1	91	12
		palometa	1	84	18
	2	southern kingfish	1	204	136
		bullnose ray	1	340	513
		silver jenny	1	91	22
	3	southern kingfish	1	167	67

APPENDIX K

I C H T H Y O P L A N K T O N

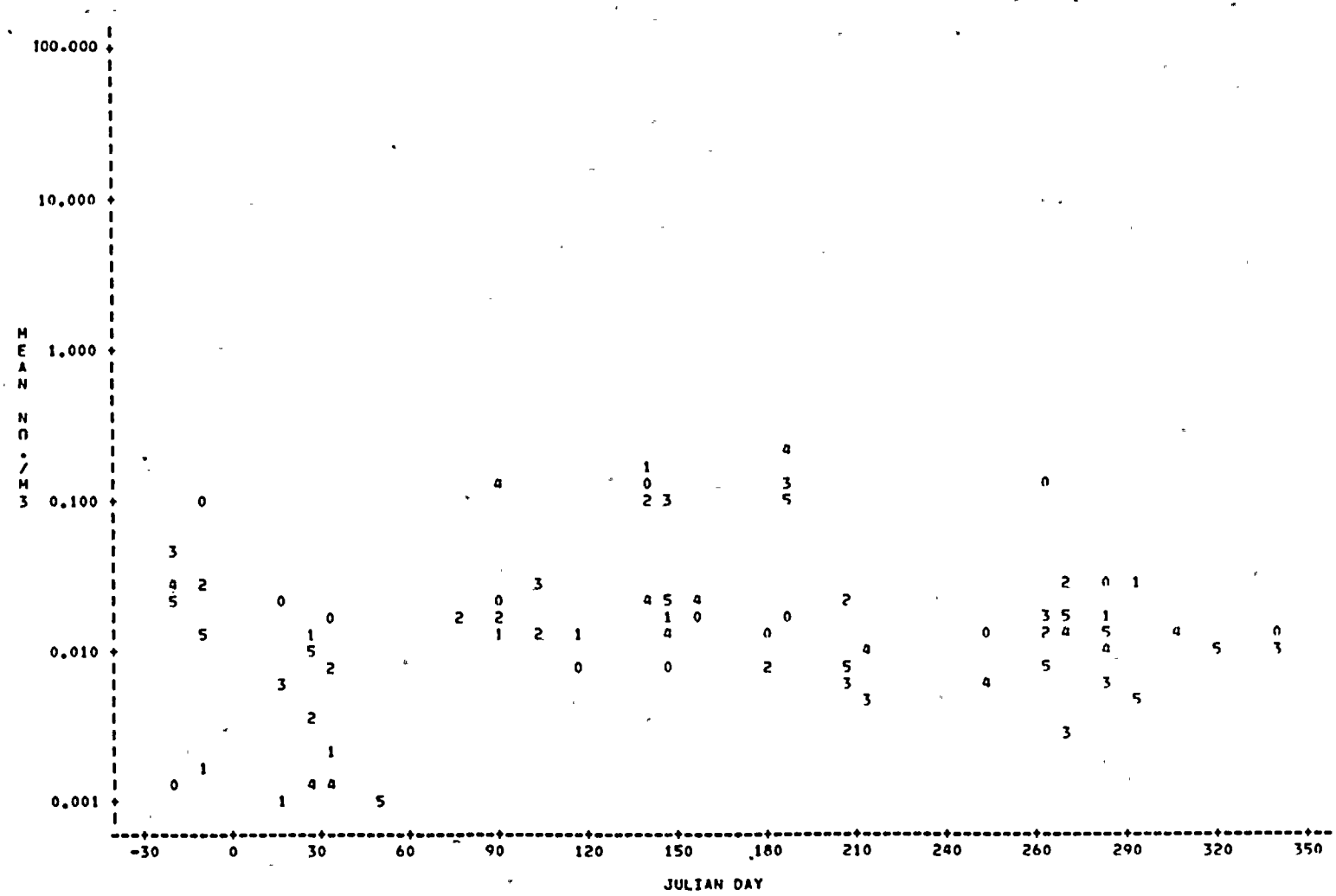


Figure K-1. Density of Gerreidae larvae by Julian (calendar) day, Stations 0 through 5, St. Lucie Plant, 12 December 1976 - 5 December 1977.

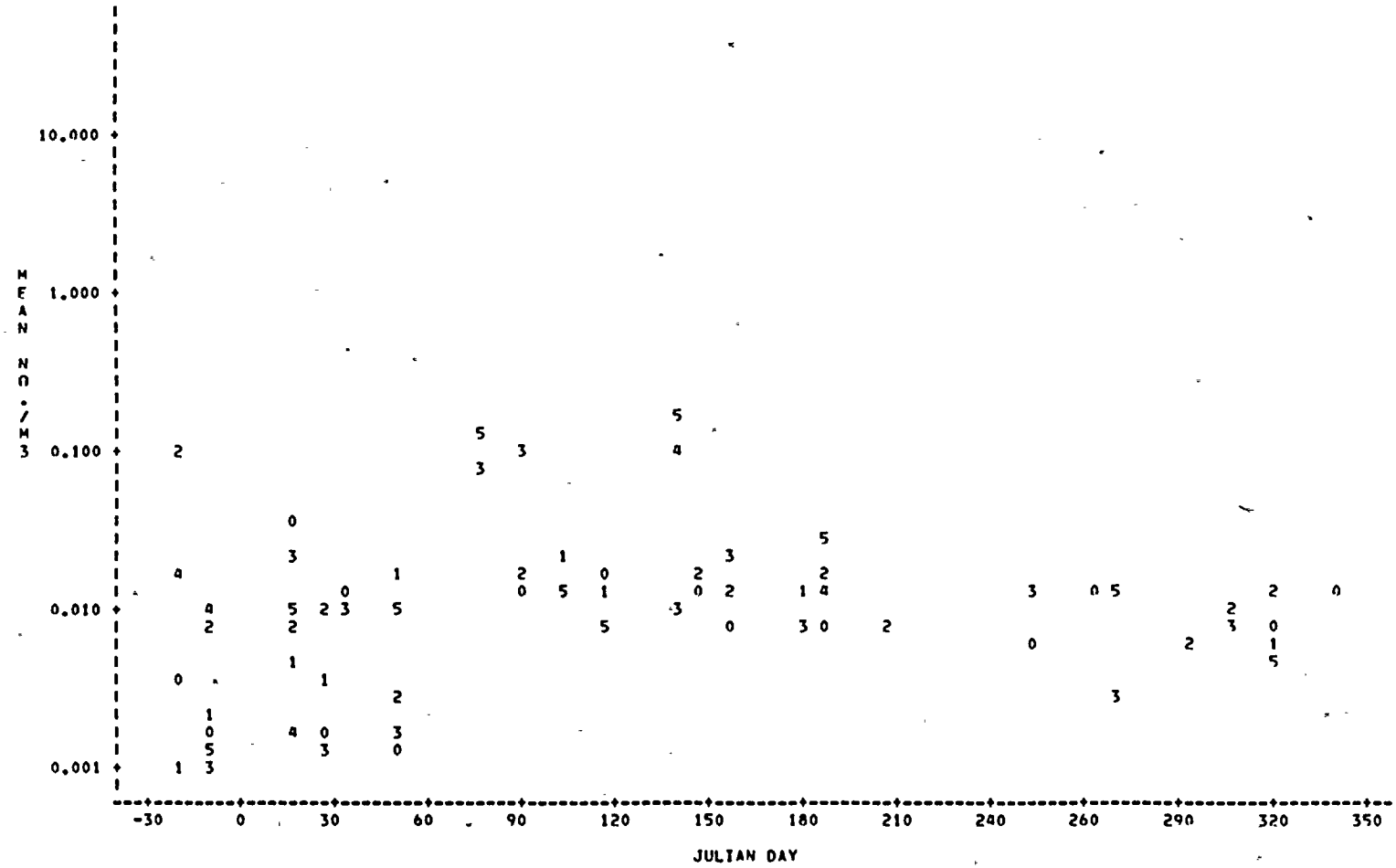


Figure K-2. Density of Bleniidae larvae by Julian (calendar) day, Stations 0 through 5, St. Lucie Plant, 12 December 1976 - 5 December 1977.

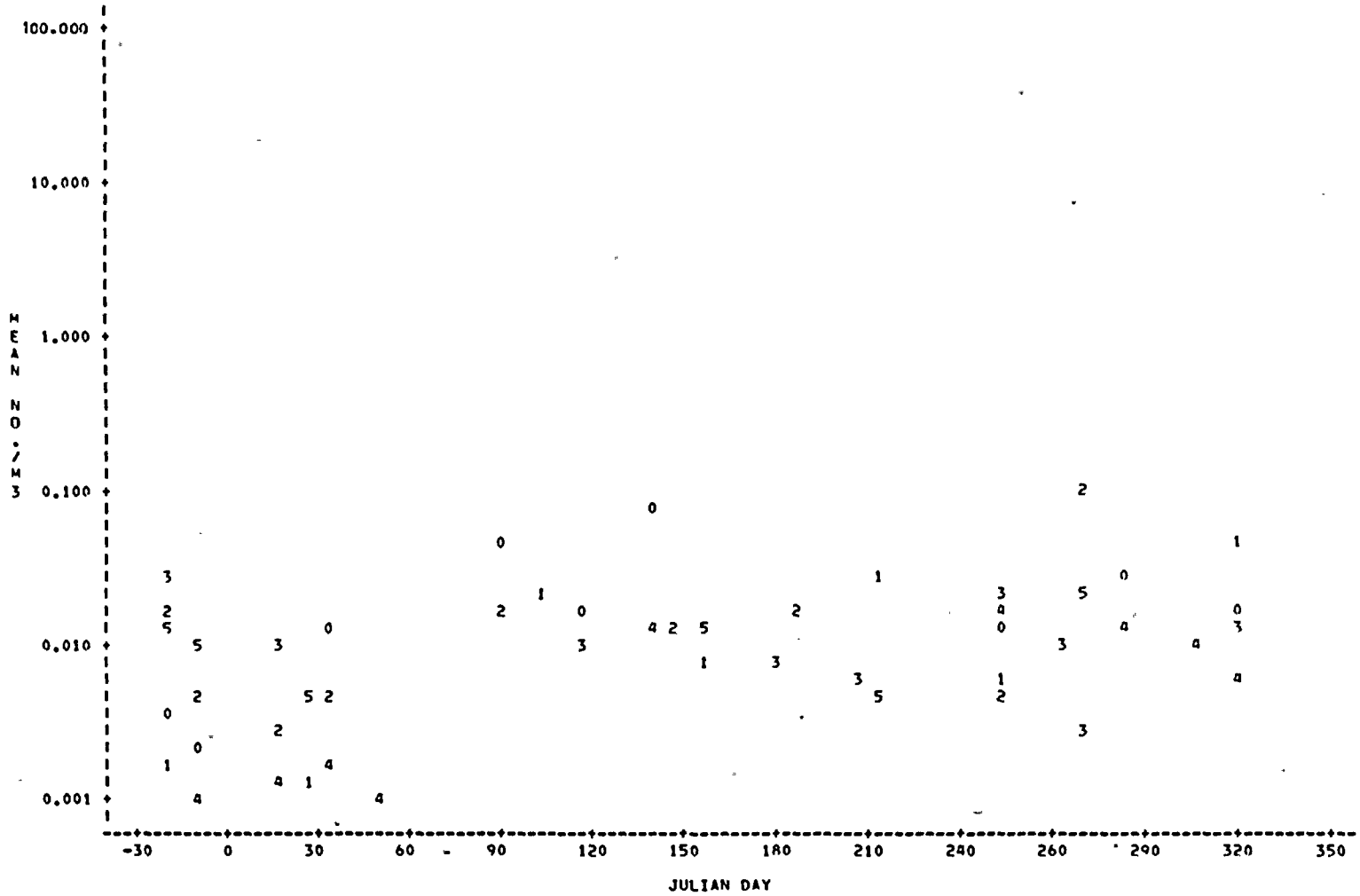


Figure K-3. Density of Ophidiidae larvae by Julian (calendar) day, Stations 0 through 5, St. Lucie Plant, 12 December 1976 - 5 December 1977.

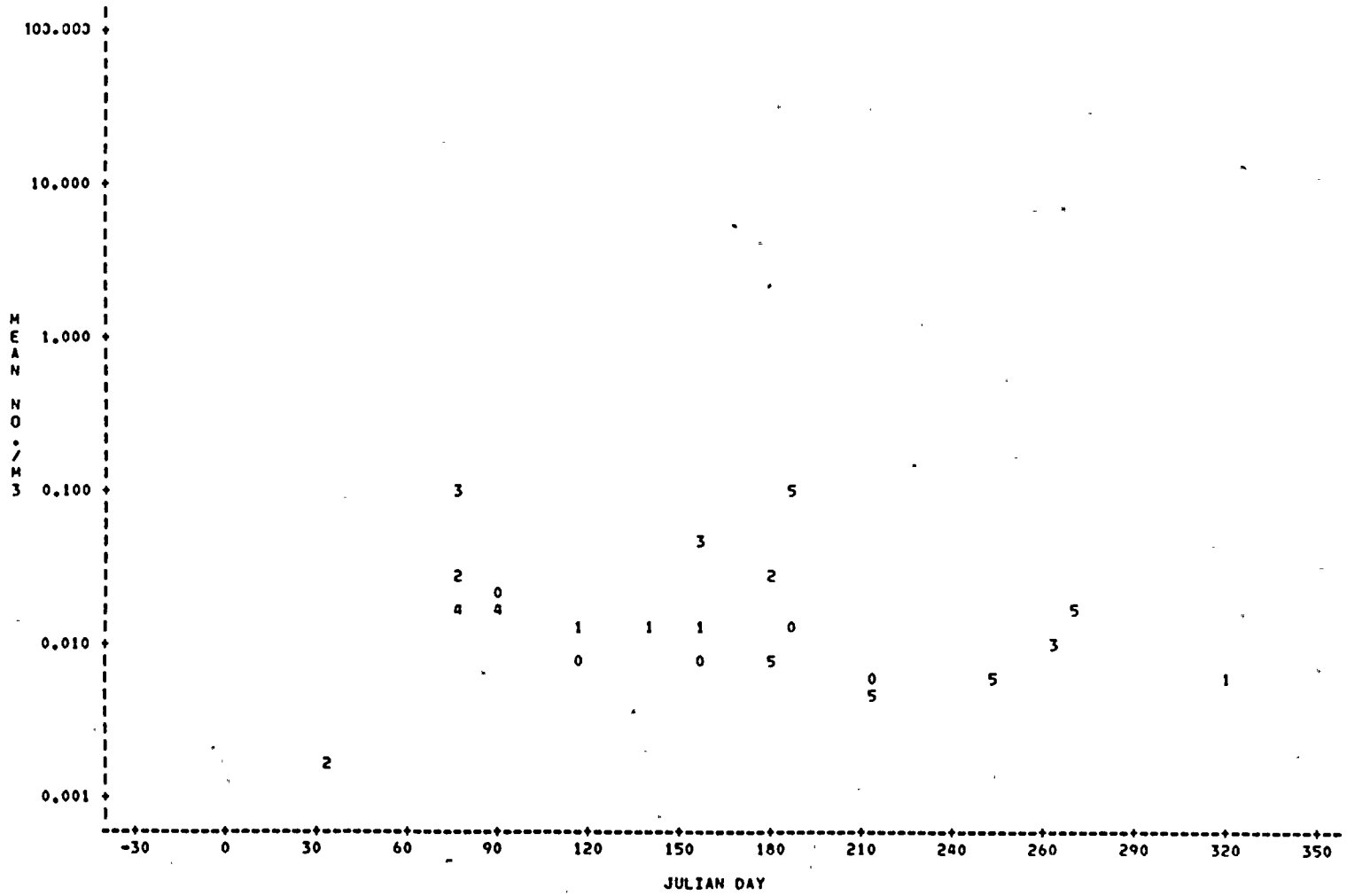


Figure K-4. Density of Serranidae larvae by Julian (calendar) day, Stations 0 through 5, St. Lucie Plant, 12 December 1976 - 5 December 1977.

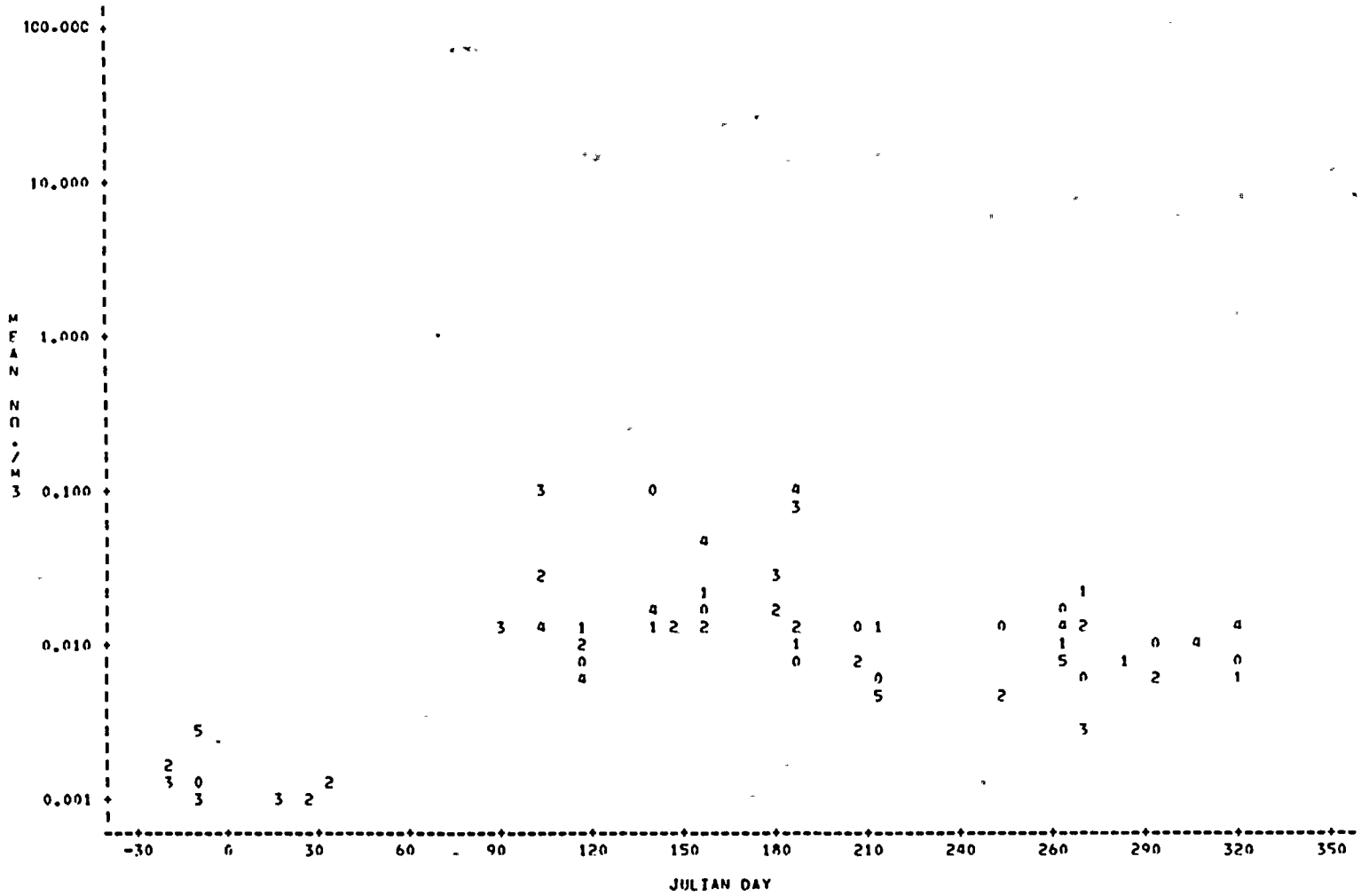


Figure K-5. Density of Tetraodontidae larvae by Julian (calendar) day, Stations 0 through 5, St. Lucie Plant, 12 December 1976 - 5 December 1977.

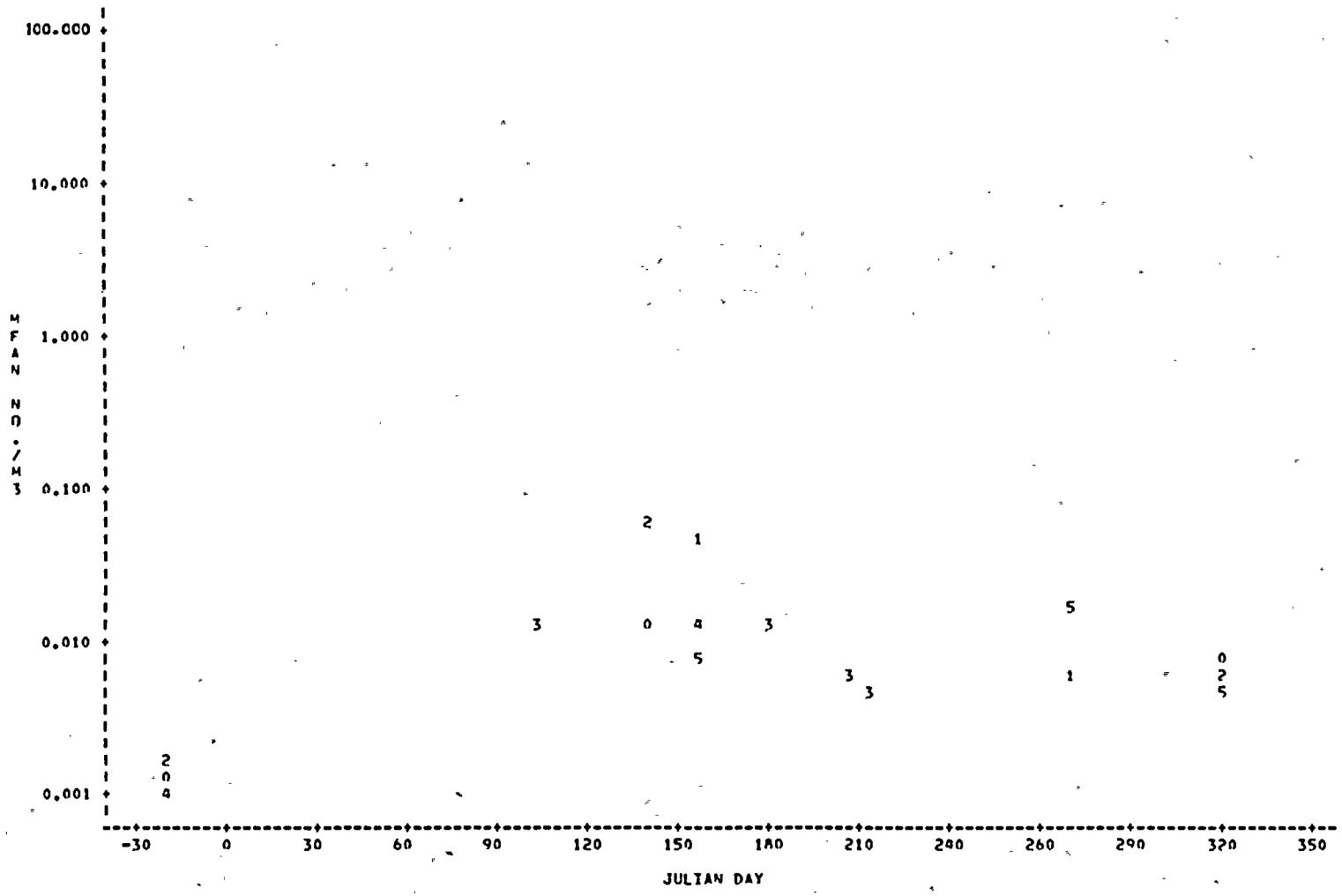


Figure K-6. Density of Scorpaenidae larvae by Julian (calendar) day, Stations 0 through 5, St. Lucie Plant, 12 December 1976 - 5 December 1977.

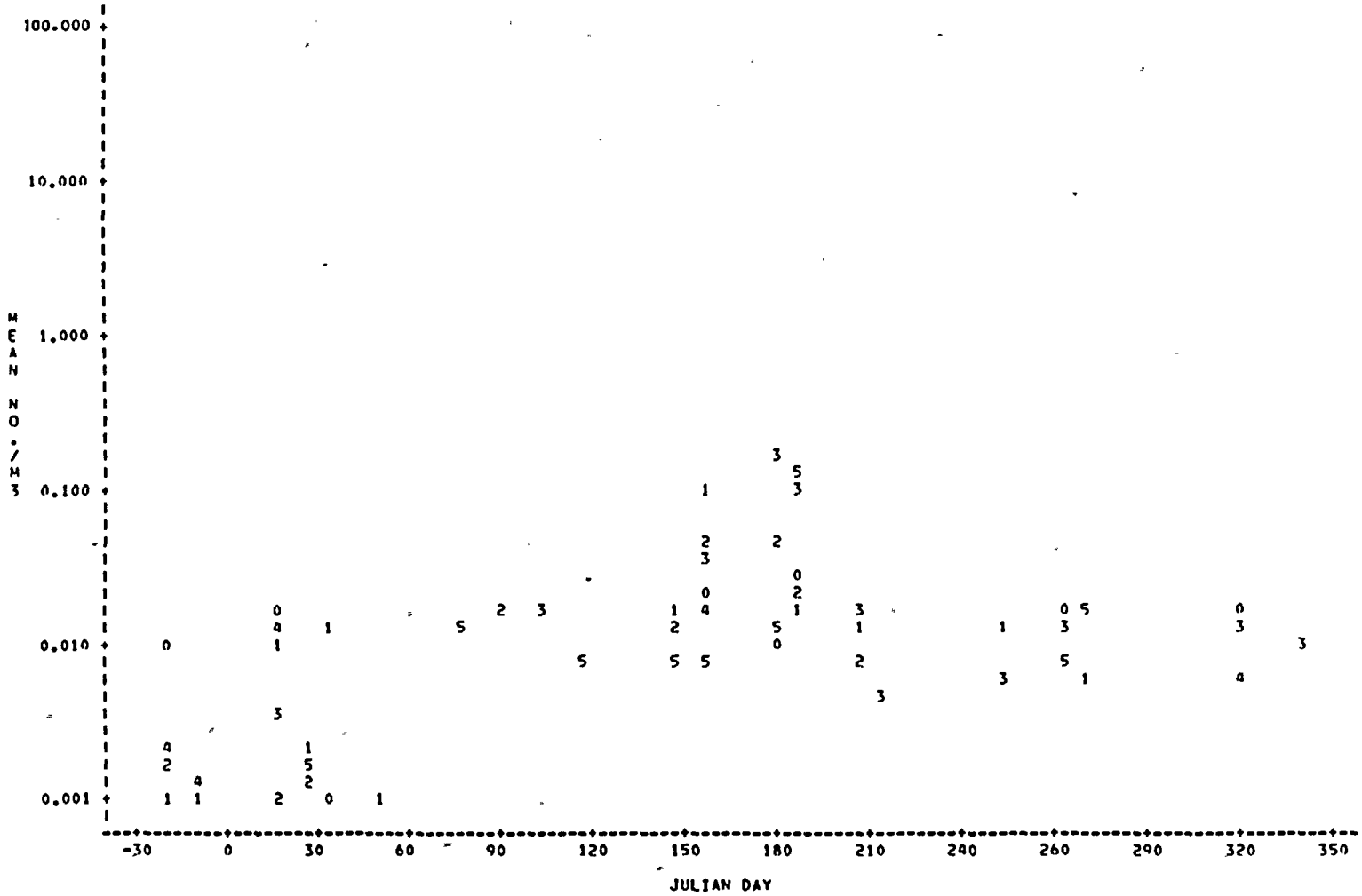


Figure K-7. Density of Gobiidae larvae by Julian (calendar) day, Stations 0 through 5, St. Lucie Plant, 12 December 1976 - 5 December 1977.

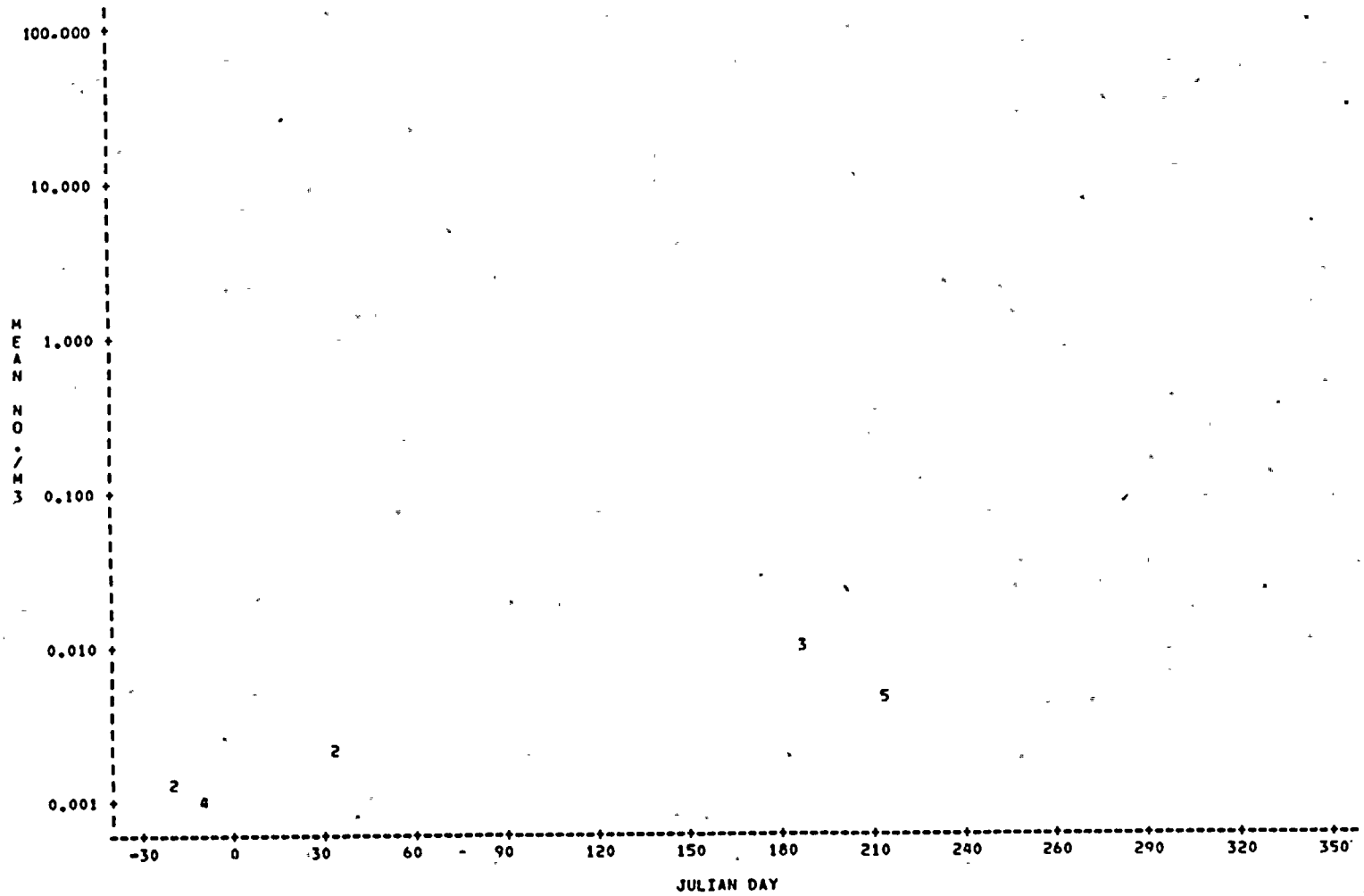


Figure K-8. Density of Gobiesocidae larvae by Julian (calendar) day, Stations 0 through 5, St. Lucie Plant, 12 December 1976 - 5 December 1977.

TABLE K-01

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
12 DECEMBER 1976

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	2.3 - 6.8	3	0	0	0	.	0	42	36
SCIAENIDAE	2.3 - 5.8	8	1	0	0	.	10	8	3
BLENIIDAE	2.1 - 8.0	0	8	2	0	.	67	0	1
TETRAODONTIDAE	2.4 -19.3	0	1	0	0	.	2	1	1
CLUPEIFORMES	2.6 -22.0	7	8	8	2	.	11	6	15
CARANGIDAE	2.4 - 4.3	1	0	0	0	.	9	2	2
GOBIIDAE	3.2 -14.5	8	6	2	0	.	2	0	0
BOTHIDAE	2.2 -20.0	6	0	0	0	.	8	0	0
GOBIESOCIDAE	2.5 - 5.0	1	0	0	0	.	1	0	0
OPHIDIIDAE	3.3 -13.2	5	4	3	1	.	20	44	18
SERRANIDAE	5.7 - 5.7	1	0	0	0	.	0	0	0
SCORPAENIDAE	1.7 - 5.8	2	1	0	0	.	2	1	2
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	1.6 -65.0	66	33	3	1	.	40	29	30
FISH EGGS	0.6 - 3.7	2407	1873	2635	1968	2759	1592	877	433
TOTAL WATER FILTERED IN M3		699	685	715	686	668	589	575	567
TOTAL FISH LARVAE		108	62	18	4	305	172	133	108
FISH LARVAE/M3		0.155	0.091	0.025	0.006	0.457	0.292	0.231	0.191
TOTAL FISH EGGS		2407	1873	2635	1968	2759	1592	877	433
FISH EGGS/M3		3.445	2.736	3.685	2.870	4.131	2.701	1.526	0.764

"." represents insufficient data (for columns) and no collection of a larval category (for rows).

TABLE K-01
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
12 DECEMBER 1976

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	2.3 - 6.8	72	0	34	19	0	0	0	0
SCIAENIDAE	2.3 - 5.8	0	4	0	0	0	0	0	0
BLENIIDAE	2.1 - 8.0	1	35	0	0	1	0	2	4
TETRAODONTIDAE	2.4 -19.3	1	0	2	1	0	0	0	0
CLUPEIFORMES	2.6 -22.0	5	1	18	20	1	0	0	0
CARANGIDAE	2.4 - 4.3	0	2	0	1	0	0	0	0
GOBIIDAE	3.2 -14.5	4	1	0	0	0	0	0	0
BOTHIDAE	2.2 -20.0	1	3	0	1	0	0	0	0
GOBIESOCIDAE	2.5 - 5.0	0	0	1	2	0	0	0	0
OPHIDIIDAE	3.3 -13.2	45	19	9	12	0	0	0	0
SERRANIDAE	5.7 - 5.7	0	0	0	0	0	0	0	0
SCORPAENIDAE	1.7 - 5.8	2	0	0	0	0	0	0	0
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	1.6 -65.0	83	22	1	9	0	0	0	0
FISH EGGS	0.6 - 3.7	621	966	7286	6800	94	62	20	6
TOTAL WATER FILTERED IN M3		679	612	630	605	350	250	216	250
TOTAL FISH LARVAE		214	87	65	65	2	0	2	4
FISH LARVAE/M3		0.315	0.142	0.103	0.108	0.006	0.000	0.009	0.016
TOTAL FISH EGGS		621	966	7286	6800	94	62	20	6
FISH EGGS/M3		0.915	1.578	11.568	11.246	0.268	0.248	0.092	0.024

TABLE K-02

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
20 DECEMBER 1976

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	2.1 -16.3	27	133	0	2	47	1	0	2
SCIAENIDAE	1.9 - 3.1	0	0	4	2	1	0	2	1
BLENIIDAE	2.7 - 8.4	2	1	1	2	0	9	1	0
TETRAODONTIDAE	2.2 -13.7	3	0	0	0	0	0	0	1
CLUPEIFORMES	3.7 - 6.6	15	52	12	16	17	11	3	4
CARANGIDAE	2.4 -18.8	0	1	0	0	1	1	1	3
GOBIIDAE	4.3 - 6.8	0	0	1	0	1	0	0	1
BOTHIDAE	18.4 -18.4	0	0	0	0	0	0	0	0
GOBIESOCIDAE	5.2 - 5.5	0	0	0	0	0	0	0	0
OPHIDIIDAE	3.4 - 9.7	1	3	0	0	3	4	3	0
SERRANIDAE	. - .	.	.	.	.	.	.	.	.
SCORPAENIDAE	9.5 - 9.5	0	1	0	0	0	0	0	0
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	1.6 -78.0	2	0	13	13	1	23	5	8
FISH EGGS	0.6 - 3.5	305	428	400	421	291	241	29	41
TOTAL WATER FILTERED IN M3		610	550	351	375	510	474	368	355
TOTAL FISH LARVAE		50	191	31	35	71	49	15	20
FISH LARVAE/M3		0.082	0.347	0.088	0.093	0.139	0.103	0.041	0.056
TOTAL FISH EGGS		305	428	400	421	291	241	29	41
FISH EGGS/M3		0.500	0.779	1.138	1.123	0.571	0.508	0.079	0.115

TABLE K-02
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
20 DECEMBER 1976

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	2.1 -16.3	0	0	15	4	0	0	0	0
SCIAENIDAE	1.9 - 3.1	5	2	6	7	0	0	0	0
BLENIIDAE	2.7 - 8.4	7	4	2	0	1	1	1	0
TETRAODONTIDAE	2.2 -13.7	0	1	3	1	0	0	0	0
CLUPEIFORMES	3.7 - 6.6	10	6	83	67	0	0	1	1
CARANGIDAE	2.4 -18.8	6	3	6	1	0	0	0	0
GOBIIDAE	4.3 - 6.8	2	0	0	0	0	0	0	0
BOTHIDAE	18.4 -18.4	0	0	0	1	0	0	0	0
GOBIESOCIDAE	5.2 - 5.5	0	1	0	1	0	0	0	0
OPHIDIIDAE	3.4 - 9.7	1	0	7	1	0	0	0	0
SERRANIDAE	. - .	.	.	.	.	.	.	.	.
SCORPAENIDAE	9.5 - 9.5	0	0	0	0	0	0	0	0
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	1.6 -78.0	10	6	17	6	3	0	0	0
FISH EGGS	0.6 - 3.5	160	61	240	190	5	7	37	27
TOTAL WATER FILTERED IN M3		443	404	413	389	349	353	383	332
TOTAL FISH LARVAE		41	23	139	89	4	1	2	1
FISH LARVAE/M3		0.092	0.057	0.337	0.229	0.011	0.003	0.005	0.003
TOTAL FISH EGGS		160	61	240	190	5	7	37	27
FISH EGGS/M3		0.361	0.151	0.581	0.489	0.014	0.020	0.097	0.081

TABLE K-03

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
18 JANUARY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	3.2 -12.9	57	7	0	2	0	2	1	12
SCIAENIDAE	3.2 -11.6	154	10	13	7	5	0	138	181
BLENIIDAE	2.4 -20.3	73	29	10	2	8	7	43	24
TETRAODONTIDAE	3.2 -13.7	0	0	0	0	1	0	0	2
CLUPEIFORMES	4.3 -20.0	6864	5875	3687	6731	291	264	397	291
GOBIIDAE	3.1 -11.4	23	31	14	4	1	1	5	5
BOTHIDAE	3.1 -11.3	0	0	2	2	0	0	0	0
GOBIESOCIDAE	5.8 - 5.8	1	0	0	0	0	0	0	0
OPHIDIIDAE	4.5 -10.0	1	0	0	0	3	5	12	5
SERRANIDAE	5.3 - 5.3	0	0	0	0	0	0	0	0
SCORPAENIDAE	4.5 - 4.5	0	0	0	0	0	0	0	1
ALL OTHER LARVAE	2.7 -58.0	0	0	0	52	5	2	2	1
FISH EGGS	0.6 - 1.6	4040	5225	4321	4625	1025	1400	1100	850
TOTAL WATER FILTERED IN M3		852	842	817	791	832	843	791	848
TOTAL FISH LARVAE		7153	5952	3726	6800	314	281	598	522
FISH LARVAE/M3		8.391	7.066	4.559	8.592	0.378	0.333	0.756	0.616
TOTAL FISH EGGS		4040	5225	4321	4625	1025	1400	1100	850
FISH EGGS/M3		4.739	6.203	5.287	5.844	1.233	1.660	1.391	1.003

TABLE K-03
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
18 JANUARY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	3.2 -12.9	0	2	0	2	0	0	0	0
SCIAENIDAE	3.2 -11.6	14	10	43	44	0	1	1	0
BLENIIDAE	2.4 -20.3	3	2	6	10	0	0	1	0
TETRAODONTIDAE	3.2 -13.7	0	0	0	1	0	0	0	0
CLUPEIFORMES	4.3 -20.0	2450	5250	1650	1400	0	1	0	0
GOBIIDAE	3.1 -11.4	27	0	32	16	0	1	0	0
BOTHIDAE	3.1 -11.3	1	1	2	3	0	0	0	0
GOBIESOCIDAE	5.8 - 5.8	0	0	0	0	0	0	0	0
OPHIDIIDAE	4.5 -10.0	3	1	0	1	0	0	0	0
SERRANIDAE	5.3 - 5.3	0	1	0	0	0	0	0	0
SCORPAENIDAE	4.5 - 4.5	0	0	0	0	0	0	0	0
ALL OTHER LARVAE	2.7 -58.0	2	2	3	2	0	0	0	0
FISH EGGS	0.6 - 1.6	5375	3900	5525	5950	202	239	125	93
TOTAL WATER FILTERED IN M3		891	1001	844	780	.	.	466	594
TOTAL FISH LARVAE		2500	5269	1736	1479	0	3	2	0
FISH LARVAE/M3		2.805	5.264	2.057	1.897	.	.	0.004	0.000
TOTAL FISH EGGS		5375	3900	5525	5950	202	239	125	93
FISH EGGS/M3		6.031	3.896	6.545	7.632	.	.	0.268	0.157

TABLE K-04

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
28 JANUARY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	3.7 -14.5	0	0	10	12	3	2	0	1
SCIAENIDAE	5.8 -13.8	2	8	12	13	0	1	0	1
BLENIIDAE	2.0 -20.0	1	2	2	4	6	4	1	1
TETRAODONTIDAE	15.0 -15.0	0	0	0	0	1	0	0	0
CLUPEIFORMES	2.6 -18.2	55	30	179	135	1	2	2	3
CARANGIDAE	3.4 - 3.5	0	0	0	1	0	1	0	0
GOBIIDAE	3.5 -10.8	0	0	3	1	1	1	1	0
BOTHIDAE	4.0 - 4.7	0	0	0	0	1	0	0	0
OPHIDIIDAE	6.4 -13.0	0	0	1	1	0	2	0	0
SERRANIDAE	5.8 - 5.8	0	0	0	0	0	0	0	0
ALL OTHER LARVAE	2.9 -73.0	0	2	2	3	0	0	4	3
FISH EGGS	0.6 - 4.2	1325	2150	14325	16925	1975	2100	450	500
TOTAL WATER FILTERED IN M3		521	597	517	555	430	479	539	588
TOTAL FISH LARVAE		58	42	209	170	13	13	8	9
FISH LARVAE/M3		0.111	0.070	0.405	0.306	0.030	0.027	0.015	0.015
TOTAL FISH EGGS		1325	2150	14325	16925	1975	2100	450	500
FISH EGGS/M3		2.542	3.599	27.731	30.471	4.598	4.380	0.835	0.851

TABLE K-04
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
28 JANUARY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	3.7 -14.5	0	2	12	5	0	2	1	0
SCIAENIDAE	5.8 -13.8	0	0	2	0	4	0	0	0
BLENIIDAE	2.0 -20.0	0	1	2	1	1	1	1	0
TETRAODONTIDAE	15.0 -15.0	0	0	0	0	0	0	0	0
CLUPEIFORMES	2.6 -18.2	2	5	17	15	0	0	1	0
CARANGIDAE	3.4 - 3.5	0	0	0	0	0	0	0	0
GOBIIDAE	3.5 -10.8	0	0	0	3	0	1	0	0
BOTHIDAE	4.0 - 4.7	0	0	0	1	0	0	0	0
OPHIDIIDAE	6.4 -13.0	0	1	6	2	0	0	0	0
SERRANIDAE	5.8 - 5.8	0	1	0	0	0	0	0	0
ALL OTHER LARVAE	2.9 -73.0	0	0	0	2	0	0	0	0
FISH EGGS	0.6 - 4.2	600	650	8575	11575	900	1175	500	125
TOTAL WATER FILTERED IN M3		527	612	579	570	466	437	386	355
TOTAL FISH LARVAE		2	10	39	29	5	4	3	0
FISH LARVAE/M3		0.004	0.016	0.067	0.051	0.011	0.009	0.008	0.000
TOTAL FISH EGGS		600	650	8575	11575	900	1175	500	125
FISH EGGS/M3		1.139	1.061	14.809	20.321	1.931	2.688	1.296	0.352

TABLE K-05

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
3 FEBUARY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	3.1 -12.9	10	31	3	3	12	0	0	0
SCIAENIDAE	3.1 -13.0	6	87	27	8	39	67	1	0
BLENIIDAE	1.9 -21.0	2	37	1	0	16	9	4	12
TETRAODONTIDAE	4.5 -16.9	0	0	0	0	1	2	0	0
CLUPEIFORMES	4.0 -25.0	3425	2844	475	615	112	171	3	6
CARANGIDAE	2.7 -11.5	1	0	0	0	1	4	0	0
GOBIIDAE	3.5 -11.9	0	2	3	20	1	0	0	0
BOTHIDAE	2.7 -17.7	1	3	1	20	1	1	0	1
GOBIESOCIDAE	3.5 - 7.1	1	0	0	0	2	3	0	0
OPHIDIIDAE	5.0 - 9.7	0	30	0	0	6	3	0	0
SERRANIDAE	3.9 - 5.6	0	0	0	0	2	2	0	1
SCORPAENIDAE	12.7 -12.7	0	0	0	0	0	0	0	0
ALL OTHER LARVAE	2.9 -85.0	24	38	55	41	7	16	5	12
FISH EGGS	0.6 - 2.6	8675	7725	1625	1675	9200	11875	4200	6275
TOTAL WATER FILTERED IN M3		834	784	761	738	666	698	558	545
TOTAL FISH LARVAE		3470	3072	565	707	200	278	13	32
FISH LARVAE/M3		4.162	3.919	0.743	0.958	0.300	0.398	0.023	0.059
TOTAL FISH EGGS		8675	7725	1625	1675	9200	11875	4200	6275
FISH EGGS/M3		10.404	9.855	2.136	2.270	13.810	17.013	7.525	11.518

TABLE K-05
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
3 FEBUARY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	3.1 -12.9	0	2	1	0	0	0	0	0
SCIAENIDAE	3.1 -13.0	8	9	2	7	0	0	0	0
BLENIIDAE	1.9 -21.0	9	5	0	0	0	0	0	0
TETRAODONTIDAE	4.5 -16.9	1	0	0	0	0	0	0	0
CLUPEIFORMES	4.0 -25.0	12	14	326	187	1	2	2	0
CARANGIDAE	2.7 -11.5	0	0	0	0	0	0	0	0
GOBIIDAE	3.5 -11.9	0	1	0	0	0	0	1	0
BOTHIDAE	2.7 -17.7	1	0	0	4	0	0	0	0
GOBIESOCIDAE	3.5 - 7.1	0	0	0	0	0	0	0	0
OPHIDIIDAE	5.0 - 9.7	4	0	0	0	0	0	0	0
SERRANIDAE	3.9 - 5.6	0	0	0	0	0	0	0	0
SCORPAENIDAE	12.7 -12.7	0	0	0	1	0	0	0	0
ALL OTHER LARVAE	2.9 -85.0	6	2	1	5	0	0	0	1
FISH EGGS	0.6 - 2.6	9125	10625	1675	2100	250	76	206	131
TOTAL WATER FILTERED IN M3		618	601	616	653	338	360	363	291
TOTAL FISH LARVAE		41	33	330	204	1	2	3	1
FISH LARVAE/M3		0.066	0.055	0.536	0.313	0.003	0.006	0.008	0.003
TOTAL FISH EGGS		9125	10625	1675	2100	250	76	206	131
FISH EGGS/M3		14.772	17.690	2.719	3.218	0.740	0.211	0.567	0.449

TABLE K-06

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
18 FEBUARY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	10.5 -13.2	0	1	0	0	0	0	0	1
SCIAENIDAE	3.4 - 3.5	0	0	0	1	0	0	0	0
BLENIIDAE	2.6 -11.0	2	2	12	33	5	4	2	2
TETRAODONTIDAE	4.3 - 9.2	0	0	0	0	1	0	0	0
CLUPEIFORMES	4.2 -17.4	0	2	3	4	0	2	0	0
CARANGIDAE	12.7 -12.7	0	0	0	0	0	0	0	1
GOBIIDAE	4.0 -10.5	0	1	1	1	0	0	0	0
OPHIDIIDAE	4.8 - 8.2	0	0	0	1	0	0	0	0
SERRANIDAE	3.1 - 5.2	0	0	0	1	0	0	0	0
ALL OTHER LARVAE	2.9 -37.0	2	0	1	1	0	1	3	4
FISH EGGS	0.6 - 3.2	15925	17600	38000	34000	22275	18150	3075	2350
TOTAL WATER FILTERED IN M3		869	866	582	823	902	805	794	763
TOTAL FISH LARVAE		4	6	17	42	6	7	5	8
FISH LARVAE/M3		0.005	0.007	0.029	0.051	0.007	0.009	0.006	0.010
TOTAL FISH EGGS		15925	17600	38000	34000	22275	18150	3075	2350
FISH EGGS/M3		18.329	20.323	65.281	41.291	24.701	22.543	3.873	3.079

TABLE K-06
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
18 FEBUARY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	10.5 -13.2	0	0	2	0	0	0	0	0
SCIAENIDAE	3.4 - 3.5	1	0	1	0	0	0	0	0
BLENIIDAE	2.6 -11.0	22	30	13	7	2	0	0	0
TETRAODONTIDAE	4.3 - 9.2	0	1	0	0	0	0	0	0
CLUPEIFORMES	4.2 -17.4	0	1	4	5	0	1	0	0
CARANGIDAE	12.7 -12.7	0	0	0	0	0	0	0	0
GOBIIDAE	4.0 -10.5	0	0	1	0	0	0	0	0
OPHIDIIDAE	4.8 - 8.2	0	2	0	1	0	0	0	0
SERRANIDAE	3.1 - 5.2	0	0	0	1	0	0	0	0
ALL OTHER LARVAE	2.9 -37.0	1	2	2	2	0	1	1	0
FISH EGGS	0.6 - 3.2	76200	78925	4100	3350	1325	1850	335	300
TOTAL WATER FILTERED IN M3		819	803	900	812	374	466	408	517
TOTAL FISH LARVAE		24	36	23	16	2	2	1	0
FISH LARVAE/M3		0.029	0.045	0.026	0.020	0.005	0.004	0.002	0.000
TOTAL FISH EGGS		76200	78925	4100	3350	1325	1850	335	300
FISH EGGS/M3		92.987	98.294	4.557	4.125	3.542	3.974	0.821	0.580

TABLE K-07

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
16 MARCH 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	4.0 - 4.0	0	0	0	0	1	0	0	0
SCIAENIDAE	5.2 - 5.2	0	0	0	0	0	0	0	0
BLENIIDAE	3.7 - 5.2	0	0	0	0	0	0	1	2
CLUPEIFORMES	5.2 - 6.0	0	0	0	1	1	0	0	0
GOBIIDAE	4.2 - 4.2	0	0	0	0	0	0	0	0
BOTHIDAE	18.4 -19.3	0	0	0	0	0	0	0	0
SERRANIDAE	4.0 - 8.1	0	0	0	0	1	1	2	2
ALL OTHER LARVAE	2.6 - 4.8	0	0	0	0	0	1	0	0
FISH EGGS	0.6 - 1.2	0	4	62	77	2	0	5	7
TOTAL WATER FILTERED IN M3		19	19	19	19	18	18	17	17
TOTAL FISH LARVAE		0	0	.	1	3	2	3	4
FISH LARVAE/M3		0.000	0.000	.	0.052	0.167	0.108	0.174	0.230
TOTAL FISH EGGS		0	4	62	77	2	0	5	7
FISH EGGS/M3		0.000	0.206	3.349	3.987	0.111	0.000	0.291	0.402

TABLE K-07
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
16 MARCH 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	4.0 - 4.0	0	0	0	0	0	0	0	0
SCIAENIDAE	5.2 - 5.2	0	1	0	0	0	0	0	0
BLENIIDAE	3.7 - 5.2	0	0	3	4	0	0	0	0
CLUPEIFORMES	5.2 - 6.0	1	1	0	0	0	0	0	0
GOBIIDAE	4.2 - 4.2	0	0	1	0	0	0	0	0
BOTHIDAE	18.4 -19.3	1	0	1	0	0	0	0	0
SERRANIDAE	4.0 - 8.1	1	0	1	1	0	0	0	0
ALL OTHER LARVAE	2.6 - 4.8	1	0	0	1	0	0	0	0
FISH EGGS	0.6 - 1.2	7	8	11	15	30	35	20	16
TOTAL WATER FILTERED IN M3		19	20	21	20	40	39	37	37
TOTAL FISH LARVAE		4	2	6	6	0	0	0	0
FISH LARVAE/M3		0.212	0.101	0.287	0.297	0.000	0.000	0.000	0.000
TOTAL FISH EGGS		7	8	11	15	30	35	20	16
FISH EGGS/M3		0.372	0.405	0.525	0.743	0.753	0.891	0.536	0.431

TABLE K-08

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
31 MARCH 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	2.8 - 7.9	2	0	0	1	1	0	0	0
BLENIIDAE	2.7 -18.8	0	1	1	0	0	1	3	3
TETRAODONTIDAE	8.4 - 8.4	0	0	0	0	0	0	0	1
CLUPEIFORMES	2.9 -25.3	3	2	2	1	1	2	2	1
CARANGIDAE	7.1 - 7.1	0	0	1	0	0	0	0	0
GOBIIDAE	5.0 - 7.2	0	0	0	0	1	0	0	0
OPHIDIIDAE	6.1 -10.6	1	2	0	0	0	1	0	0
SERRANIDAE	4.7 - 7.6	1	1	0	0	0	0	0	0
ALL OTHER LARVAE	2.6 -11.4	16	18	5	4	2	1	7	6
FISH EGGS	0.6 - 1.6	16	11	9	11	13	16	11	12
TOTAL WATER FILTERED IN M3		23	23	20	20	20	20	25	25
TOTAL FISH LARVAE		23	24	9	6	5	5	12	11
FISH LARVAE/M3		1.018	1.055	0.441	0.295	0.252	0.251	0.481	0.441
TOTAL FISH EGGS		16	11	9	11	13	16	11	12
FISH EGGS/M3		0.708	0.483	0.441	0.540	0.656	0.804	0.441	0.481

TABLE K-08
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
31 MARCH 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	2.8 - 7.9	4	2	0	0	0	0	0	0
BLENIIDAE	2.7 -18.8	0	1	0	0	0	0	0	0
TETRAODONTIDAE	8.4 - 8.4	0	0	0	0	0	0	0	0
CLUPEIFORMES	2.9 -25.3	4	0	0	0	0	0	0	0
CARANGIDAE	7.1 - 7.1	0	0	0	0	0	0	0	0
GOBIIDAE	5.0 - 7.2	1	0	0	0	0	0	0	0
OPHIDIIDAE	6.1 -10.6	0	0	0	0	0	0	0	0
SERRANIDAE	4.7 - 7.6	1	0	0	0	0	0	0	0
ALL OTHER LARVAE	2.6 -11.4	16	11	2	1	0	0	0	0
FISH EGGS	0.6 - 1.6	28	25	41	31	4	4	10	6
TOTAL WATER FILTERED IN M3		19	19	23	23	32	33	37	38
TOTAL FISH LARVAE		26	14	2	1	0	0	0	0
FISH LARVAE/M3		1.390	0.748	0.088	0.044	0.000	0.000	0.000	0.000
TOTAL FISH EGGS		28	25	41	31	4	4	10	6
FISH EGGS/M3		1.497	1.335	1.796	1.349	0.126	0.122	0.270	0.156

TABLE K-09

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
14 APRIL 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	. - .	.	.	.	0	1	0	1	1
SCIAENIDAE	. - .	.	.	.	0	0	1	0	0
BLENIIDAE	. - .	.	.	.	1	0	0	0	0
TETRAODONTIDAE	. - .	.	.	.	0	1	1	2	2
CLUPEIFORMES	. - .	.	.	.	5	0	3	0	0
CARANGIDAE	. - .	.	.	.	2	0	0	0	0
GOBIIDAE	. - .	.	.	.	0	0	0	1	0
BOTHIDAE	. - .	.	.	.	.	.	.	.	.
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	. - .	.	.	.	1	0	0	0	0
SERRANIDAE	. - .	.	.	.	0	0	0	0	0
SCORPAENIDAE	. - .	.	.	.	0	0	0	0	1
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	. - .	.	.	.	12	1	1	1	0
FISH EGGS	. - .	525	530	.	825	137	160	40	51
TOTAL WATER FILTERED IN M3		14	15	.	23	22	22	20	21
TOTAL FISH LARVAE		19	13	.	21	3	6	5	4
FISH LARVAE/M3		1.401	0.842	.	0.918	0.135	0.271	0.256	0.189
TOTAL FISH EGGS		525	530	.	825	137	160	40	51
FISH EGGS/M3		38.704	34.317	.	36.078	6.177	7.214	2.049	2.413

TABLE K-09
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
14 APRIL 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	. - .	0	0	0	0	0	0	0	.
SCIAENIDAE	. - .	0	0	0	0	0	0	0	.
BLENIIDAE	. - .	0	0	1	0	0	0	0	.
TETRAODONTIDAE	. - .	1	0	0	0	0	0	0	.
CLUPEIFORMES	. - .	0	1	7	0	3	3	1	.
CARANGIDAE	. - .	1	0	0	0	0	0	0	.
GOBIIDAE	. - .	0	0	0	0	0	0	0	.
BOTHIDAE	. - .	.	.	.	.	.	.	.	.
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	. - .	0	0	0	0	0	0	0	.
SERRANIDAE	. - .	0	0	0	0	0	0	0	.
SCORPAENIDAE	. - .	0	0	0	0	0	0	0	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	. - .	2	0	3	1	0	0	0	.
FISH EGGS	. - .	260	206	1650	2886	8	100	40	34
TOTAL WATER FILTERED IN M3		23	24	21	21	22	7	23	18
TOTAL FISH LARVAE		4	1	11	1	3	3	1	0
FISH LARVAE/M3		0.178	0.043	0.535	0.047	0.139	0.420	0.043	0.000
TOTAL FISH EGGS		260	206	1650	2886	8	100	40	34
FISH EGGS/M3		11.555	8.765	80.244	136.66	0.370	14.005	1.717	1.937

TABLE K-10

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
26 APRIL 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	3.7 -10.3	0	1	2	0	0	0	0	0
SCIAENIDAE	. - .	.	.	.	.	.	.	.	.
BLENIIDAE	2.4 - 6.6	1	3	1	1	0	0	1	1
TETRAODONTIDAE	3.2 -10.0	1	0	1	1	0	1	0	2
CLUPEIFORMES	3.5 -20.0	6	2	17	25	4	3	6	3
CARANGIDAE	16.7 -16.7	0	0	0	0	0	0	0	1
GOBIIDAE	10.3 -10.3	0	0	0	0	0	0	0	0
BOTHIDAE	3.3 - 3.3	0	1	0	0	0	0	0	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	6.0 -12.1	1	2	0	0	0	0	0	1
SERRANIDAE	4.2 - 7.2	0	1	2	0	0	0	2	0
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	2.1 - 6.6	0	1	2	2	1	2	1	2
FISH EGGS	0.6 - 2.6	141	781	274	205	448	500	540	491
TOTAL WATER FILTERED IN M3		58	58	52	55	49	51	46	48
TOTAL FISH LARVAE		9	11	25	29	5	6	10	10
FISH LARVAE/M3		0.154	0.188	0.478	0.529	0.102	0.118	0.216	0.207
TOTAL FISH EGGS		141	781	274	205	448	500	540	491
FISH EGGS/M3		2.414	13.355	5.235	3.738	9.111	9.828	11.666	10.181

TABLE K-10
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
26 APRIL 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	3.7 -10.3	0	0	0	0	0	0	0	0
SCIAENIDAE	. - .	.	.	.	.	.	.	.	.
BLENIIDAE	2.4 - 6.6	0	0	0	1	0	0	0	0
TETRAODONTIDAE	3.2 -10.0	1	0	0	1	0	0	0	0
CLUPEIFORMES	3.5 -20.0	2	1	4	12	9	8	4	2
CARANGIDAE	16.7 -16.7	0	0	0	0	0	0	0	0
GOBIIDAE	10.3 -10.3	0	0	1	0	0	0	0	0
BOTHIDAE	3.3 - 3.3	0	0	0	0	0	0	0	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	6.0 -12.1	0	0	0	0	0	0	0	0
SERRANIDAE	4.2 - 7.2	0	0	0	1	0	0	0	0
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	2.1 - 6.6	0	0	1	1	0	0	0	0
FISH EGGS	0.6 - 2.6	400	410	301	680	13	17	59	48
TOTAL WATER FILTERED IN M3		61	62	54	56	37	38	-735	42
TOTAL FISH LARVAE		3	1	6	16	9	8	4	2
FISH LARVAE/M3		0.050	0.016	0.112	0.286	0.245	0.208	-0.005	0.047
TOTAL FISH EGGS		400	410	301	680	13	17	59	48
FISH EGGS/M3		6.605	6.662	5.619	12.155	0.354	0.443	-0.080	1.132

TABLE K-11

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
19 MAY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	2.9 - 7.9	7	10	14	16	1	4	6	6
SCIAENIDAE	2.6 - 2.6	0	0	0	0	0	0	1	0
BLENIIDAE	2.9 - 7.1	0	0	0	0	0	0	0	1
TETRAODONTIDAE	3.2 -12.0	1	9	1	1	1	0	0	2
CLUPEIFORMES	2.6 - 8.4	47	32	30	19	7	3	24	56
CARANGIDAE	1.9 - 5.8	5	6	0	1	0	0	0	0
GOBIIDAE	. - .	.	.	.	.	.	.	.	.
BOTHIDAE	. - .	.	.	.	.	.	.	.	.
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	4.5 - 6.6	5	4	0	0	0	0	0	0
SERRANIDAE	2.8 - 3.0	0	0	2	0	0	0	0	0
SCORPAENIDAE	4.5 - 6.4	1	1	0	0	2	1	0	0
ATHERINIDAE	6.8 - 6.8	1	0	0	0	0	0	0	0
ALL OTHER LARVAE	2.6 - 8.9	7	13	4	1	1	1	0	2
FISH EGGS	0.7 - 2.8	538	508	108	99	62	62	128	144
TOTAL WATER FILTERED IN M3		50	49	52	56	20	17	48	48
TOTAL FISH LARVAE		74	75	51	38	12	9	31	67
FISH LARVAE/M3		1.490	1.543	0.982	0.675	0.591	0.534	0.649	1.402
TOTAL FISH EGGS		538	508	108	99	62	62	128	144
FISH EGGS/M3		10.831	10.451	2.081	1.758	3.056	3.682	2.679	3.014

TABLE K-11
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
19 MAY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	2.9 - 7.9	3	1	28	1	0	0	0	0
SCIAENIDAE	2.6 - 2.6	0	0	0	0	0	0	0	0
BLENIIDAE	2.9 - 7.1	7	6	8	23	0	0	0	0
TETRAODONTIDAE	3.2 -12.0	2	1	0	0	0	0	0	0
CLUPEIFORMES	2.6 - 8.4	7	4	3	3	0	0	0	0
CARANGIDAE	1.9 - 5.8	1	0	0	0	1	0	0	0
GOBIIDAE	. - .	.	.	.	.	.	.	.	.
BOTHIDAE	. - .	.	.	.	.	.	.	.	.
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	4.5 - 6.6	0	2	0	0	0	0	0	0
SERRANIDAE	2.8 - 3.0	0	0	0	0	0	0	0	0
SCORPAENIDAE	4.5 - 6.4	0	0	0	0	0	0	0	0
ATHERINIDAE	6.8 - 6.8	0	0	0	0	0	0	0	0
ALL OTHER LARVAE	2.6 - 8.9	1	2	0	0	0	0	0	0
FISH EGGS	0.7 - 2.8	351	363	195	195	10	14	35	30
TOTAL WATER FILTERED IN M3		51	49	54	53	39	39	37	36
TOTAL FISH LARVAE		21	16	39	27	1	0	0	0
FISH LARVAE/M3		0.416	0.323	0.723	0.511	0.026	0.000	0.000	0.000
TOTAL FISH EGGS		351	363	195	195	10	14	35	30
FISH EGGS/M3		6.947	7.338	3.615	3.692	0.257	0.362	0.950	0.833

TABLE K-12

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
25 MAY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	2.7 - 5.2	1	0	1	3	0	3	4	7
SCIAENIDAE	2.4 - 4.8	0	0	0	1	0	0	0	8
BLENIIDAE	2.5 - 3.9	0	2	0	0	1	2	2	1
TETRAODONTIDAE	2.8 - 6.1	0	0	0	0	1	1	2	0
CLUPEIFORMES	3.2 -17.7	34	31	24	33	103	161	109	83
CARANGIDAE	3.1 - 4.8	0	0	0	0	1	0	0	1
GOBIIDAE	2.9 - 9.3	0	0	2	2	1	1	2	1
BOTHIDAE	3.7 - 4.3	0	0	0	0	0	0	0	1
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	2.9 - 6.6	0	0	0	0	0	2	0	2
SERRANIDAE	. - .	.	.	.	.	.	.	.	.
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	2.4 -13.5	2	1	0	1	4	0	19	15
FISH EGGS	0.6 - 2.4	20	35	40	44	961	836	326	248
TOTAL WATER FILTERED IN M3		56	56	58	58	50	49	56	55
TOTAL FISH LARVAE		37	34	27	40	111	170	138	119
FISH LARVAE/M3		0.655	0.608	0.463	0.694	2.223	3.442	2.458	2.148
TOTAL FISH EGGS		20	35	40	44	961	836	326	248
FISH EGGS/M3		0.354	0.626	0.686	0.764	19.244	16.926	5.808	4.476

TABLE K-12
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
25 MAY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	2.7 - 5.2	0	2	1	3	0	0	0	0
SCIAENIDAE	2.4 - 4.8	0	0	5	0	0	0	0	0
BLENIIDAE	2.5 - 3.9	0	0	0	0	0	0	0	0
TETRAODONTIDAE	2.8 - 6.1	0	0	0	2	0	0	0	0
CLUPEIFORMES	3.2 -17.7	43	24	132	167	6	3	4	12
CARANGIDAE	3.1 - 4.8	1	0	0	0	0	0	0	0
GOBIIDAE	2.9 - 9.3	1	1	1	0	0	0	0	0
BOTHIDAE	3.7 - 4.3	0	0	0	1	0	0	0	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	2.9 - 6.6	0	0	0	0	0	0	0	0
SERRANIDAE	. - .	.	.	.	.	.	.	.	.
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	2.4 -13.5	1	0	2	4	0	0	0	0
FISH EGGS	0.6 - 2.4	100	41	243	219	2	1	4	2
TOTAL WATER FILTERED IN M3		59	59	54	54	48	48	49	49
TOTAL FISH LARVAE		46	27	141	177	6	3	4	12
FISH LARVAE/M3		0.785	0.460	2.608	3.300	0.126	0.063	0.082	0.245
TOTAL FISH EGGS		100	41	243	219	2	1	4	2
FISH EGGS/M3		1.708	0.698	4.494	4.083	0.042	0.021	0.082	0.041

TABLE K-13

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
6 JUNE 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	3.2 -12.9	2	2	0	0	0	0	2	1
SCIAENIDAE	2.9 - 3.2	0	0	0	0	0	0	0	0
BLENIIDAE	2.9 -19.5	0	1	0	1	1	1	2	2
TETRAODONTIDAE	2.4 - 5.8	4	0	1	3	2	0	0	4
CLUPEIFORMES	3.7 -16.7	13	31	71	46	171	194	291	178
CARANGIDAE	2.7 - 2.7	0	0	0	0	0	0	0	0
GOBIIDAE	2.3 - 8.1	2	3	7	5	3	5	2	4
BOTHIDAE	3.5 - 3.5	0	0	0	0	0	0	0	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	4.2 -11.6	0	0	0	1	0	0	0	0
SERRANIDAE	3.2 - 7.9	1	0	0	2	0	2	3	4
SCORPAENIDAE	2.7 - 7.7	0	0	2	5	0	0	0	0
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	2.7 -10.5	1	0	1	2	1	0	0	0
FISH EGGS	0.6 - 2.6	52	54	10	15	27	43	61	25
TOTAL WATER FILTERED IN M3		57	57	53	54	57	57	52	53
TOTAL FISH LARVAE		23	37	82	65	178	202	300	193
FISH LARVAE/M3		0.400	0.649	1.540	1.204	3.148	3.575	5.716	3.674
TOTAL FISH EGGS		52	54	10	15	27	43	61	25
FISH EGGS/M3		0.905	0.948	0.188	0.278	0.477	0.761	1.162	0.476

TABLE K-13
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
6 JUNE 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	3.2 -12.9	1	3	0	0	0	0	0	0
SCIAENIDAE	2.9 - 3.2	0	2	0	0	0	0	0	0
BLENIIDAE	2.9 -19.5	0	2	1	0	0	0	0	0
TETRAODONTIDAE	2.4 - 5.8	3	5	0	0	0	0	0	0
CLUPEIFORMES	3.7 -16.7	285	260	72	77	0	0	0	0
CARANGIDAE	2.7 - 2.7	0	0	1	0	0	0	0	0
CARANGIDAE	. - .	0	0	1	0	0	0	0	0
GOBIIDAE	2.3 - 8.1	2	1	1	0	0	0	0	1
BOTHIDAE	3.5 - 3.5	0	0	1	0	0	0	0	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	4.2 -11.6	0	0	1	1	0	0	0	0
SERRANIDAE	3.2 - 7.9	0	1	0	0	0	.	0	0
SCORPAENIDAE	2.7 - 7.7	1	1	1	0	0	0	0	0
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	2.7 -10.5	1	3	1	1	0	0	0	0
FISH EGGS	0.6 - 2.6	27	18	157	166	25	24	8	3
TOTAL WATER FILTERED IN M3		55	55	54	53	29	28	28	28
TOTAL FISH LARVAE		293	278	79	79	0	0	0	1
FISH LARVAE/M3		5.286	5.061	1.474	1.479	0.000	0.000	0.000	0.035
TOTAL FISH EGGS		27	18	157	166	25	24	8	3
FISH EGGS/M3		0.487	0.328	2.929	3.108	0.869	0.864	0.283	0.106

TABLE K-14

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
29 JUNE 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	2.7 -10.0	0	2	0	0	0	1	0	1
SCIAENIDAE	4.8 - 4.8	0	0	0	0	0	0	1	0
BLENIIDAE	2.0 - 8.1	0	0	1	0	0	0	0	1
TETRAODONTIDAE	3.5 -12.4	0	0	0	0	0	3	2	3
CLUPEIFORMES	3.5 -16.0	8	10	27	14	3	43	2	5
CARANGIDAE	2.5 - 2.5	0	0	0	0	0	0	0	1
GOBIIDAE	2.1 - 8.5	0	1	0	0	2	5	20	10
BOTHIDAE	3.8 - 5.5	0	0	0	0	1	0	2	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	4.8 - 4.8	0	0	0	0	0	0	0	1
SERRANIDAE	1.6 - 5.0	0	0	0	0	2	3	0	0
SCORPAENIDAE	3.7 - 6.8	0	0	0	0	0	0	2	0
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	1.9 -13.4	2	1	6	1	0	1	19	12
FISH EGGS	0.6 - 1.9	3769	3966	89	57	70	100	5	5
TOTAL WATER FILTERED IN M3		50	51	25	51	39	56	53	54
TOTAL FISH LARVAE		10	14	34	15	8	56	48	34
FISH LARVAE/M3		0.201	0.276	1.357	0.292	0.203	1.008	0.909	0.635
TOTAL FISH EGGS		3769	3966	89	57	70	100	5	5
FISH EGGS/M3		75.800	78.148	3.553	1.109	1.775	1.800	0.095	0.093

TABLE K-14
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
29 JUNE 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	2.7 -10.0	1	0	0	0	0	0	0	0
SCIAENIDAE	4.8 - 4.8	0	1	0	0	0	0	0	0
BLENIIDAE	2.0 - 8.1	1	0	0	0	0	0	0	0
TETRAODONTIDAE	3.5 -12.4	0	0	0	0	0	0	0	0
CLUPEIFORMES	3.5 -16.0	6	6	11	20	0	1	0	0
CARANGIDAE	2.5 - 2.5	0	0	0	0	0	0	0	0
GOBIIDAE	2.1 - 8.5	0	0	1	1	0	0	0	0
BOTHIDAE	3.8 - 5.5	0	0	0	0	0	0	0	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	4.8 - 4.8	0	0	0	0	0	0	0	0
SERRANIDAE	1.6 - 5.0	0	0	0	1	0	0	0	0
SCORPAENIDAE	3.7 - 6.8	0	0	0	0	0	0	0	0
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	1.9 -13.4	2	2	0	2	0	0	0	0
FISH EGGS	0.6 - 1.9	24	26	14	22	8	11	18	17
TOTAL WATER FILTERED IN M3		55	55	53	54	24	19	30	30
TOTAL FISH LARVAE		10	9	12	24	0	1	0	0
FISH LARVAE/M3		0.183	0.164	0.226	0.447	0.000	0.052	0.000	0.000
TOTAL FISH EGGS		24	26	14	22	8	11	18	17
FISH EGGS/M3		0.440	0.473	0.263	0.409	0.334	0.568	0.605	0.571

TABLE K-15

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
6 JULY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	2.4 -11.6	0	3	0	0	3	0	14	3
SCIAENIDAE	2.4 - 3.9	0	0	0	0	0	0	0	0
BLENIIDAE	2.3 - 9.5	1	0	0	0	3	0	0	0
TETRAODONTIDAE	1.9 -28.0	0	1	1	0	2	0	1	7
CLUPEIFORMES	2.4 -16.7	37	36	2	6	188	114	16	24
CARANGIDAE	3.1 - 3.4	0	0	0	0	0	0	4	0
GOBIIDAE	2.1 - 6.8	4	1	0	2	2	2	6	7
BOTHIDAE	2.4 - 6.0	1	2	2	1	0	0	0	0
GOBIESOCIDAE	2.6 - 2.6	0	0	0	0	0	0	1	0
OPHIDIIDAE	6.1 - 6.8	0	0	0	0	2	1	0	0
SERRANIDAE	2.6 - 3.4	2	0	0	0	1	1	0	0
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	2.4 - 7.9	1	3	3	1	1	2	1	10
FISH EGGS	0.6 - 1.7	8	13	5	4	20	11	4	4
TOTAL WATER FILTERED IN M3		56	54	51	31	57	54	49	46
TOTAL FISH LARVAE		46	46	8	10	202	120	43	51
FISH LARVAE/M3		0.826	0.858	0.157	0.319	3.549	2.224	0.882	1.107
TOTAL FISH EGGS		8	13	5	4	20	11	4	4
FISH EGGS/M3		0.144	0.242	0.098	0.127	0.351	0.204	0.082	0.087

TABLE K-15
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
6 JULY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	2.4 -11.6	14	26	8	4	0	0	0	0
SCIAENIDAE	2.4 - 3.9	13	8	17	9	0	0	0	0
BLENIIDAE	2.3 - 9.5	0	2	2	3	0	0	0	0
TETRAODONTIDAE	1.9 -28.0	10	4	0	1	0	0	0	0
CLUPEIFORMES	2.4 -16.7	204	207	132	90	0	0	0	0
CARANGIDAE	3.1 - 3.4	0	0	0	0	0	0	0	0
GOBIIDAE	2.1 - 6.8	9	7	6	10	0	0	0	0
BOTHIDAE	2.4 - 6.0	3	1	0	0	1	0	0	0
GOBIESOCIDAE	2.6 - 2.6	0	0	0	0	0	0	0	0
OPHIDIIDAE	6.1 - 6.8	0	0	0	0	0	0	0	0
SERRANIDAE	2.6 - 3.4	0	0	1	9	0	0	0	0
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	2.4 - 7.9	4	4	5	5	0	0	0	0
FISH EGGS	0.6 - 1.7	19	19	6	1	1	1	1	0
TOTAL WATER FILTERED IN M3		54	53	51	51	27	28	29	30
TOTAL FISH LARVAE		257	259	171	131	1	0	0	0
FISH LARVAE/M3		4.721	4.899	3.376	2.586	0.037	0.000	0.000	0.000
TOTAL FISH EGGS		19	19	6	1	1	1	1	0
FISH EGGS/M3		0.349	0.359	0.118	0.020	0.037	0.036	0.035	0.000

TABLE K-16

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
26 JULY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	4.0 -11.6	0	0	0	0	1	3	1	0
SCIAENIDAE	2.6 - 5.8	0	0	0	0	0	0	1	1
BLENIIDAE	3.4 - 3.4	0	0	0	0	0	1	0	0
TETRAODONTIDAE	3.5 -12.2	1	1	0	0	0	1	0	0
CLUPEIFORMES	3.2 -12.9	43	41	51	65	57	67	10	26
CARANGIDAE	3.0 -11.6	0	0	0	0	0	0	1	1
GOBIIDAE	3.9 -10.5	0	0	2	0	1	0	3	0
BOTHIDAE	2.9 - 4.0	0	0	1	3	1	0	1	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	8.5 - 8.5	0	0	0	0	0	0	1	0
SERRANIDAE	. - .	.	.	.	.	.	.	.	.
SCORPAENIDAE	5.2 - 5.2	0	0	0	0	0	0	1	0
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	1.7 -21.0	2	0	3	1	0	0	4	10
FISH EGGS	0.6 - 1.8	50	60	50	53	96	128	44	31
TOTAL WATER FILTERED IN M3		59	59	54	53	55	55	59	59
TOTAL FISH LARVAE		46	42	57	69	60	72	23	38
FISH LARVAE/M3		0.784	0.712	1.052	1.291	1.093	1.318	0.387	0.641
TOTAL FISH EGGS		50	60	50	53	96	128	44	31
FISH EGGS/M3		0.852	1.017	0.923	0.992	1.750	2.344	0.741	0.523

TABLE K-16
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
26 JULY 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	4.0 -11.6	0	0	0	1	0	0	0	0
SCIAENIDAE	2.6 - 5.8	0	0	0	0	0	0	0	0
BLENIIDAE	3.4 - 3.4	0	0	0	0	0	0	0	0
TETRAODONTIDAE	3.5 -12.2	0	1	1	0	0	0	0	0
CLUPEIFORMES	3.2 -12.9	24	16	60	42	0	0	1	1
CARANGIDAE	3.0 -11.6	2	0	0	0	0	0	0	0
GOBIIDAE	3.9 -10.5	2	0	0	1	0	0	0	0
BOTHIDAE	2.9 - 4.0	0	0	1	1	0	0	0	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	8.5 - 8.5	0	0	0	0	0	0	0	0
SERRANIDAE	. - .	.	.	.	.	.	.	.	.
SCORPAENIDAE	5.2 - 5.2	0	0	0	0	0	0	0	0
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	1.7 -21.0	1	2	1	1	0	0	0	0
FISH EGGS	0.6 - 1.8	140	157	47	62	11	9	5	3
TOTAL WATER FILTERED IN M3		57	58	56	55	23	24	17	18
TOTAL FISH LARVAE		29	19	63	46	0	0	1	1
FISH LARVAE/M3		0.507	0.328	1.131	0.832	0.000	0.000	0.058	0.056
TOTAL FISH EGGS		140	157	47	62	11	9	5	3
FISH EGGS/M3		2.447	2.710	0.844	1.122	0.474	0.376	0.290	0.168

TABLE K-17

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
2 AUGUST 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	3.6 - 6.8	0	0	0	0	0	0	0	1
SCIAENIDAE	2.4 - 3.5	0	0	0	0	0	0	0	0
BLENIIDAE	. - .	.	.	.	.	.	.	.	.
TETRAODONTIDAE	2.9 - 3.5	1	0	1	1	0	0	0	0
CLUPEIFORMES	1.8 -11.8	4	3	8	25	27	13	12	17
CARANGIDAE	. - .	.	.	.	.	.	.	.	.
GOBIIDAE	4.3 - 4.3	0	0	0	0	0	0	0	1
BOTHIDAE	3.1 - 3.1	0	0	0	2	0	0	0	0
GOBIESOCIDAE	2.9 - 2.9	0	0	0	0	0	0	0	0
OPHIDIIDAE	4.8 - 8.1	0	0	1	5	0	0	0	0
SERRANIDAE	3.8 - 4.8	1	0	0	1	0	0	0	0
SCORPAENIDAE	4.7 - 4.7	0	0	0	0	0	0	1	0
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	1.2 - 5.3	2	2	1	1	0	2	2	2
FISH EGGS	0.6 - 2.2	146	123	136	166	332	327	183	198
TOTAL WATER FILTERED IN M3		65	65	62	63	62	63	71	72
TOTAL FISH LARVAE		8	5	11	35	27	15	15	21
FISH LARVAE/M3		0.124	0.077	0.178	0.559	0.435	0.240	0.212	0.293
TOTAL FISH EGGS		146	123	136	166	332	327	183	198
FISH EGGS/M3		2.256	1.893	2.205	2.651	5.351	5.229	2.590	2.764

TABLE K-17
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
2 AUGUST 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	3.6 - 6.8	0	2	1	0	0	0	0	0
SCIAENIDAE	2.4 - 3.5	0	2	1	0	0	0	0	0
BLENIIDAE	. - .	.	.	.	.	.	.	.	.
TETRAODONTIDAE	2.9 - 3.5	0	0	0	1	0	0	0	0
CLUPEIFORMES	1.8 -11.8	17	7	18	7	0	2	0	0
CARANGIDAE	. - .	.	.	.	.	.	.	.	.
GOBIIDAE	4.3 - 4.3	0	0	0	0	0	0	0	0
BOTHIDAE	3.1 - 3.1	0	0	0	0	0	0	0	0
GOBIESOCIDAE	2.9 - 2.9	0	0	1	0	0	0	0	0
OPHIDIIDAE	4.8 - 8.1	0	0	1	0	0	0	0	0
SERRANIDAE	3.8 - 4.8	0	0	1	0	0	0	0	0
SCORPAENIDAE	4.7 - 4.7	0	0	0	0	0	0	0	0
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	1.2 - 5.3	2	2	2	2	0	0	0	0
FISH EGGS	0.6 - 2.2	219	211	337	353	11	6	2	4
TOTAL WATER FILTERED IN M3		73	73	68	67	41	42	39	38
TOTAL FISH LARVAE		19	13	25	10	0	2	0	0
FISH LARVAE/M3		0.262	0.178	0.370	0.148	0.000	0.048	0.000	0.000
TOTAL FISH EGGS		219	211	337	353	11	6	2	4
FISH EGGS/M3		3.017	2.893	4.990	5.230	0.268	0.144	0.052	0.105

TABLE K-18

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
6 SEPTEMBE 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	5.8 -12.2	0	2	0	3	0	0	1	2
SCIAENIDAE	2.4 - 4.7	1	1	3	1	1	1	5	3
BLENIIDAE	1.8 - 3.9	1	0	0	0	0	0	1	1
TETRAODONTIDAE	2.3 - 8.0	1	1	0	0	0	1	0	0
CLUPEIFORMES	2.4 -11.6	25	17	82	117	14	14	168	42
CARANGIDAE	1.8 - 3.2	0	0	0	0	1	0	5	0
GOBIIDAE	2.9 - 6.1	0	0	2	1	0	0	1	0
BOTHIDAE	. - .	.	.	.	.	.	.	.	.
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	3.9 - 8.1	1	2	0	1	0	1	4	1
SERRANIDAE	4.8 - 4.8	0	0	0	0	0	0	0	0
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	1.6 - 6.3	0	1	0	3	1	4	2	5
FISH EGGS	0.6 - 2.2	14	19	3	6	17	22	14	12
TOTAL WATER FILTERED IN M3		62	63	60	61	67	68	60	62
TOTAL FISH LARVAE		29	24	87	126	17	21	187	56
FISH LARVAE/M3		0.467	0.380	1.460	2.066	0.256	0.307	3.100	0.903
TOTAL FISH EGGS		14	19	3	6	17	22	14	12
FISH EGGS/M3		0.225	0.301	0.050	0.098	0.256	0.322	0.232	0.194

TABLE K-18
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
6 SEPTEMBE 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	5.8 -12.2	1	0	0	0	0	0	0	0
SCIAENIDAE	2.4 - 4.7	0	0	0	0	0	0	0	0
BLENIIDAE	1.8 - 3.9	0	0	0	0	0	0	0	0
TETRAODONTIDAE	2.3 - 8.0	0	0	2	0	0	0	0	0
CLUPEIFORMES	2.4 -11.6	9	13	28	26	0	0	0	0
CARANGIDAE	1.8 - 3.2	0	0	1	0	0	0	0	0
GOBIIDAE	2.9 - 6.1	0	0	1	0	0	0	0	0
BOTHIDAE	. - .	.	.	.	.	.	.	.	.
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	3.9 - 8.1	1	2	2	3	0	0	0	0
SERRANIDAE	4.8 - 4.8	0	0	0	1	0	0	0	0
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	1.6 - 6.3	1	1	1	0	0	0	0	0
FISH EGGS	0.6 - 2.2	21	9	15	16	0	3	1	2
TOTAL WATER FILTERED IN M3		60	60	65	66	42	42	38	38
TOTAL FISH LARVAE		12	15	35	30	0	0	0	0
FISH LARVAE/M3		0.200	0.250	0.538	0.456	0.000	0.000	0.000	0.000
TOTAL FISH EGGS		21	9	15	16	0	3	1	2
FISH EGGS/M3		0.350	0.150	0.231	0.243	0.000	0.072	0.026	0.053

TABLE K-19

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
19 SEPTEMBE 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	2.7 -10.9	7	11	0	0	0	2	0	3
SCIAENIDAE	2.7 - 5.2	14	11	0	0	0	0	0	0
BLENIIDAE	5.5 - 6.0	0	2	0	0	0	0	0	0
TETRAODONTIDAE	2.1 -27.0	0	3	1	0	0	0	0	0
CLUPEIFORMES	4.2 -13.0	16	27	0	0	0	1	0	0
CARANGIDAE	2.9 - 8.4	3	1	0	0	0	3	1	0
GOBIIDAE	3.9 - 8.7	0	3	0	0	0	0	2	0
BOTHIDAE	2.4 - 6.1	4	1	0	0	2	0	0	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	4.3 - 4.3	0	0	0	0	0	0	1	0
SERRANIDAE	3.4 - 3.4	0	0	0	0	0	0	0	1
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	3.1 -12.0	2	2	1	0	0	0	0	2
FISH EGGS	0.6 - 2.5	12	18	29	18	60	44	87	74
TOTAL WATER FILTERED IN M3		55	55	50	51	57	57	45	45
TOTAL FISH LARVAE		46	61	2	0	2	5	4	6
FISH LARVAE/M3		0.834	1.110	0.040	0.000	0.035	0.087	0.089	0.132
TOTAL FISH EGGS		12	18	29	18	60	44	87	74
FISH EGGS/M3		0.218	0.328	0.574	0.356	1.052	0.770	1.931	1.631

TABLE K-19
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
19 SEPTEMBE 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	2.7 -10.9	1	1	0	1	0	0	0	0
SCIAENIDAE	2.7 - 5.2	0	0	1	0	0	0	0	0
BLENIIDAE	5.5 - 6.0	0	0	0	0	0	0	0	0
TETRAODONTIDAE	2.1 -27.0	1	1	0	1	0	0	0	0
CLUPEIFORMES	4.2 -13.0	0	1	0	1	0	0	0	0
CARANGIDAE	2.9 - 8.4	0	2	0	0	0	0	0	0
GOBIIDAE	3.9 - 8.7	0	0	0	1	0	0	0	0
BOTHIDAE	2.4 - 6.1	0	0	0	0	0	0	0	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	4.3 - 4.3	0	0	0	0	0	0	0	0
SERRANIDAE	3.4 - 3.4	0	0	0	0	0	0	0	0
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	3.1 -12.0	0	0	1	1	0	0	0	0
FISH EGGS	0.6 - 2.5	226	209	33	29	2	3	1	1
TOTAL WATER FILTERED IN M3		53	53	56	55	31	31	32	31
TOTAL FISH LARVAE		2	5	2	5	0	0	0	0
FISH LARVAE/M3		0.038	0.094	0.036	0.091	0.000	0.000	0.000	0.000
TOTAL FISH EGGS		226	209	33	29	2	3	1	1
FISH EGGS/M3		4.261	3.939	0.593	0.529	0.064	0.098	0.032	0.032

TABLE K-20

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
26 SEPTEMBE 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	4.8 -10.5	0	0	0	0	2	4	1	0
SCIAENIDAE	3.2 - 6.0	0	0	19	9	2	1	0	0
BLENIIDAE	5.4 - 8.1	0	0	0	0	0	0	1	0
TETRAODONTIDAE	1.9 -13.4	1	0	3	2	0	3	1	0
CLUPEIFORMES	2.9 - 9.7	0	0	42	20	0	0	0	0
CARANGIDAE	1.9 - 6.0	0	0	1	4	0	0	0	0
GOBIIDAE	5.0 - 5.6	0	0	1	0	0	0	0	0
BOTHIDAE	2.4 -12.0	0	0	16	10	0	1	0	1
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	2.9 - 7.6	0	0	0	0	8	7	1	0
SERRANIDAE	3.5 - 3.7	0	0	0	0	0	0	0	0
SCORPAENIDAE	3.1 - 4.8	0	0	0	1	0	0	0	0
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	2.3 -18.0	0	0	0	0	0	0	1	2
FISH EGGS	0.6 - 1.9	4	8	9	12	17	20	33	43
TOTAL WATER FILTERED IN M3		60	59	60	59	66	65	97	44
TOTAL FISH LARVAE		1	0	82	46	12	16	5	3
FISH LARVAE/M3		0.017	0.000	1.371	0.777	0.182	0.247	0.051	0.067
TOTAL FISH EGGS		4	8	9	12	17	20	33	43
FISH EGGS/M3		0.066	0.136	0.151	0.203	0.258	0.309	0.339	0.966

TABLE K-20
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
26 SEPTEMBE 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	4.8 -10.5	2	0	2	2	0	0	0	0
SCIAENIDAE	3.2 - 6.0	1	0	5	2	0	0	0	0
BLENIIDAE	5.4 - 8.1	0	0	1	1	0	0	0	0
TETRAODONTIDAE	1.9 -13.4	1	0	0	2	0	0	0	0
CLUPEIFORMES	2.9 - 9.7	0	0	5	1	0	0	0	0
CARANGIDAE	1.9 - 6.0	0	0	6	5	0	0	0	0
GOBIIDAE	5.0 - 5.6	0	0	2	1	0	0	0	0
BOTHIDAE	2.4 -12.0	0	0	1	1	0	0	0	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	2.9 - 7.6	0	0	2	3	0	0	0	0
SERRANIDAE	3.5 - 3.7	0	0	2	1	0	0	0	0
SCORPAENIDAE	3.1 - 4.8	0	0	2	1	0	0	0	0
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	2.3 -18.0	0	1	2	0	0	0	0	0
FISH EGGS	0.6 - 1.9	55	43	80	103	3	2	0	0
TOTAL WATER FILTERED IN M3		64	60	58	57	34	33	28	29
TOTAL FISH LARVAE		4	1	30	20	0	0	0	0
FISH LARVAE/M3		0.063	0.017	0.516	0.348	0.000	0.000	0.000	0.000
TOTAL FISH EGGS		55	43	80	103	3	2	0	0
FISH EGGS/M3		0.866	0.712	1.376	1.795	0.089	0.061	0.000	0.000

TABLE K-21

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
10 OCTOBER 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	5.8 -10.1	3	4	2	1	0	0	0	1
SCIAENIDAE	3.9 - 6.0	0	1	0	0	0	0	0	1
BLENIIDAE	. - .	.	.	.	.	.	.	.	.
TETRAODONTIDAE	12.2 -12.2	0	0	0	1	0	0	0	0
CLUPEIFORMES	3.5 - 7.6	0	0	5	2	0	0	0	0
CARANGIDAE	6.9 - 6.9	0	0	0	0	0	1	0	0
GOBIIDAE	. - .	.	.	.	.	.	.	.	.
BOTHIDAE	2.9 - 3.5	0	0	1	4	0	0	0	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	4.5 - 8.4	4	3	0	0	0	0	0	6
SERRANIDAE	. - .	.	.	.	.	.	.	.	.
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	1.8 - 4.2	0	0	0	0	0	0	0	1
FISH EGGS	0.6 - 1.2	21	15	1	1	3	2	3	1
TOTAL WATER FILTERED IN M3		64	64	58	58	62	61	62	61
TOTAL FISH LARVAE		7	8	8	8	0	1	0	9
FISH LARVAE/M3		0.109	0.126	0.139	0.139	0.000	0.016	0.000	0.147
TOTAL FISH EGGS		21	15	1	1	3	2	3	1
FISH EGGS/M3		0.328	0.236	0.017	0.017	0.048	0.033	0.049	0.016

TABLE K-21
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
10 OCTOBER 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	5.8 -10.1	0	2	1	.	0	0	0	0
SCIAENIDAE	3.9 - 6.0	0	0	0	.	0	0	0	0
BLENIIDAE	. - .	.	.	.	.	.	.	.	.
TETRAODONTIDAE	12.2 -12.2	0	0	0	.	0	0	0	0
CLUPEIFORMES	3.5 - 7.6	0	0	0	.	0	0	0	0
CARANGIDAE	6.9 - 6.9	0	0	0	.	0	0	0	0
GOBIIDAE	. - .	.	.	.	.	.	.	.	.
BOTHIDAE	2.9 - 3.5	0	0	0	.	0	0	1	3
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	4.5 - 8.4	0	3	1	.	0	0	0	0
SERRANIDAE	. - .	.	.	.	.	.	.	.	.
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	1.8 - 4.2	1	0	0	.	0	0	0	0
FISH EGGS	0.6 - 1.2	2	3	4	.	0	1	4	1
TOTAL WATER FILTERED IN M3		60	67	58	.	51	51	49	49
TOTAL FISH LARVAE		1	5	2	.	0	0	1	3
FISH LARVAE/M3		0.017	0.074	0.035	.	0.000	0.000	0.020	0.061
TOTAL FISH EGGS		2	3	4	.	0	1	4	1
FISH EGGS/M3		0.034	0.045	0.069	.	0.000	0.020	0.082	0.020

TABLE K-22

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
20 OCTOBER 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	10.1 -12.9	0	0	4	1	0	0	0	0
SCIAENIDAE	. - .	.	.	.	.	.	.	.	.
BLENIIDAE	4.3 - 4.3	0	0	0	0	0	1	0	0
TETRAODONTIDAE	3.7 -17.7	0	1	0	0	0	1	0	0
CLUPEIFORMES	13.2 -13.2	0	0	0	0	1	0	0	0
CARANGIDAE	. - .	.	.	.	.	.	.	.	.
GOBIIDAE	. - .	.	.	.	.	.	.	.	.
BOTHIDAE	2.0 - 4.0	0	0	2	3	1	1	0	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	. - .	.	.	.	.	.	.	.	.
SERRANIDAE	. - .	.	.	.	.	.	.	.	.
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	35.0 -35.0	0	0	0	0	0	0	0	1
FISH EGGS	0.7 - 1.1	0	1	6	3	10	10	13	13
TOTAL WATER FILTERED IN M3		52	52	51	53	58	60	56	57
TOTAL FISH LARVAE		0	1	6	4	2	3	0	1
FISH LARVAE/M3		0.000	0.019	0.117	0.075	0.034	0.050	0.000	0.018
TOTAL FISH EGGS		0	1	6	3	10	10	13	13
FISH EGGS/M3		0.000	0.019	0.117	0.056	0.172	0.168	0.234	0.228

TABLE K-22
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
20 OCTOBER 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	10.1 -12.9	0	0	0	1	0	0	0	0
SCIAENIDAE	. - .	.	.	.	.	.	.	.	.
BLENIIDAE	4.3 - 4.3	0	0	0	0	0	0	0	0
TETRAODONTIDAE	3.7 -17.7	0	1	0	0	0	0	0	0
CLUPEIFORMES	13.2 -13.2	0	0	0	0	0	0	0	0
CARANGIDAE	. - .	.	.	.	.	.	.	.	.
GOBIIDAE	. - .	.	.	.	.	.	.	.	.
BOTHIDAE	2.0 - 4.0	0	0	0	1	0	1	0	0
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	. - .	.	.	.	.	.	.	.	.
SERRANIDAE	. - .	.	.	.	.	.	.	.	.
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	35.0 -35.0	0	0	0	0	0	0	0	0
FISH EGGS	0.7 - 1.1	2	1	0	0	3	1	0	0
TOTAL WATER FILTERED IN M3		49	50	66	68	38	36	49	49
TOTAL FISH LARVAE		0	1	0	2	0	1	0	0
FISH LARVAE/M3		0.000	0.020	0.000	0.029	0.000	0.028	0.000	0.000
TOTAL FISH EGGS		2	1	0	0	3	1	0	0
FISH EGGS/M3		0.041	0.020	0.000	0.000	0.080	0.028	0.000	0.000

TABLE K-23

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
14 NOVEMBER 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	2.9 -11.8	0	0	0	0	0	0	0	0
SCIAENIDAE	3.4 - 4.7	0	0	3	3	0	1	0	0
BLENIIDAE	1.9 - 3.9	0	0	0	0	1	0	0	1
TETRAODONTIDAE	3.7 -18.7	0	0	0	0	0	0	0	0
CLUPEIFORMES	1.6 -19.0	42	49	2	8	2	1	2	0
CARANGIDAE	. - .	.	.	.	.	.	.	.	.
GOBIIDAE	. - .	.	.	.	.	.	.	.	.
BOTHIDAE	2.4 - 2.4	0	1	0	0	0	0	0	0
GOBIESOCIDAE	3.2 - 3.2	0	0	0	0	0	0	0	0
OPHIDIIDAE	4.4 - 4.4	0	0	0	0	0	0	0	0
SERRANIDAE	. - .	.	.	.	.	.	.	.	.
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	48.0 -48.0	0	0	0	0	0	0	0	0
FISH EGGS	0.7 - 1.6	445	295	116	94	21	21	14	15
TOTAL WATER FILTERED IN M3		55	59	50	53	43	47	53	57
TOTAL FISH LARVAE		42	50	5	11	3	2	2	1
FISH LARVAE/M3		0.761	0.847	0.101	0.207	0.070	0.042	0.038	0.018
TOTAL FISH EGGS		445	295	116	94	21	21	14	15
FISH EGGS/M3		8.059	4.999	2.332	1.767	0.488	0.446	0.265	0.264

TABLE K-23
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
14 NOVEMBER 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	2.9 -11.8	2	0	0	0	0	0	0	0
SCIAENIDAE	3.4 - 4.7	1	0	0	0	0	0	0	0
BLENIIDAE	1.9 - 3.9	0	0	0	0	0	0	0	0
TETRAODONTIDAE	3.7 -18.7	1	0	0	0	0	0	0	0
CLUPEIFORMES	1.6 -19.0	17	8	9	13	0	0	0	0
CARANGIDAE	. - .	.	.	.	.	.	.	.	.
GOBIIDAE	. - .	.	.	.	.	.	.	.	.
BOTHIDAE	2.4 - 2.4	0	0	0	0	0	0	0	0
GOBIESOCIDAE	3.2 - 3.2	0	0	0	0	0	0	0	0
OPHIDIIDAE	4.4 - 4.4	1	0	0	0	0	0	0	0
SERRANIDAE	. - .	.	.	.	.	.	.	.	.
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	48.0 -48.0	0	0	0	0	0	0	0	0
FISH EGGS	0.7 - 1.6	118	108	141	152	17	8	27	13
TOTAL WATER FILTERED IN M3		51	55	53	56	48	49	47	47
TOTAL FISH LARVAE		22	8	9	13	0	0	0	0
FISH LARVAE/M3		0.430	0.146	0.170	0.232	0.000	0.000	0.000	0.000
TOTAL FISH EGGS		118	108	141	152	17	8	27	13
FISH EGGS/M3		2.307	1.969	2.666	2.709	0.353	0.164	0.575	0.276

TABLE K-24

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
17 DECEMBER 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	11.3 -12.0	0	0	0	0	0	0	0	0
SCIAENIDAE	2.6 - 8.5	0	2	0	2	0	0	1	0
BLENIIDAE	3.5 - 6.9	0	1	1	0	1	1	0	0
TETRAODONTIDAE	2.2 - 5.0	0	1	0	1	0	1	0	0
CLUPEIFORMES	4.7 -12.6	2	5	29	56	1	1	2	1
CARANGIDAE	2.9 - 8.1	0	0	0	0	0	0	2	4
GOBIIDAE	3.5 -10.0	1	3	0	0	2	2	1	2
BOTHIDAE	4.0 -17.7	0	0	0	0	0	0	0	1
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	3.9 -10.5	2	1	6	3	0	0	1	1
SERRANIDAE	5.6 -10.0	0	0	1	0	0	0	0	0
SCORPAENIDAE	2.8 - 5.4	0	1	0	0	0	1	0	0
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	2.7 -12.7	3	1	1	2	2	3	1	4
FISH EGGS	0.7 - 3.4	16	9	10	3	20	15	2	9
TOTAL WATER FILTERED IN M3		58	57	59	63	62	66	63	64
TOTAL FISH LARVAE		8	15	38	64	6	9	8	13
FISH LARVAE/M3		0.139	0.261	0.639	1.024	0.096	0.137	0.127	0.202
TOTAL FISH EGGS		16	9	10	3	20	15	2	9
FISH EGGS/M3		0.277	0.157	0.168	0.048	0.321	0.228	0.032	0.140

TABLE K-24.
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
17 DECEMBER 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	11.3 -12.0	0	0	0	2	0	0	0	.
SCIAENIDAE	2.6 - 8.5	1	1	2	2	0	0	0	.
BLENIIDAE	3.5 - 6.9	1	0	0	1	0	0	0	.
TETRAODONTIDAE	2.2 - 5.0	1	1	1	2	0	0	0	.
CLUPEIFORMES	4.7 -12.6	0	1	1	1	0	0	0	.
CARANGIDAE	2.9 - 8.1	0	0	1	0	0	0	0	.
GOBIIDAE	3.5 -10.0	1	0	3	1	0	0	0	.
BOTHIDAE	4.0 -17.7	0	1	0	1	0	0	0	.
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	3.9 -10.5	0	1	2	0	0	0	0	.
SERRANIDAE	5.6 -10.0	0	0	1	0	0	0	0	.
SCORPAENIDAE	2.8 - 5.4	0	0	0	1	0	0	0	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	2.7 -12.7	0	2	5	3	0	0	0	.
FISH EGGS	0.7 - 3.4	19	19	18	17	0	0	3	.
TOTAL WATER FILTERED IN M3		62	61	66	69	37	37	36	36
TOTAL FISH LARVAE		4	7	16	14	0	0	0	.
FISH LARVAE/M3		0.065	0.115	0.243	0.203	0.000	0.000	0.000	.
TOTAL FISH EGGS		19	19	18	17	0	0	3	.
FISH EGGS/M3		0.308	0.313	0.274	0.246	0.000	0.000	0.082	.

TABLE K-25

NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
5 DECEMBER 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 0-A	0-B	1-A	1-B	2-A	2-B	3-A	3-B
GERREIDAE	12.2 -13.4	2	0	0	0	0	0	1	0
SCIAENIDAE	3.9 - 5.5	1	0	2	1	0	0	0	0
BLENIIDAE	10.0 -11.5	2	0	0	0	0	0	0	0
TETRAODONTIDAE	. - .	.	.	.	.	.	.	.	.
CLUPEIFORMES	6.9 -18.5	0	1	1	3	0	0	0	1
CARANGIDAE	. - .	.	.	.	.	.	.	.	.
GOBIIDAE	5.3 - 5.3	0	0	0	0	0	0	0	1
BOTHIDAE	. - .	.	.	.	.	.	.	.	.
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	. - .	.	.	.	.	.	.	.	.
SERRANIDAE	. - .	.	.	.	.	.	.	.	.
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	3.4 - 8.9	0	0	0	1	0	1	0	2
FISH EGGS	0.7 - 1.7	62	49	0	3	5	6	7	6
TOTAL WATER FILTERED IN M3		55	54	46	45	52	50	43	41
TOTAL FISH LARVAE		5	1	3	5	0	1	1	4
FISH LARVAE/M3		0.091	0.019	0.065	0.112	0.000	0.020	0.023	0.097
TOTAL FISH EGGS		62	49	0	3	5	6	7	6
FISH EGGS/M3		1.125	0.909	0.000	0.067	0.096	0.119	0.162	0.145

TABLE K-25
(CONTINUED)
NUMBER OF FISH LARVAE AND EGGS COLLECTED
ST. LUCIE PLANT
5 DECEMBER 1977

CATEGORY	RANGE OF TOTAL LENGTHS (MM)	STATION-REPLICATE 4-A	4-B	5-A	5-B	11-A	11-B	12-A	12-B
GERREIDAE	12.2 -13.4	0	0	0	0	0	0	0	0
SCIAENIDAE	3.9 - 5.5	0	0	0	0	0	0	0	0
BLENIIDAE	10.0 -11.5	0	0	0	0	0	0	0	0
TETRAODONTIDAE	. - .	.	.	.	.	.	.	.	.
CLUPEIFORMES	6.9 -18.5	1	0	0	0	0	0	0	0
CARANGIDAE	. - .	.	.	.	.	.	.	.	.
GOBIIDAE	5.3 - 5.3	0	0	0	0	0	0	0	0
BOTHIDAE	. - .	.	.	.	.	.	.	.	.
GOBIESOCIDAE	. - .	.	.	.	.	.	.	.	.
OPHIDIIDAE	. - .	.	.	.	.	.	.	.	.
SERRANIDAE	. - .	.	.	.	.	.	.	.	.
SCORPAENIDAE	. - .	.	.	.	.	.	.	.	.
ATHERINIDAE	. - .	.	.	.	.	.	.	.	.
ALL OTHER LARVAE	3.4 - 8.9	0	0	0	0	0	0	0	0
FISH EGGS	0.7 - 1.7	18	17	9	9	0	2	0	0
TOTAL WATER FILTERED IN M3		55	54	56	55	29	30	38	38
TOTAL FISH LARVAE		1	0	0	0	0	0	0	0
FISH LARVAE/M3		0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL FISH EGGS		18	17	9	9	0	2	0	0
FISH EGGS/M3		0.325	0.312	0.162	0.164	0.000	0.068	0.000	0.000

APPENDIX L

M A C R O I N V E R T E B R A T E S

TABLE L-1

SEDIMENT SIZE ANALYSIS (% BY WEIGHT) AT BENTHIC STATIONS
ST. LUCIE PLANT
1972-1973 AND 1976-1977

Station	Year	Month	Pebble			Granule	Very coarse sand	Coarse sand	Medium sand	Fine sand	Very fine sand	Silt and clay	Mean diameter	Sorting coefficient
		ø: (mm):	<-4 (>16)	-3 (16-8)	-2 (8-4)	1 (4-2)	0 (2-1)	1 (1.000-0.500)	2 (0.500-0.250)	3 (0.250-0.125)	4 (0.125-0.063)	>4 (<0.063)	(ø)	(ø)
0	1976	Mar	2.6	5.9	9.6	15.0	24.2	29.0	9.8	0.6	2.9	0.4	-0.5	2.8
		Jun	4.0	7.6	10.4	17.5	26.8	25.0	4.8	0.6	2.9	0.3	-0.8	2.9
		Sep	1.8	3.7	9.0	11.5	18.9	32.9	17.8	0.8	2.8	0.8	-0.1	2.7
		Dec	5.0	5.2	7.1	10.5	17.9	36.0	17.0	0.3	0.9	0.1	-0.4	2.9
	1977	Mar	0.0	0.0	0.0	4.2	1.8	0.4	0.4	7.1	83.9	2.4	3.2	1.4
		Jun	0.0	0.3	1.1	1.1	0.8	0.3	0.7	26.2	68.1	1.4	3.1	1.1
		Sep	0.0	2.1	0.2	0.7	0.5	0.4	1.0	13.4	79.4	2.3	3.1	1.5
		Dec	0.0	0.9	5.8	12.6	7.8	1.4	1.0	9.0	59.5	2.0	2.0	5.0
1	1972	Mar	N.A.[a]	N.A.	N.A.	3.7	0.4	0.4	0.8	10.0	82.1	2.6	3.2	0.7
		Jul	N.A.	N.A.	N.A.	1.5	0.3	0.3	0.6	18.0	77.0	2.4	3.2	0.8
		Nov	N.A.	N.A.	N.A.	1.0	0.3	0.3	0.9	63.2	33.6	0.8	2.8	0.7
	1973	Mar	N.A.	N.A.	N.A.	0.5	0.2	0.1	0.4	15.5	82.2	1.1	3.3	0.5
		Jul	N.A.	N.A.	N.A.	0.5	0.3	0.5	0.8	66.5	29.7	1.7	2.8	0.6
	1976	Mar	0.0	0.0	0.0	0.0	0.8	3.1	38.2	47.8	9.5	0.5	2.1	0.6
		Jun	0.0	0.0	0.0	0.0	1.8	2.5	28.1	51.0	16.1	0.2	2.3	0.7
		Sep	-	0.0	0.0	0.0	1.8	2.8	23.8	44.6	25.2	1.0	2.4	0.8
		Dec	0.0	1.0	3.0	7.9	12.9	18.8	34.6	16.8	5.0	0.0	0.9	2.2
	1977	Mar	0.0	0.0	0.1	0.2	0.3	0.6	4.9	23.3	67.9	2.6	3.2	0.5
		Jun	0.0	0.0	0.0	0.1	0.3	0.9	11.7	50.6	35.6	0.8	2.7	0.5
		Sep	0.0	0.0	0.4	0.5	0.9	1.1	4.4	21.1	68.4	3.2	3.1	0.8
		Dec	0.0	0.0	0.0	0.5	0.5	1.7	18.3	35.3	42.3	1.4	2.7	0.8
2	1972	Mar	N.A.[a]	N.A.	N.A.	20.6	21.2	37.8	19.6	0.3	0.4	0.1	0.1	1.1
		Jul	N.A.	N.A.	N.A.	17.6	21.2	35.6	24.9	0.4	0.3	0.0	0.2	1.1
		Nov	N.A.	N.A.	N.A.	25.9	25.0	26.9	19.5	1.9	0.6	0.3	0.0	1.2
	1973	Mar	N.A.	N.A.	N.A.	25.2	23.5	33.7	14.9	1.4	0.8	0.3	0.0	1.1
		Jul	N.A.	N.A.	N.A.	30.0	20.0	29.2	13.7	5.4	1.2	0.5	0.0	1.3

[a] Analyses did not include these screen sizes.

TABLE L-1
(continued)
SEDIMENT SIZE ANALYSIS (% BY WEIGHT) AT BENTHIC STATIONS
ST. LUCIE PLANT
1972-1973 AND 1976-1977

Station	Year	Month	Pebble			Granule	Very coarse sand	Coarse sand	Medium sand	Fine sand	Very fine sand	Silt and clay	Mean diameter	Sorting coefficient
		ϕ: (mm):	<-4 (>16)	-3 (16-8)	-2 (8-4)	1 (4-2)	0 (2-1)	1 (1.000-0.500)	2 (0.500-0.250)	3 (0.250-0.125)	4 (0.125-0.063)	>4 (<0.063)	(ϕ)	(ϕ)
2 (cont.)	1976	Mar	3.3	2.7	2.3	6.8	13.0	35.3	34.8	1.0	1.0	0.3	0.3	2.3
		Jun	0.0	3.5	6.3	20.1	27.9	29.8	8.8	1.1	0.4	2.1	-0.3	2.1
		Sep	3.5	1.7	2.6	6.0	19.0	41.0	26.0	0.4	0.1	0.0	0.1	2.0
		Dec	N.A.[a]	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.3	1.40
	1977	Mar	1.3	3.0	9.6	17.4	27.9	22.2	11.4	1.4	3.9	1.9	-0.3	2.9
		Jun	2.5	2.0	3.4	5.3	15.7	42.1	28.0	0.5	0.3	0.3	0.4	2.0
		Sep	0.0	2.9	2.2	6.0	19.0	41.3	27.4	0.7	0.3	0.2	0.3	1.4
		Dec	3.8	1.6	3.4	5.5	16.6	38.9	28.5	1.0	0.5	0.2	0.2	2.2
3	1972	Mar	N.A.[a]	N.A.	N.A.	1.8	5.3	25.2	60.5	7.2	0.1	0.0	1.2	0.8
		Jul	N.A.	N.A.	N.A.	0.1	1.1	10.2	69.9	18.4	0.3	0.0	1.6	0.6
		Nov	N.A.	N.A.	N.A.	0.1	13.1	10.6	64.5	23.4	0.1	0.0	1.6	0.6
	1973	Mar	N.A.	N.A.	N.A.	0.1	0.8	9.9	65.7	22.6	0.7	0.1	1.6	0.6
		Jul	N.A.	N.A.	N.A.	0.1	0.6	8.7	78.7	11.8	0.2	0.0	1.5	0.5
	1976	Mar	0.0	0.0	0.0	0.0	0.8	3.7	42.8	50.8	0.7	0.1	2.0	0.4
		Jun	0.0	0.0	0.0	0.0	1.4	7.4	46.4	44.0	0.4	0.3	1.9	0.5
		Sep	0.0	0.0	0.0	0.0	1.8	4.9	48.8	43.9	0.5	0.1	1.9	0.5
		Dec	0.0	0.0	0.0	0.0	4.9	20.6	57.8	15.7	0.6	0.5	1.4	0.6
	1977	Mar	0.1	0.1	0.1	0.3	2.9	21.3	65.8	9.3	0.1	0.0	1.3	0.5
		Jun	0.0	0.0	0.0	0.1	0.9	6.3	35.3	56.7	0.6	0.1	2.0	0.5
		Sep	0.0	0.0	0.1	0.3	2.1	15.6	68.3	13.3	0.2	0.1	1.4	0.4
		Dec	0.0	0.0	0.1	1.0	5.2	25.2	62.3	6.0	0.1	0.1	1.2	0.5
4	1972	Mar	N.A.[a]	N.A.	N.A.	15.7	21.0	38.0	24.3	0.8	0.1	0.0	0.2	1.0
		Jul	N.A.	N.A.	N.A.	25.1	23.0	33.0	17.8	0.7	0.2	0.1	0.0	1.1
		Nov	N.A.	N.A.	N.A.	10.7	15.2	45.0	27.0	1.7	0.4	0.0	0.5	1.0
	1973	Mar	N.A.	N.A.	N.A.	15.0	23.0	48.0	12.6	0.9	0.5	0.1	0.1	1.0
		Jul	N.A.	N.A.	N.A.	18.4	21.5	40.6	15.9	2.1	1.0	0.6	0.2	1.1

[a] Analyses did not include these screen sizes.

TABLE L-1
(continued)
SEDIMENT SIZE ANALYSIS (% BY WEIGHT) AT BENTHIC STATIONS
ST. LUCIE PLANT
1972-1973 AND 1976-1977

Station	Year	Month	Pebble			Granule	Very coarse sand	Coarse sand	Medium sand	Fine sand	Very fine sand	Silt and clay	Mean diameter	Sorting coefficient
		ø: (cm):	<-4 (>16)	-3 (16-8)	-2 (8-4)	1 (4-2)	0 (2-1)	1 (1.000-0.500)	2 (0.500-0.250)	3 (0.250-0.125)	4 (0.125-0.063)	>4 (<0.063)	(ø)	(ø)
4 (cont.)	1976	Mar	2.7	1.9	3.2	5.7	15.0	37.9	30.1	0.7	0.6	0.2	0.3	2.0
		Jun	7.1	7.7	5.7	6.1	15.8	33.1	15.2	0.7	0.4	0.5	-0.5	3.6
		Sep	3.1	4.8	4.8	7.8	27.3	37.1	13.8	0.3	0.1	0.3	-0.3	2.2
		Dec	0.7	1.6	2.5	4.6	17.0	39.2	27.1	6.4	0.4	0.4	0.5	1.6
	1977	Mar	0.0	2.1	3.9	8.9	24.4	35.4	22.0	1.0	1.4	1.1	0.2	1.8
		Jun	4.1	2.7	3.4	6.5	21.4	36.2	23.4	1.3	0.6	0.4	0.0	2.4
		Sep	3.7	1.9	2.2	6.0	24.9	37.0	23.0	1.2	0.1	0.0	0.1	2.0
		Dec	1.2	2.4	3.5	3.7	12.1	35.5	36.4	3.3	1.3	0.6	0.5	2.0
5	1972	Mar	N.A.[a]	N.A.	N.A.	29.7	18.2	31.9	16.9	2.3	0.8	0.1	0.0	1.2
		Jul	N.A.	N.A.	N.A.	24.7	21.1	34.7	14.3	2.1	2.6	0.6	0.1	1.3
		Nov	N.A.	N.A.	N.A.	36.7	16.4	20.6	15.4	5.4	5.3	0.5	0.0	1.5
	1973	Mar	N.A.	N.A.	N.A.	32.9	19.3	20.1	18.6	6.2	2.8	0.1	0.1	1.4
		Jul	N.A.	N.A.	N.A.	44.7	19.3	17.2	11.0	4.6	3.1	0.2	-0.3	2.0
	1976	Mar	1.6	3.7	4.5	9.6	14.2	18.0	36.4	6.7	4.6	0.6	0.5	2.9
		Jun	0.0	1.9	1.4	2.5	4.8	37.6	48.8	2.1	0.7	0.2	0.8	1.1
		Sep	2.0	1.8	3.1	6.3	17.3	35.3	33.7	0.3	0.1	0.1	0.3	1.8
		Dec	3.5	9.5	9.7	12.6	20.7	23.4	11.7	3.4	4.6	0.8	-0.5	3.9
	1977	Mar	0.7	5.1	11.5	21.4	26.1	19.2	8.1	1.9	4.4	1.6	-0.5	3.0
		Jun	0.3	3.6	7.2	10.8	19.9	31.8	25.3	0.3	0.4	0.4	0.2	2.0
		Sep	0.0	4.7	14.3	22.6	18.6	8.3	8.3	9.6	12.0	1.6	-0.1	4.6
		Dec	2.9	7.1	8.1	9.6	12.2	11.8	16.5	20.8	9.4	1.6	0.4	5.2

[a] Analyses did not include these screen sizes.

TABLE L-2

NUMERICAL METHODS

RAREFACTION DIVERSITY (Sanders, 1968)

The rarefaction method of graphically calculating species diversity was formulated to directly compare samples of different sizes. The usual difficulty inherent in such a comparison is that, as the sample size increases, individuals are added at a constant arithmetic rate but species accumulate at a decreasing logarithmic rate. The rarefaction method is dependent on the shape of the species abundance curve rather than on the absolute number of specimens per sample. The procedure is to keep the percentage composition of the component species constant with that of a hypothetical sample of 1000 individuals while reducing the sample size, i.e., to artificially create the results that would have been obtained had smaller samples with identical faunal composition been taken. With this technique, the expected number of species in any size sample can be determined.

THE SPEARMAN PEAK CORRELATIONS [r_s] (Siegel, 1956)

In this test "N" individuals are ranked according to two variables. If the ranking of the independent variables is denoted as $X_1, X_2, X_3, \ldots, X_n$ and the ranking of the dependent variables is represented by $Y_1, Y_2, Y_3, \ldots, Y_n$, a measure of rank correlation may be used to determine the relationship between the X's and the Y's.

$$d_i = X_i - Y_i$$

indicates the disparity between the two sets of rankings.

$$r_s = 1 - \frac{6 \sum_{i=1}^{N} d_i^2}{N^3 - N}$$

is used if no tied rankings are present. When a considerable number of ties are present, the following formula is used:

$$r_s = \frac{\Sigma x^2 + \Sigma y^2 - \Sigma d^2}{2\sqrt{\Sigma x^2 y^2}}$$

where: $\Sigma x^2 = \frac{N^3 - N}{12} - \Sigma T_x$

$\Sigma y^2 = \frac{N^3 - N}{12} - \Sigma T_y$

and $T = \frac{t^3 - t}{12}$

Where t = the number of observations tied at a given rank. Critical values of significance (P=0.05) have been determined for various N (See Siegel, 1956, Table P of Appendix).

DOMINANCE-DIVERSITY CURVES (Whittaker, 1965)

In order to examine the relative abundances of the taxa at each station, all taxa were ranked by abundance and the ranks were then plotted against the log of the number of individuals represented by each rank. A steeply sloping curve indicates a high degree of dominance by a few species, while a gently sloping curve indicates a more equitable distribution of abundances among taxa.

SPECIES SATURATION CURVES (Gaufin et al., 1956)

Gaufin et al. (1956) presented a method for calculating the best average curve based on all possible combinations of randomized replicates. An estimate can be made of the average probability (P_k) of finding a species in the kth set of a set of $k \leq n$ samples, but in no previous sample, given that it has occurred in the total set of n samples, using the formula:

$$P_k = \sum_{i=1}^{n-k+1} \left[\frac{C^{i}_{n-k+1}\ (i)}{C^{i}_{n}\ (n-k+1)} \right] \left[\frac{S_i}{S} \right]$$

where S_i is the number of different species appearing in i out of n samples, S is the total number of species observed, and C is a coefficient derived from the combinatorial formula:

$$C^{k}_{n} = n!/k!(n-k)!$$

The coefficient must first be multiplied by a constant defined by:

$$n!/(k-1)!(n-k)!$$

which varies with k.

McCLOSKEY'S (1970) INDEX OF FAUNAL DOMINANCE

This index ranks each species taken in a series of samples to determine the most dominant species. Use of this index disregards sample size. The species in each sample are ranked for dominance by

their "biological index value" (BIV), which is obtained by giving 10 points to the species which numerically dominates that sample, 9 for each second dominant species, and so on. The "scores" of each species in the series of samples are then added to determine the total biological index value. The species having the highest total BIV is then the species of primary dominance.

THE MANN-WHITNEY U-TEST (Elliott, 1971)

This is a non-parametric alternative to the t-test for comparing differences in two sample means. The null hypothesis is that there is no difference between sample means from two independent random samples drawn from populations having the same parent distribution.

The test statistics are calculated as follows:

$$U_1 = n_1 n_2 + \frac{n_2(n_2 + 1)}{2} - R_2$$

$$U_2 = n_1 n_2 + \frac{n_1(n_1 + 1)}{2} - R_1$$

where n_1 = number of elements in sample 1 and n_2 = number of elements in sample 2. Data are pooled and ranked by order of magnitude, so that the lowest ranking element receives a value of 1. If any ranks are equal, they are given the average of the tied ranks. R_1 and R_2 are the sum of ranks in samples 1 and 2, respectively. The smaller

of the two U values is compared to the appropriate value of U in a table of U-statistic values at the desired level of significance.

THE KRUSKAL-WALLIS TEST (Sokal and Rohlf, 1969)

This is another non-parametric test that is used for determining differences in means between several samples, not necessarily of equal size. The null hypothesis is that all samples come from the same population and therefore there is no difference between sample means. The test statistic is computed as follows:

$$H = \frac{12}{(\overset{a}{\Sigma} n_i)(\overset{a}{\Sigma} n_i + 1)} \cdot \frac{\overset{a}{\Sigma}(\overset{n_i}{\Sigma} R)^2 i^2}{n_i} - 3\,(\overset{a}{\Sigma} n_i + 1)$$

where n_i equals the number of items in group i. Counts are again pooled and ranked in order of magnitude and an average given for tied ranks. The sum of the ranks equals $(\overset{n_i}{\Sigma} R)_i$. An adjustment for tied ranks is calculated as follows:

$$D = 1 - \frac{\overset{m}{\Sigma} T_j}{(\overset{a}{\Sigma} n_i - 1)\overset{a}{\Sigma} n_i (\overset{a}{\Sigma} n_i + 1)}$$

where T_j is a function of t_j, the number of variations in the jth group of ties.

$$T_j = (t_j^3 - t_j)$$

Adjusted $H = \frac{H}{D}$

The adjusted H value is compared to $\chi^2(a-1)$ tables at the desired level of significance.

DIVERSITY AND EQUITABILITY

Diversity indices are an additional tool for measuring the quality of the environment and the effect of induced stress on the structure of a community of macroinvertebrates. Their use is based on the generally observed phenomenon that undisturbed environments support communities having large numbers of species with no individual species represented in overwhelming abundance (EPA, 1973). Many forms of stress tend to reduce diversity by making the environment unsuitable for some species or by giving other species a competitive advantage.

The Shannon-Weaver index of diversity ($\bar{d}$) (Lloyd, Zar, and Karr, 1968) calculates mean diversity and is recommended by the EPA (1973):

$$\bar{d} = \frac{C}{N} (N \log_{10} N - \Sigma n_i \log_{10} n_i)$$

where: $C = 3.321928$ (converts base 10 log to base 2)

N = total number of individuals

n_i = total number of individuals of the ith species.

Mean diversity as calculated above is affected both by the number of species and the distribution of individuals among the species. The value may range from 0 to $3.321928 \log_{10} n$.

To evaluate the component of diversity due to the distribution of individuals among the species (equitability), the calculated $\bar{d}$ is

compared with a hypothetical maximum $\bar{d}$ based on a maximum species distribution obtained from MacArthur's "broken stick" model (Lloyd and Ghelardi, 1964). The MacArthur model results in distribution quite frequently observed in nature: one with a few abundant species and increasing numbers of species represented by only a few individuals. Sample data are not expected to conform to the MacArthur model, since it is only being used as a measure against which the distribution of abundances is compared. Equitability values may range from zero to one, except in rare cases where the distribution in the sample is more equitable than that in the MacArthur model.

Equitability is computed by: $e = \frac{s^i}{s}$

where: s = number of taxa in the sample

s^i = hypothetical maximum number of taxa in the sample based on a table devised by Lloyd and Ghelardi (1964)

MORISITA'S (1959) INDEX OF COMMUNITY SIMILARITY: $C\lambda$

This index is used with semi-quantitative data such as trawl samples. It compares two samples by taking into account the abundances of common species, total abundances in each sample, and their respective diversities.

Morisita's index is based on Simpson's index of diversity (λ):

$$\lambda = \frac{\Sigma n_i(n_i-1)}{N(N-1)}$$

where: N = total number of individuals

n_i = importance value (abundance, biomass, etc.) of the ith species.

Using subscripts 1 and 2, the λ values of two samples may be differentiated:

$$\lambda_1 = \frac{\Sigma n_{i1}(n_{i1}-1)}{N_1(N_1-1)} \quad \text{and} \quad \lambda_2 = \frac{\Sigma n_{i2}(n_{i2}-1)}{N_2(N_2-1)}$$

Morisita's index of similarity between communities may then be calculated by the following formula:

$$C\lambda = \frac{2\Sigma n_{i1}n_{i2}}{(\lambda_1+\lambda_2)N_1N_2}$$

This index is almost uninfluenced by the sizes of N_1 and N_2. The value of $C\lambda$ will approach unity when samples demonstrate similarity in species abundance and diversity. Conversely, as $C\lambda$ approaches zero, the samples will have fewer species in common, which suggests that the samples have been drawn from dissimilar habitats.

TABLE L-3

NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
PLATYHELMINTHES (C)	1		8		6	4	14		8		4	6	12		11	1	23	2	27	4	22		20	44
NEMERTINA (C)	6		70		25	13	37	10	36	4	8	134	20	12	71	3	61	47	100	16	65	12	58	70
ANNELIDA																								
Polycheata																								
Polynoidae (O)																								
Harmothoe extenuata (O)																								
Harmothoe sp. (O)									1	1			8						2					
Lepidonotus sublevis (O)						1																		1
Malmgre..ia lunulata (O)																								
Unidentified Species (O)					1				2		1													
Polyodontidae (O)																								
Polyodontes lupinus (O)																								
Sigalionidae (DF)																								
Psammolyce arenosa (DF)						1	1										1							
Sigalion arenicola (DF)																								
Sigalion sp. (DF)			4															3						
Sthenelais limicola (DF)																								
Sthenelais sp. (DF)														1	2									
Unidentified Species (DF)									5						12		2						1	
Pisionidae (Q)																								
Pisione remota (Q)			1		1										1				4					
Chrysopetalidae (Q)																								
Bhawania goodei (Q)																								1
Paleonotus heteroseta (Q)	2		1						2								1	1						
Amphinomidae (Q)																								
Linopherus ambigua (Q)																			1					
Linopherus canariensis (Q)																								
Linopherus sp. (Q)	2		1			2						2												
Paramphinome pulchella (Q)										1													1	
Phyllodicidae (O)																								
Anaitides arenae (O)																								
Anaitides madeirensis (O)	2					1									1									
Eulalia bilineata (O)						1							3		3			1						
Eumida sanguinea (O)	1								2								1		1		1			7
Hesionura elongata (O)															9							4		

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q-Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Phyllodocidae (continued)																								
Nereiphylla fragilis (O)							1						4		3			1	1				1	3
Paranaites kosteriensis(O)															1									
Phyllodoce sp. (O)						1	1												1					
Protomystides bidentata(O)					3						1	3	1			3		1	1				2	
Pterocirrus macroceros (O)	3				1																			1
Unidentified Species	1		1		2		3		2								1							
Hesionidae (O)																								
Gyptis brevipalpa (O)						1																		
Hesione picta (O)																								
Heteropodarke sp. (O)											1	1			2								1	
Kefersteinia sp. (O)																					1			
Microphthalmus hartmanae(O)						2	2					2	1		8			3	3					4
Microphthalmus sp. B (O)												8			2			3					4	2
Ophiodromus sp. A (O)					1	8	6		3		1	34	12		21		9	22	12		2		4	15
Podarke obscura (O)	1				4	12	25		12		3	6	4		6		7	9	2		1			2
Unidentified Species	1		11		1						2													
Pilargidae (C)																								
Ancistrosyllis carolinensis (C)									8			1												
Ancistrosyllis hartmanae(C)						4	1		20		4	26	4		8		16	9			1		1	1
Ancistrosyllis sp. (C)							2				8		2		1		4							
Pilargis sp. A (C)						1																		
Synelmis albini (C)						1					1	7				2		1						
Syllidae (C)																								
Autolytus dentalius (C)											1										1			3
Autolytus sp. (C)	2		1			1					3				1			1						
Branchiosyllis sp. (C)																								
Brania swedmarki (C)			2						2						53			34	6		3		3	1
Brania wellfleetensis (C)																						2		
Brania sp. (C)			1		6	2			6		6	11			7		4							
Dioplosyllis sp. A (C)																								
Eusyllis heterocirrata (C)	5		4		9	2			7	3	7	44			19		3	25			2	1	1	
Eusyllis sp. A (C)																								
Exogone dispar (C)	30		20		19	18	100		34			5	99		31		25	19	95		24	3	6	47
Exogone cf. *verrugora* (C)											2													

(Feeding type designations: C-carnivore; O-omnivore; DF- deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q-Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Syllidae (continued)																								
Exogone sp. A (C)						1	5				8		6				1		4					1
Odontosyllis sp. (C)			2						2			13	1		7			13			2		3	
Parapionosyllis longicirrata (C)	22		16		6	9	63		28	3	7	33	28		56	6	56	15	26	7	11	5	5	20
Pionosyllis uraga (C)			1		1		5		7		3		3						1	1			1	4
Plakosyllis brevipes (C)			14		2	3	13		16		3	4	9		24		31	14	5		6		8	2
Sphaerosyllis hystrix (C)	7		6		6	5	12		17		7	1	19		11		31	4	11	1				6
Sphaerosyllis sp. A (C)																			8		34	1	1	35
Sphaerosyllis spp. (C)	19		77		2	54	18		140		15	53	31		234	1	93	64	7		14		7	5
Streptosyllis sp. A (C)			2		7					3						3								
Syllides sp. (C)			2						5			5			7			3			2			
Syllis amica (C)			5			8					4	2					2	9					6	
Syllis cornuta (C)					1	1			1				1					1						1
Syllis ferrugina (C)					2																			
Syllis gracitis (C)			1								3	1												
Syllis hyalina (C)																		4			1			
Syllis regulata carolinae (C)	6		17		5	3	17		18		4	13	23		53	1	36	8	4	2	26	3	4	15
Syllis spongicola (C)													6						4					
Syllis sp. (C)	1			2																				
Trypanosyllis cooliaca (C)											1	1			2			7		1			7	1
Trypanosyllis zebra (C)																								
Trypanosyllis sp. A (C)																		3						1
Trypanosyllis sp. B (C)												1												
Trypanosyllis sp. (C)			1		4						1		4				1							
Unidentified Species (C)	43										2				1								1	
Nereidae (C)																								
Ceratonereis iritabilis (C)			1																					
Ceratonereis mirabilis (C)																			1					
Ceratonereis sp. A (C)																								
Ceratonereis sp. (C)	1																				2			
Nereis sp. (C)	3										1	1	1					1			1			
Platynereis dumerilii (O)						1							1										1	
Unidentified Species (C)	3		1		2		1				2	2	2				4							

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit suspension feeder; SF-suspension feeder; Q-Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

Species and Feeding Type[a]	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Nephtyidae (O)																								
Nephtys cf. *incisa* (O)													3			4			2				1	3
Nephtys squamosa (O)			2		3	5	2		3			2	7	1	5		1	2	1		2			2
Nephtus sp. (O)	1				1	1																		
Glyceridae (C)																								
Glycera capitata (C)						1																		
Glycera dibranchiata (O)																								
Glycera oxycephala (O)						5										1								
Glycera papillosa (O)							1		1															
Glycera sphyrabrancha(O)							1							1										
Glycera sp. (O)																					2			
Hemipodus roseus (O)	27		45		55	20	49		25		20	10	7		23	1	11	12	41	24	10	4	20	25
Goniadidae (C)																								
Goniada littorea (C)								2																
Goniadides carolinae (C)			1		7	98	51		83		73	178	146		85		40	77	107		40		56	3
Lacydoniidae (DF)																								
Lacydonia cf. *miranda*																					1			
Eunicidae (C)																								
Eunice antennata (C)																								
Eunice vitatta (C)	11		19	1	11		1		9		1	2	22		25		59	7	10		16		4	37
Nematonereis sp. (C)			1			1												1			1		2	
Onuphidae (O)																								
Diopatra cuprea (O)																								
Nothria sp. A. (O)																1								
Onuphis eremita (O)		1						1																
Onuphis quadricuspis(O)					1	1	7																	
Onuphis sp. (O)			2									1							1	1	5		1	
Lumbrineridae (C)																								
Lumbrinerides cf. *acuta*(C)											1		2		4		1	2	1					
Lumbrineris cf. *coccinea*(C)													1											
Lumbrineris cruzensis (C)														1										
Lumbrineris inflata (C)																								1
Lumbrineris latreilli (C)											1	1			1									
Lumbrineris sp. (C)			1								1													
Arabellidae (C)																								
Arabella mutans (C)													1				3							1

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q-Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

Species and Feeding Type[a]	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Arabellidae (continued)																								
Drilonereis sp. (C)																								
Unidentified Species									1															
Dorvilleidae (DF)																								
Dorvillea sociabilis (DF)						2						1	1											
Protodorvillea kefersteini (DF)			23		6	15	5		4		7	35	15		45		3	65	23	13	21		14	2
Schistomeringos rudolphi (DF)			3		6	3			1		12	4	4		3		11	5	1		2		1	1
Orbiniidae (DF)																								
Haploscoloplos fragilis(DF)																								
Haploscoloplos sp. (DF)		1				1																		
Naineris setosa (DF)	4																							
Scoloplos rubra (DF)							1		1									2	1		2		1	
Scoloplos sp. (DF)	1											1												
Paraonidae (DF)																								
Aedicira sp. (DF)																								
Aricidea sp. A (DF)									2															
Aricidea sp. B (DF)						2			2									2						
Aricidea sp. C (DF)																								
Cirrophorus lyriformis (DF)						2			4															
Paraonides cf. *lyra* (DF)									10			3								1				
Paraonides sp. A (DF)									5		1	5	1		1							2		
Paraonis fulgens (DF)											1					1								
Paraonis pygoenigmatica(DF)																								
Spionidae (DF)																								
Aonides sp. A (DF)									1															
Apoprionospio dayi (DF)																								
Boccardia hamata (DF)																								
Laonice cirrata (DF)	4		1										3											
Malacoceros glutaeus (DF)												1									1			
Malacoceros sp. (DF)															1									
Minuspio cirrifera (DF)											8									1				
Minuspio cirrobranchiata(DF)						1					1	1	2		1									
Minuspio sp. (DF)																		2						2

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q- Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	
Spionidae (continued)																								
Paraprionspio pinnata (DF)																								
Polydora socialis (DSF)	4		1						1								1							
Polydora sp. A. (DSF)									1						1									
Polydora sp. (DSF)													1											
Prionospio cristata (DF)	2					1	806	4	178		5	17	53	3	36		16	8	7	3	1			25
Pseudopolydora sp. A (DF)									2															
Scolelepis texana (DF)					1																			
Spio pettiboneae (DF)																								
Spio cf. *setosa* (DF)											1													
Spiophanes bombyx (DF)	1					1	2					1	2	2		1				2		1		
Unidentified Species (DF)	2		1			3								1										
Magelonidae (DSF)																								
Magelona cf. *papillicornis* (DSF)														2										
Magelona sp. (DSF)						3						4			1			1						
Poecilochaetidae (DF)																								
Poecilochaetus johnsoni (DF)	1					1	1						1											
Chaetopteridae (SF)																								
Spiochaetopterus costarum oculatus (SF)																								
Acrocirridae (DF)																								
Macrochaeta sp. (DF)			8				2		5		1	12	6		41		17	24	12		9		10	
Cirratulidae (DF)																								
Caulleriella alatus (DF)												2			1							1		1
Caulleriella cf. *killariensis* (DF)						5			8				1		2			1						
Cirriformia filigera (DF)																					1		1	
Cirriformia grandis (DF)																		1						
Cirriformia sp. (DF)																					2		3	
Dodecaceria concharum (DF)								1																
Tharyx marioni (DF)									1		1													
Tharyx sp. (DF)			1		1				4		1	3						2			2	1		91
Flabelligeridae (DF)																								
Piromis roberti (DF)																								
Unidentified species	1																							

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit suspension feeder; SF-suspension feeder; Q-Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

Species and Feeding Type[a]	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Opheliidae (DF)																								
Armandia agilis (DF)														2										
Armandia maculata (DF)			1	2					40	7	20	8	21			2	2		1					
Armandia polyophthalma (DF)																2						1		
Ophelia denticulata (DF)					1		4		6	7	2	4		1	3		3	2	1	1	3			
Unidentified species (DF)						1																		
Capitellidae (DF)																								
Capitella capitate floridana (DF)					1						1		1											
Mediomastus californiensis (DF)	2					25	2		82		12	6	44		7		5	37	1	1			1	2
Notomastus latericeus (DF)													1		3				7	1				
Pulliella sp. A. (DF)																								
Scyphoproctus platyproctus (DF)																								
Capitellid sp. A (DF)															1			2						
Unidentified species (DF)	1																							
Maldanidae (DF)																								
Axiothella mucosa (DF)					2				2										1		2		2	4
Euclymene sp. A. (DF)							1																	
Macroclymene zonalis (DF)					1	5	3		4			5			2		6							
Petaloproctus socialis (DF)																	1		1					2
Rhodine sp. (DF)	4		5			1			1			5	6				15	12					3	
Unidentified species (DF)	1		1		1								1											
Oweniidae (DSF)																								
Owenia fusiformis (DSF)						1	1																	
Sabellariidae (SF)																								
Sabellaria floridensis (SF)	4																							
Sabellaria vulgaris (SF)	1					109	8		1				11		2			1	6				1	4
Pectinariidae (DF)																								
Pectinaria gouldii (DF)																								
Ampharetidae (DF)																								
Ampharete cf. *americana* (DF)							4		32			1	3		6			3						1
Isolda pulchella (DF)												1												
Terebellidae (DF)																								
Amaena trilobata (DF)																								
Loimia medusa (DF)	108						81		2															

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q-Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

Species and Feeding Type[a]	Quarter and Station																						
	1st Quarter						2nd Quarter						3rd Quarter					4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Terebellidae (continued)																								
Polycirrus eximius (DF)									1								10		4		7		1	
Polycirrus sp. A (DF)																							1	
Polycirrus sp. B (DF)													1								1			
Thelepus sp. (DF)																	1							
Terebellid sp. A (DF)						2												1						
Unidentified species (DF)	1		3			7			6		1		1		5									
Sabellidae (SF)																								
Amphiglena mediterranea (SF)									1								44				6			5
Chone americana (SF)							2		1			2			1			3						1
Chone sp. A (SF)																								
Megalomma bioculatum (SF)									3															
Megalomma lobiferum (SF)	1								1		1	3												
Potamilla sp. (SF)									1								10						1	
Sabella microphthalma (SF)																								
Unidentified species (SF)						1	1		2															
Serpulidae (SF)																								
Dexiospira sp. (SF)																								
Filogranula sp. (SF)	241		136		284	74	28		764		337	493	305		622		599	229	99	3	231	18	146	584
Hydroides bispinosa (SF)					8				4		1		4		5		24		1		3			1
Hydroides dianthus (SF)																								
Hydroides elegans (SF)									1															
Hydroides floridana (SF)													4		11		17							1
Hydroides microtus (SF)							1		1		1				23		13							
Hydroides parva (SF)													1				4							
Hydroides protulicola (SF)											6													
Hydroides sp. (SF)			1			1									1		1							
Pseudovermilia sp. A. (SF)			1												2		12		3		5			
Serpula vermicularis (SF)									3		2		1		22	1	5							
Spirorbis sp.	44		8	26	214		8		12		56				12		24				2			
Vermiliopsis sp.	14		35	3	38	52	106		51		16	30	119		82		72	24	63	2	55	6	19	13
Polygordiidae (DF)																								
Polygordius sp. (DF)	419				3	5	35		6		1		1		3		3	5	32		8		4	10
Protodrilidae (DF)																								
Protodrilus sp. (DF)							18				3				19				5		1		3	

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q- Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

Species and Feeding Type[a]	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Saccocirridae (DF)																								
Saccocirrus sp. (DF)																	2		1		1		5.	
Oligochaeta (DF)																								
Clitellio arenicolus (DF)																			23		25		19	43
Marionina sp. (DF)	6				14		16		3		31	45	41		6		14	41	19		12	2	57	
Peloscolex sp. A (DF)						1					9	4	7		6		10	2						
Peloscolex sp. B (DF)																								
Peloscolex sp. C (DF)						2			34		33	13	32		13		81	75			15			2
Tubifex sp. A (DF)																								
Tubificid sp. A (DF)																			4		2			3
Tubificid sp. B (DF)																					2			
Tubificid sp. C (DF)																			18		5	1	25	
Tubificid sp. D (DF)																			3		12		15	
Tubificid sp. E (DF)																			38		13		16	26
Tubificid sp. F (DF)																								
Unidentified Species (DF)	14		51		54	19	137		57		43	200	27		107	1	13	86						
Hirudinea (C)	3																							
MOLLUSCA																								
Gastropoda																								
Acteocina canaliculata (Q)																				1				
Acteocina candei (Q)								1																
Acteocina recta (Q)			1													1								
Aesopus stearnsii (Q)			1				1												1		2			
Anachis floridanum (H)																								
Anachis iontha (H)	1		1			1				1			4		1								1	1
Anachis lafresnayi (H)																								
Anachis obesa (H)									1															
Areno tricarinata (H)	7				2	2	1				1		4		5		2	5	2		6	1	1	5
Balcis conoidea (C)							1						1		1									
Caecum cooperi (H)			2	10	1	3				1		2	1		2	2		1			3	1	3	
Caecum floridanum (H)			1		3				1		2				1		1		1		2			
Caecum nitidum (H)																								
Caecum pulchellum (H)																							1	
Caecum strigosum (H)	107		4		6	1	24		34		7		3		14		13	1	61	2	22		8	12
Caecum vestitum (H)							3						1						3					

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit suspention feeder; SF-suspension feeder; Q- Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Gastropoda (continued)																								
Calliostoma pulchrum (H)																					1			
Caluptraca centralis (H)	5		4			1	2					1	15		13		10	1	4		8		5	12
Cerithiopsis cf. *iota* (O)																								
Cerithiopsis sp. (O)																	2							
Cochliolepis holmesi (C)						1																		
Crepidula fornicata (H)	18		35		4	147	1		43		4	6	14	2	63	1	5				2			
Crepidula plana (H)						3							1											
Cresius acicula (SF)																								
Cyclostremiscus pentagonus (Q)																								
Didianema pauli (Q)																								
Diodora cayenensis (H)																						1		
Epitonium sp. (C)																			1					
Eulimostraca sp. (C)													1											
Fasciolaria hunteria (C)																								
Finella adamsi (H)																					1			
Haminoea cf. *solitaria* (O)																								
Hyalina (*Volvarina*) sp. (C)																			1					
Ithycythara pentagonalis (Q)													1		2								1	1
Kurtziella atrostyla (C)																								
Kurtziella limonitella (C)																								
Macromphalina palmalitoris (C)							1						11						1	1				
Marginella eburneola (C)							3										1		2			2		
Mitrella argus (H)																								
Mitrella lunata (H)						1																		
Nassarius consensus (C)	1				1	2			1		2						5				1		3	
Natica pusilla (C)						1						1			1	3					1	1	3	
Oceanida n. sp. (Q)			1		1		1								1									
Odostomia (*Fargoa*) *dux* (C)																	1							
Oliva sayana (C)																1								
Olivella floralia (C)						1	1	1		1		1		2						1			2	
Olivella minuta (C)																								
Olivella sp. A (C)																								
Polinices lacteus (C)	1																							

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q-Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
GASTROPODA (continued)																								
Polygyreulima sp. A (C)									1				2		1		1		1					
Polygyreulima sp. B (C)															1									
Prunum rosidum (C)																								2
Rissoina catesbyana (H)						1																		
Rubellatoma rubella (C)																								
Seila adamsi (O)																								
Sigatica carolinensis (H)																								
Sinum maculatum (C)			1				1																	1
Skenea sp. A (Q)									1															
Skenea sp. B (Q)																		1						
Teinostoma sp. (Q)																								
Tricolia affinis pterocladica (H)													2		1									
Triphora cf. *decorata* (C)																								
Turbo castanea (H)	5																							
Turbonilla pilsbryi (C)							2								3									
Turbonilla (*Chemnitzia*) sp. (C)																								1
Turbonilla (*Striotur-bonilla*) sp. B (C)	1																							
Voxillum wandoense (C)							1						1				1							
Vitreolena sp. (Q)																			1		1			
Zebina browniana (Q)	1						2						11		2		1		15		1			20
Opistobranchia (Q)																								
Doradacea sp. A (Q)																								
Doradacea sp. B (Q)																								
Onchidella sp. (Q)													1											
Schaphopoda (C)																								
Dentalium calamus (C)			1	12	2		1			7		5			2	12		1			2	2	5	
Dentalium sowerbyi (C)																					1	2	1	
Dentalium sp. (C)			2		2					1		1												
Polyplacophora (O)																								
Chaetoplerua apiculata (O)	2				2	2	5		11		5		8		4		4	2	4		2			3
Ischnochiton hartmayeri (O)			30		36	2	15		7		5	3	8		14		8	15	4		16		17	7
Ischnochiton papillosus (O)			6		1	4			16		11		18	1	21		212	8	7		39		4	22
Stenoplax boogii (O)																	2							

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q-Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Bivalvia																								
Abra aequalis (DF)						1																		
Aequipecten muscosus (SF)									1															
Anadara transversa (SF)						1																		
Anomia simplex (SF)						11	1		3		1		17		3		1		1					
Argopecten gibbus (SF)							2		9		4													
Barbatia domingensis (SF)							1																	
Chama congregata (SF)			1		2								1				1							
Chama macerophylla (SF)																							1	
Chione grus (SF)													6		3	1	6							7
Chione intapurpurea (SF)	2		10		3	1	8	1	15		4	14	6		21	2	5	5	4		9		22	4
Corbula barrattiana (SF)							2																	
Corbula sp. (SF)									1															
Crassinella duplinana (SF)	3		9	20	4	4	6		4	115	5	21			5	256	3	5	10		3	12	2	1
Crassinella lunulata (SF)	22		1		1	20	17		7		1		5		1		12		18	2	1			46
Crenolla divaricata (SF)			1		1		1			1		1				2			2				2	
Dinocardium robustum (SF)																								
Diplothyra smithii (SF)					1																			1
Divaricolla quadrisulcata (Q)																								
Ervilia concentrica (SF)								2		1		10	1	1										
Gastrochaena hians (SF)						4																		
Glycymeris americana (SF)													1								1			
Glycymeris spectralis (SF)	2		2	4			7		1	8	1	6	7		3	6	1	2	15	1	2	22	8	
Gouldia cerina (SF)	1												1											1
Laevicardium pictum (SF)																								
Laevicardium sp. (SF)													1		1			1						
Lithophaga bisulcata (SF)																								3
Lioborus castaneus (SF)													1											
Macoma brevifrons (DSF)						1	20		7		1		4		1		1	1	2			1		1
Macoma tenta (DSF)						1																		
Mactra fragilis (SF)																								
Modiolus modiolus squamosus (SF)																								
Montacuta sp. A (SF)													1											
Musculus lateralis (SF)																								

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q- Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Bivalvia (continued)																								
Noetia ponderosa (SF)						2																		
Nucula proxima (SF)																	1							
Orobitella limpida (SF)																							1	
Ostrea equestris (SF)							1												1					
Pandora bushiana (SF)					1																1			1
Papyridea soleniformis (SF)						1																		
Parvilucina multilineata (SF)						1		1		1														
Pitar fulminata (SF)											1													
Pleuromeris tridentata (SF)	2		1			3				1	1	2												1
Plicatula gibbosa (SF)																							1	
Pteromeris perplana (SF)			1							1		2												
Raota plicatella (SF)														1										
Semele bellastriata (DSF)						2	3					2			1			1						1
Semele nuculoides (DSF)				1						3						7						2		
Sphenia antillensis (SF)						1																		1
Tellina iris (DSF)	1	20			1			2						1										
Tellina sp. (DSF)																								
Tivela floridana (SF)																1						1		
Trachycardium egmontianum (SF)											2													
Varicorbula operculata (SF)												1												
Bivalve sp. A (Q)																								
ARTHROPODA																								
Pycnogonida sp. (Q)																								
Ostracoda (SF)																								
Species A (SF)							1		10		2		6		32		30		2		1		1	1
Species B (SF)	1				1				1						1		1	2	2	1				
Species C (SF)	2					1									1		3	2			1			
Species E (SF)					1				1								9							2
Species F (SF)						1													1					
Species G (SF)			1		1																			
Species H (SF)							6		3		1		5	1	1		3	2	3		9		2	5
Species J (SF)																		2						
Species K (SF)							2																	
Species L (SF)								1								1	2	1						
Species M (SF)	1								4								1						1	2

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q-Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

Species and Feeding Type[a]	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Ostracoda (continued)																								
Species N (SF)												1												
Species O (SF)													1		13									
Species P (SF)													1		1									
Species Q (SF)														1										
Species R (SF)														1										
Species S (SF)																								
Species T (SF)																								
Species U (SF)																								
Species V (SF)																								
Species W (SF)																								
Unidentified Species																								
Cirrepedia (SF)																								
Balanus trigonus			2				1		4		20		14		14		99	1						2
Balanus venustus						1	2		25		50		103		41		287	38			2		1	2
Balanus sp.			12			17					15		22		36		18	10						
Cirriped cypris						3																		
Stomatopoda																								
Nannosquilla taylori ? (C)							1																	
Mysidacea (SF)																								
Bowmaniella sp. (SF)			3							1						1			1					
Heteromysis formosa (SF)							1																	
Mysidium sp. (SF)	1																							
Mysidopsis sp. (SF)																								
Unidentified species																								
Cumacea (SF)																			4					
Cyclaspis pustula ? (SF)														1										
Cyclaspis varians (SF)						4												1	1					
Oxyurostylis smithi (SF)						6		1		1						1								
Cumacea sp. A (SF)							3						1	1										
Cumacea sp. B (SF)							1		2															
Cumacea sp. C (SF)							1		1			2												
Tanaidacea (O)																								
Apseudes sp. A (O)	1						11				1		5				3		7					1
Heterotanais sp. A (O)	6		2			1	15						4			1	2	1	7		1			1
Leptochelia sp. A (O)	1						3						1											
Tanaidacea sp. A (O)										1														
Isopoda																								
Ancinus depressus (O)				1																				
Apanthura magnifica (O)																								
Asollota sp. (O)																							1	

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q- Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

Species and Feeding Type[a]	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Isopoda (continued)																								
Chiridotea arenicola (O)															1	1								
Eurydice littoralis (O)	1	1			2		1	1		10					1	9		1	2	4				2
Horoloanthura irpex (O)							13				3				1									
Microcerberus sp. A (DF)	3			13	2		36		12		5		2		9		25	20	18		22		16	74
Panathura formosa (O)	63			5	11	23	39		6		5		14		2		61	1	22	3	4			5
Xenathura brevitelson? (O)		1			1			1																
Anthurid sp. (Q)										1														
Amphipoda																								
Acanthohaustorius sp.A (DF)								1																
Bathyporeia sp. A (DF)																								
Colomastix halichondriae (C)						2																		
Corophium acherusicum (DF)																			4					
Corophium acherusicum ? (DF)																				1				
Elasmopus sp. A (DF)	4		1			2	4		3		2	2	13					3						
Elasmopus ? sp. A (DF)															8		5							
Erichthonius brasiliensis (DF)													1											2
Erichthonius sp.A (DF)					1	1	2																	
Eriopisa ? sp. A (DF)			1		1				4								1							
Hemiaegina minuta (Q)						1			1															
Ingolfiella n. sp. (DF)	6						11						1						2					
Jeddo ? sp. A (DF)												1												
Lembos smithi (DF)																		1						
Liljeborgia sp. A (DF)	1				3		1								7			1	5		2		2	
Luonacia incerta (Q)																								
Lysianopsis alba (C)																								
Maera sp. A (DF)	1								11		2		1				8	7						2
Megaluropus sp. A (DF)	1		4		2		2			1		2	1					1						
Melita appendiculata (DF)					1	1																		
Melita sp. A	5						2		10				4		3		10		10		3			9
Microdeutopus sp. A (DF)						5	5					11	1											
Microdeutopus sp. A ? (DF)									8		12		9					1						3
Monoculodes cf. *intermedius* (DF)																								
Paraphoxus spinosus (Q)																								
Photis sp. A (DF)			3				1				1													
Photis sp. B (DF)									2			2												
Pontogeneia longleyi (DF)													7											
Protohaustorius sp. A (DF)										9						10								
Pseudoplatyishnopus sp. A (DF)			1								2		3	12										
Pseudunciola sp. A (DF)	4					13			3				10								2			3
Rudilemboides sp. (DF)																								
Stenothoe crenulata (DF)																								

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q-Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Amphipoda (continued)																								
Synchelidium americanum (DF)						3	1						1											
Synopia ultramarina (DF)											4						7							
Tiron sp. A (DF)							7		9		3			1	3		1	4						
Trichophoxus sp. A (DF)				2				4		15			5	2		22				8		1		
Trichopoxus sp. B (DF)										4				2										
Unciola dissimilis ? (DF)																								
Lysianassid sp. (C)																								
Decapoda																								
Aepinus septemspinosus (Q)																								
Albunea paretti (C)																								
Albunea sp. (C)																								
Alpheus normanni (H)						1					1													
Alpheus sp. (H)						2							6											
Automate evermanni (Q)																								
Callianassa ? sp. (SF)							1							1										
Dissodactylus mellitae (Q)											1													
Dissodactylus crinitichelis (Q)																								
Ebalia cariosa (Q)																								
Euceramus praelongus (SF)															1									
Euryplax nitida (Q)							6		3		1		5		2									
Hepatus sp. (Q)													1											
Heterocrypta granulata (Q)																								
Hexapanopous angustifrons (Q)																								
Hypoconcha arcuata (Q)									3															1
Latreutes parvulus (Q)							2																	
Leptochela papulata (Q)					1																		1	
Leptochela serratorbita (Q)																								
Libinia sp. (Q)																								
Lucifer faxoni (SF)						1											1							
Lucifer sp. (SF)																								
Megalobrachium soratium (Q)																								
Neopontonides beaufortensis (Q)																								
Ogyrides sp. (DSF)		1																						
Ovalipes sp. (Q)																								
Paguristes hummi (Q)									1				1											
Pagurus annulipes-bonnairensis (Q)	1																							
Pagurus carolinensis (Q)																								
Panopeus occidentalis (Q)																								

(Feeding type designations: C=carnivore; O-omnivore; DF-deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q-Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

Species and Feeding Type[a]	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Decapoda (continued)																								
Parthenope serrata ? (Q)									1															
Pelia mutica (Q)																								
Periclimenes americanus (Q)													2											
Persephona mediterranea (Q)																								
Pinnixa floridana (Q)	9								1															1
Pinnixa sp. (Q)						4	2							1										
Portunus sp. (C)					2		1																	
Processa bermudensis (Q)																								
Processa hemphilli (Q)							1																	1
Processa sp. (Q)							2																	
Sicyonia laevigata (C)							2						2		1									
Sicyonia sp. (C)													1											
Sicyonia ? sp. (C)													1											
Solenocera ? sp. (Q)																								
Synalpheus townsendi ? (Q)						1																		
Synalpheus sp. (Q)																								
Tozeuma sp. A (O)																			1					
Trachypenaeus sp. (Q)													1					1						
Upogebia sp. (Q)																								
Apheid sp. (Q)											1													
Anomuran postlarvae (Q)							1																	
Brachyuran postlarvae (Q)					1		4				1	1	10	2	2		3	1		1		1		
Caridea sp. (Q)													2											
Crab megalopa (Q)	6				1				2					2										
Majid sp. (Q)						1																		
Paguroidea sp. (Q)						2			2				1				1			1				
Penaeid sp. (O)																								
Pinnotherid sp. (Q)	2		2																					
Porcellanid sp. (Q)																								
Processid sp. (Q)													1											
Xanthid sp. (Q)															1		1							1
Collumbola																								
Anurida maritima (Q)																								
SIPUNCULIDA (DF)	28		424		48	23	153	1	33		85	134	55		506		224	139	27	3	384	10	45	22
ECHIURIDA (DF)	2						1																	
PHORONIDA (SF)															1									
ECHINODERMATA																								
Echinoidea (Q)																								
Arbacia punctulata (O)																								

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q- Others; H-herbivore.)

TABLE L-3
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1976

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Encope michelini			1		1																			
Lytechinus variegatus																					1		1	2
Mellita quinquiesporforata											11		1	1			12							
Clypeasteroidea sp. (Q)			2	13	3	1				3				1		9				1	9	6	37	
Echinoid sp. (endocyclic)(Q)							1				1		1				12	1						
Echinoid sp. (exocyclic)(Q)																					6	6	9	
Mellitidae sp. (DF)			1	1						6				1		1				1			3	
Unidentified species (Q)					1											1		3					1	
Holothuroidea (DF)																								
Leptosynapta sp. (DF)	2				1		1												2					
Unidentified species (DF)			1																					
Ophiuroidea (DF)																								
Amphiodia pulchella (DF)	1		3		2		79					8	38		1		3		12	2	2		2	1
Amphiodia ? sp. A (DF)																								
Amphiphólis squamata (DF)																								
Ophiactis sp. (DF)																								
Ophioderma sp. (DF)																								
Ophiolepis elegans (DF)					1										1								1	1
Ophiolepis sp. (DF)															1									
Ophiophragmus septus (DF)									1															
Ophiophragmus wurdemani (DF)														1										
Ophiophragmus sp. (DF)																1								
Amphiurid sp. (DF)	9		3			2	6	1	3		3							3	7		5		22	2
Ophiotrichid sp. (DF)																	6							
Unidentified species (DF)	10	1	22		53	3			2		3	2		7	65		27	24	52	2	33	1	96	47
CEPHALOCHORDATA																								
Branchiostoma caribaeum (SF)	6		16		10		32		3	4	2	10	9	10	33	26	3	49	13	6	26	26	36	5
TOTAL	1445	27	1260	98	1058	993	2315	36	2197	227	1122	1779	1759	77	2898	415	2747	1438	1232	127	1392	167	949	1548
NUMBER OF TAXA	96	8	94	14	91	125	125	18	127	33	111	92	147	34	132	45	117	107	104	38	101	37	94	110

(Feeding type designations: C-carnivore; O-omnivore; DF-deposit feeder; DSF-deposit-suspension feeder; SF-suspension feeder; Q-Others; H-herbivore.)

TABLE L-4

NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

Species and Feeding Type[a]	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
PLATYHELMINTHES (C)	3	4	13		3	16			34		58	43			16	1	16	7			11		1	
NEMERTINA (C)	18	10	23	7	50	56	5	4	159	1	70	106	15	23	97	24	59	114	10	15	30	4	25	45
ANNELIDA																								
Polychaeta																								
Polynoidae (O)																								
Harmothoe extenuata (O)											1	1												
Harmothoe sp. (O)																								2
Lepidonotus sublevis (O)																								
Malmgrenia lunulata (O)						2																		
Unidentified species																								
Polyodontidae (O)										1														
Eupanthalis																					1			
Polyodontes lupinus			1																					
Sigalionidae (DF)																		1						
Psammolyce arenosa (DF)			8			13						2												
Sigalion arenicola (DF)																	1							
Sigalion sp. (DF)									2	1														
Sthenelais limicola (DF)							3	1																1
Sthenelais sp. (DF)	8	2											1											
Unidentified species (DF)			1						1			3			6		1				2			
Pisionidae (Q)																								
Pisione remota (Q)															1		2							
Chrysopetalidae (Q)																								
Bhawania goodei (Q)						2						1												2
Paleonotus heteroseta (Q)			3		1																			
Amphinomidae (Q)																								
Linopherus ambigua (Q)						2											2							1
Linopherus caneriensis (Q)																								
Lionpherus sp. (Q)																						1	1	
Paramphinome pulchella (Q)																								
Phyllodocidae (O)																								
Anaitides arenae (O)	1												1					2						
Anaitides madeirensis (O)			1			1																		
Eulalia bilineata (O)			11		4	17			7		5	16			3			3			1		4	2
Eumida sanguinea (O)			2		1	12			3		4	2						4			2			4
Hesionura elongata (O)				2					13		3	2			14	3	16				8	2		
Nereiphylla fragilis (O)			9			11			4			4					1	2			1		2	18
Paranaites kostoriensis (O)			1																					
Phyllodoce sp. (O)																		2						
Protomystides bidentata (O)									2		1	4					1				1		1	

(Feeding type designations: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q- Others; H-Herbivore)

TABLE L-4
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

Species and Feeding Type[a]	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Phyllodocidae (continued)																								
Pterocirrus macroceros (0)						11									1			8						
Unidentified species (0)								1																
Hesionidae (0)																								
Gyptis brevipalpa (0)																								
Hesione picta (0)															1									
Heteropodarke sp. (0)					1					1		1				3								
Kefersteinia sp. (0)																								
Microphthalmus hartmanae (0)									2		1	5			1		1				2			
Microphthalmus sp. B (0)									2		1				2		3				1			
Ophiodromus sp. A (0)					3	1			18		3	7			11	2	10				3		2	
Podarke obscura (0)			6		2	2			20		6	12			11			3						19
Unidentified species (0)																								
Pilargidae (C)																								
Ancistrosyllis carolinensis (C)			2			2						1	1											
Ancistrosyllis hartmanae (C)			14		6	7			1		6	8			6			1			3		4	7
Ancistrosyllis sp. (C)		1																						
Pilargis sp. A (C)												1												
Synelmis albini (C)					1					2	1										1			
Syllidae (C)																								
Autolytus dentalius (C)		1	4			2			1		4	7						3			2			17
Autolytus sp. (C)					1																		1	
Branchiosyllis sp. (C)																								2
Brania swedmarki (C)			4		4				16		1	3			35		16				5		2	8
Brania wellfleetensis (C)				8		1			4	1	2				4	21					1	4		1
Brania sp. (C)																								
Dioplosyllis sp. A (C)									5		1	1												
Eusyllis heterocirrata (C)			3	3	8	2			13		2	10				5							1	
Eusyllis sp. A (C)									1															
Exogone dispar (C)	16	4	155	1	6	136			25		5	40			33		21	88	1		8		1	112
Exogone cf. *verrugera* (C)			1			5						1			1		1	6						2
Exogone sp.A (C)			1						1															
Odontosyllis sp. (C)					1				16		2	13			7		2	2			5			4
Parapionosyllis longicirrata (C)		1	26		5	35			31	1	14	23			47	23	22	13	2		12	3	5	42
Pionosyllis uraga (C)	2	4	13		1	18									3		5	3			1			4
Plakosyllis brevipes (C)			16		3	5			10		6	11			38		14	1			6		1	
Sphaerosyllis hystrix (C)			15		2	7			5		8	6			2	1		4			1		1	
Sphaerosyllis sp. A (C)			101		3	183			34		32	35			42		163	83			10	1	4	67
Sphaerosyllis spp. (C)		1	21		8	7			18		3	12			5			3			2			7
Streptosyllis sp. A (C)					1					2					6						3			

(Feeding type designations: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q- Others; H-Herbivore)

TABLE L-4
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

Species and Feeding Type[a]	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Syllidae (continued)																								
Syllides sp. (C)					1	1			5		3	2			1		9	1			2		1	3
Syllis amica (C)			4		1				1		2	2			3		1				9		2	1
Syllis cornuta (C)						2			2									3						
Syllis ferrugina (C)																								
Syllis gracitis (C)			2						1		1	9			1			6			2		3	
Syllis hyalina (C)			1		2	1			4						2		6	1						2
Syllis regulata carolinae (C)			77	2	7	39			55		17	63			36	9	24	19			10	5	2	6
Syllis spongicola (C)								1										12			5			242
Syllis sp. (C)												1												
Trypanosyllis coeliaca (C)									1			6			4		2				2			
Trypanosyllis zebra (C)																								1
Trypanosyllis sp. A (C)		1			2				5			2												
Trypanosyllis sp. B (C)																								
Trypanosyllis sp. (C)																								
Unidentified species (C)																								
Nereidae (C)																								
Ceratonereis iritabilis (C)														2			8	6						
Ceratonereis mirabilis (C)									1		1	2			1		7	19						8
Ceratonereis sp. A (C)		2																2						5
Ceratonereis sp. (C)									2						2						2			19
Nereis sp. (C)			1		1																			3
Platynereis dumerilii (O)															1									
Unidentified species (C)																								
Nephtyidae (O)																								
Nephtys cf. *incisa* (O)					1	2	1	1			1				2			1			1			1
Nephtys squamosa (O)			9		1	5					1	1			3		5	5			1		2	
Nephtys sp. (O)																								
Glyceridae (C)																								
Glycera capitata (C)							1																	
Glycera dibranchiata (O)	1												1											
Glycera oxycephala (O)																								
Glycera papillosa (O)						1																		
Glycera sphyrabrancha (O)												1												
Glycera sp. (O)																								
Hemipodus roseus (O)			10		5	14	1	1	34		23	21			17		30	1			11		6	
Goniadidae (C)																								
Goniada littorea (O)	6				1		19	1					5	1										
Goniadides carolinae (O)	7	23	36	1	51	30			55		133	83			59		22	18	1		48		45	10
Lacydoniidae (DF)																								
Lacydonia cf. *miranda* (DF)																								

[a]Feeding type designations: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q- Others; H-Herbivore)

TABLE L-4
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

Species and Feeding Type[a]	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Eunicidae (C)																								
Eunice antennata (C)																								4
Eunice vitatta (C)			57		1	34			6			24			34		23	5			16		4	27
Nematonereis sp. (C)			1			2						4			1			12						3
Onuphidae (O)																								
Diopatra cuprea (C)																1		1						
Nothria sp. A (C)		1					1																	
Onuphis eremita (C)							1							1										
Onuphis quadricuspis (C)			2			1			5			1												
Onuphis sp. (C)					1	1			5	4		2				1								
Lumbrineridae (C)																								
Lumbrinerides cf. *acuta* (C)					1				5		2	4			3		1				2			
Lumbrineris cf. *coccinea* (C)																								
Lumbrineris cruzensis (C)								2					5	2						2				
Lumbrineris inflata (C)																								
Lumbrineris latreilli (C)		2	7			3						1			1			6	1					5
Lumbrineris sp. (C)															1			2		1				
Arabellidae (C)																								
Arabella mutans (C)											1												1	1
Driloneris sp. (C)																		1						
Unidentified species (C)																								
Dorvilleidae (DF)																								
Dorvillea sociabilis (DF)																								4
Protodorvillea hefersteini (DF)			3		14				46		24	33			39	6	22	3			12		7	7
Schistomeringos rudolphi (DF)			12		3	1			4		3	8			5		2	7			2		11	1
Orbiniidae (DF)																								
Haploscoloplas fragilis (DF)							1	5																
Haploscoloplas sp. (DF)		1												1										1
Naineris setosa (DF)																								
Scoloplos rubra (DF)		1	2			4					1	8		1				2			2			2
Scoloplos sp. (DF)																								
Paraonidae (DF)																								
Aedicira sp. (DF)					1																			
Aricidea sp. A (DF)	1																							
Aricidea sp. B (DF)			2			2			1									70						13
Aricidea sp. C (DF)								1						3				2						
Cirrophorus lyriformis (DF)																		2						5
Paranoides cf. *lyra* (DF)			4			20												10						
Paranoides sp. A (DF)											3	1											2	
Paranois fulgens (DF)						1									1	1								
Paraonis pygoenigmatica (DF)																								

(Feeding type designations: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q- Others; H-Herbivore)

TABLE L-4
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

Species and Feeding Type[a]	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Spionidae (DF)																								
Aonides sp. A (DF)						1																		
Apoprionospio dayi (DF)								1						1	1						6			
Boccardia hamata (DF)																		46						123
Laonice cirrata (DF)																		1						4
Malacoceros glutaeus (DF)									1						1	2	3	10				3		1
Malacoceros sp. (DF)																								
Minuspio cirrifera (DF)			4																					
Minuspio cirrobranchiata (DF)									1	2	1				2			3					3	3
Minuspio sp. (DF)																								
Paraprionospio pinnata (DF)													3	5										2
Polydora socialis (DSF)	1		3			1						1			3		3				6		1	5
Polydora sp. A (DSF)																								
Polydora sp. (DSF)																								
Prionospio cristata (DF)	1		13			11			1				1	11			5	20		1				55
Pseudopoly dora sp. A (DF)			1															4						
Scolelepis texana (DF)	2																							
Spio pettibonese (DF)	1												21	1		4								2
Spio cf. *setosa* (DF)																								
Spiophanes bombyx (DF)	16	18	3			2						1	2	2	1	4		3	1			1		
Unidentified species (DF)									1	1														
Magelonidae (DSF)																								
Magelona cf. *papillicornis* (DF)																					1			
Magelona sp. (DF)									3		1				2	1		3	1					3
Poecilochaetidae (DF)																								
Poecilochaetus johnsoni (DF)		10												1			1							
Chaetopteridae (SF)																								
Spiochaetopterus costarum			1			1							3					2						
Oculatus (SF)																								
Acrocirridae (DF)																								
Macrochaeta sp. (DF)			4		1				28		4	18			67		108	1			21		3	
Cirratulidae (DF)																								
Caulleriella alatus (DF)												1						1			2			2
Caulleriella cf. *hillariensis* (DF)									2								2	4						37
Cirriformia filigera (DF)												1									1			
Cirriformia grandis (DF)			3						1			1												
Cirriformia sp. (DF)																								
Dodecaceria concharum (DF)																								2
Tharyx marioni (DF)			16			1			4		3	8						82					1	
Tharyx sp. (DF)					3																2			

(Feeding type designations: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q-Others; H-Herbivore)

TABLE L-4
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Flabelligeridae (DF)																								
Piromis roberti (DF)																		1						1
Unidentified species (DF)																								
Opheliidae (DF)																								
Armandia agilis (DF)	14	2					8	6					12	2					1	1				
Armandia maculata (DF)	2		1		1	11			4	6		1			4	5		28					1	17
Armandia polyophthalma (DF)																3								
Ophelia denticulata (DF)					2				2		1	1			3	1					4			
Unidentified species (DF)																								
Capitellidae (DF)																								
Capitella capitata floridana (DF)																								25
Mediomastus californiensis (DF)	254	22	204		10	197	1		4		6	14			3		1	135	11		1		3	95
Notomastus latericeus (DF)			3						2			8			10		3	2						
Pulliella sp. A (DF)			2																					
Scyphoproctus platyproctus (DF)			12			7											1	42						25
Capitellid sp. A (DF)																		1						
Unidentified species (DF)									2															
Maldanidae (DF)																								
Axiothella mucosa (DF)	5		100			237			5			14		1	3		5	53			1		1	6
Euclymene sp. A (DF)			2															3					1	
Macroclymene zonalis (DF)	5	7	124		2	114			1			13						7	1					
Petaloproctus socialis (DF)						1			1			2			1			3						
Rhodine sp. (DF)			20		3	6			2		5	77			2		1	9			2		22	5
Unidentified species (DF)																								
Oweniidae (DSF)																								
Owenia fusiformis (DSF)		2	13			5						1		1	2			2						
Sabellariidae (SF)																								
Sabellaria floridensis (SF)																								3
Sabellaria vulgaris (SF)			14		1	7			10			4												115
Pectinariidae (DF)																								
Pectinaris gouldii (DF)	1																							
Ampharetidae (DF)																								
Ampharete cf. *americana* (DF)	1		4			4			3			2			22		6	115			3			7
Isolda pulchella (DF)			1												1			1						
Terebellidae (DF)																								
Amaena trilobata (DF)	1										1	2											1	2
Loimia medusa (DF)		2	1		4	18			1			2			3			1						3
Polycirrus eximius (DF)			58		10	9			69		18	48			22		23	2			12		5	6
Polycirrus sp. A (DF)																								

(Feeding type designations: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q-Others; H-Herbivore)

TABLE L-4
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

Species and Feeding Type[a]	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Terebellidae (continued)																								
Polycirrus sp. B (DF)																	1							
Thelepus sp. (DF)			1														1							
Terebellid sp. A (DF)																								
Unidentified species (DF)																								
Sabellidae (SF)																								
Amphiglena mediterranea (DF)			9			1					1	2			7		5	5					1	2
Chone americana (DF)			2			5					1	3			2		1	9						
Chone sp. A (DF)			2																					10
Megalomma bioculatum (DF)												2			1			1						
Megalomma lobiferum (DF)																								
Potamilla sp. (DF)																								
Unidentified species																								
Serpulidae (SF)																								1
Dexiospira sp. (SF)																								
Filogranula sp. (SF)	1	1	267		26	218			16		53	162	1		31	3	82	287			72	1	324	198
Hydroides bispinosa (SF)			1						1		3	3			3		3	1			8		2	10
Hydroides dianthus (SF)			1			1												1						1
Hydroides elegans (SF)																								
Hydroides floridana (SF)			1									1						5					2	10
Hydroides microtus (SF)			1		1				1			1			7		7	5			2		1	9
Hydroides parva (SF)															2			1						
Hydroides protulicola (SF)																								
Hydroides sp. (SF)																								
Pseudovermilia sp. A (SF)			1			1			3			3			9		7	4			12		14	21
Serpula vermicularis (SF)			2								1				3		5	2						1
Spirorbis sp. (SF)			1														4							
Vermiliopsis sp. (SF)			20	1	8	35			22		15	65			16	1	9	3			23		12	
Polygordiidae (DF)																								
Polygordius sp. (DF)			23		6	5					4	6					1	3	1		1		2	1
Protodrilidae (DF)																								
Protodrilus sp. (DF)					3				58		1	28			37	9	11				1	10	1	
Saccrocirridae (DF)																								
Saccocirrus sp. (DF)			1						1		1	2			1	1					1		1	
Oligochaeta (DF)																								
Clitellio arenicolus (DF)			6	1	3	28			42	1	29	57			34	4	13				8		7	
Marionina sp. (DF)	12	10	1		18	4			2		38	27			3	2	2	9			6	3	32	2
Peloscolex sp. A (DF)			3		2	1			3		12	5			1		2						1	
Peloscolex sp. B (DF)												9												
Peloscolex sp. C (DF)			21		14	6			5		20	29			4								3	
Tubifex sp. A (DF)					3	1					14	1					1				1			

(Feeding type designations: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q- Others; H-Herbivore)

TABLE L-4

(continued)

NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Oligochaeta (continued)																								
Tubificid sp. A (DF)									5		8	3			7		3				6		1	
Tubificid sp. B (DF)									1		3	1												
Tubificid sp. C (DF)			52		1	34			27		19	29			20	1	28	16			7		6	11
Tubificid sp. D (DF)									25		9	5			29		8				4	1	1	
Tubificid sp. E (DF)			18		7	1			51		39	43			39	2	16	4			13	1	5	4
Tubificid sp. F (DF)											3													
Unidentified species (DF)										1					1									
Hirudinea (C)																								
MOLLUSCA																								
Gastropoda																								
Acteocina canaliculata (Q)	1																							
Acteocina candei (Q)																								
Acteocina recta (Q)													2		4	1	2					1		
Aesopus stearnsii (Q)									1		2	1					1							
Anachis floridanum (H)					1																			
Anachis iontha (H)			4			2									1			6			2			43
Anachis lafresnayi (H)																								1
Anachis obesa (H)																								
Arene tricarinata (H)			14	1		8			1		1	7			3		2				10			6
Balcis conoidea (C)																								
Caecum cooperi (H)									3		1	2			4	27	3				3	2	2	2
Caecum floridonum (H)									1						3		1				5		1	
Caecum nitidum (H)												1												
Caecum pulchellum (H)																								1
Caecum strigosum (H)		1	8		2	3			2			1			6		10						3	
Caecum vestitum (H)																								
Calliostoma pulchrum (H)																								
Calyptraea centralis (H)			22		1	9			8		8	22			6		1	14			13		5	4
Cerithiopsis cf. *iota* (Q)																								2
Cerithiopsis sp. (Q)																								
Cochliolepis holmesi (C)																								
Crepidula fornicata (H)		1	318			9			5		4	12			2		2	25						1
Crepidula plana (H)																								
Cresius acicula (SF)											1													
Cyclostromiscus pentagonus (Q)																				1				
Didianema pauli (Q)																								
Diodora cayenensis (H)																								1
Epitonium sp. (C)																								
Eulimostraca sp. (C)			2									2												
Fasciolaria hunteria (C)																								1

(Feeding type designations: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q-Others; H-Herbivore)

TABLE L-4
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

Species and Feeding Type[a]	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Gastropoda (continued)																								
Finella adamsi (H)																								
Haminoea cf. *solitaria* (O)													2											
Hyalina (Volvarina) sp. (C)																		1				1		
Ithycythara pentagonalis (Q)			1			1												1						
Kurtziella atrostyla (C)																								
Kurtziella limonitella (C)													1											2
Macromphalina palmalitoris (C)						1																		
Marginella eburneola (C)									1								1							
Mitrella argus (H)											1													
Mitrella lunata (H)																		1						
Nassarius consensus (C)			2			3			2		1	1					3						1	1
Natica pusilla (C)	1		1		1				1			1					1							
Oceanida n. sp. (Q)																								
Odostomia (Fargoa) dux (C)																				3				
Oliva sayana (C)							1	1																
Olivella floralia (C)	5	4					3	1						13					1	5				
Olivella minuta (C)							1																	
Olivella sp. A (C)													3	4										
Polinices lacteus (C)																								
Polygyreulima sp. A (C)			1						1						1						1			
Polygyreulima sp. B (C)																								
Prunum rosidum (C)						4																		
Rissoina catesbyana (H)																								
Rubellatoma rubella (C)														1										
Seila adamsi (O)																								2
Sigatica carolinensis (H)													1											
Sinum maculatum (C)	1					1																		
Skenca sp.A (Q)			3			1																		
Skenca sp.B (Q)						1																		
Teinostoma sp. (Q)																								
Tricolia affinis pterocladica(H)															3		6	7						
Triphora cf. *decorata* (C)																					1			
Turbo castanea (H)			5			1			1		4	4			2		2	1			1		2	2
Turbonilla pilsbry (C)			1			4						2												
Turbonilla (chemnitzia) sp. (C)																								
*Turbonilla (strioturbonilla)*sp. B (C)						2																		
Vexillum wandoense (C)																								
Vitreolena sp. (Q)												1												
Zebina browniana (Q)			50			2						2			2			8						6
Opistobranchia (Q)																								

(Feeding type designations: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q-Others; H-Herbivore)

TABLE L-4
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Opistobranchia (Q)																								
Doradacea sp. A (Q)			4		1																			
Doradacea sp. B (Q)						1																		
Onchidella sp. (Q)						3																		
Schaphopoda (C)																								
Dentalium calamus (C)				3	1				3	8		1			11	8	24				2	10		
Dentalium sowerbyi (C)									2															
Dentalium sp. (C)																								
Polyplacophora (O)																								
Chaetopleura apiculata (O)			15			10			1		4	7			1		1	4			4		5	1
Ischnochiton hartmeyori (O)			37		14	9			23		4	28			69		46	7			62		13	4
Ischnochiton papillosus (O)			63			17			60		40	96			84		69	34			121		21	16
Stenoplax buogii (O)																					1			
Bivalvia (O)																								
Abra aequalis (DF)						2																		
Aequipecten muscosus (SF)																								
Anadara transversa (SF)																	1							4
Anomia simplex (SF)			3								2				1		1	4						1
Argopecten gibbus (SF)																								
Barbatia domingensis (SF)																								
Chama congregata (SF)												1									2		6	
Chama macerophylla (SF)			1						1		1							1						
Chione grus (SF)			5			5												28						10
Chione intapurpurea (SF)			18		2	10			8		3	4			3	1	4	2			1			
Corbula barrattiana (SF)											1						1	1						
Corbula sp. (SF)																								
Crassinella duplinana (SF)	1	4		18	1	4			8	83	3	4			3	487	8	1			3	6	5	
Crassinella lunulata (SF)	1	1	22			63					2	2						116			1		1	23
Crenella divaricata (SF)						1			3		1	3				5								
Dinocardium robustum (SF)		1					3																	
Diplothyra smithii (SF)																			2	1				
Divaricella quadrisculcata (Q)																								
Ervilia concentrica (SF)				2			1	3		4			1									1		
Gastrochaena hians (SF)												2			1			2						
Glycymeris americana (SF)			1						1														1	
Glycymeris spectralis (SF)			4	10	5				1	4	3					38						46	5	
Gouldia cerina (SF)			7			5										1	1							
Laevicardium pictum (SF)									1															
Laevicardium (SF)				1																				
Lithophaga bisulcata (SF)																								
Lioberus castaneus (SF)																								

(Feeding type designations: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q-Others; H-Herbivore)

TABLE L-4
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Bivalvia (continued)																								
Macoma brevifrons (DSF)						5									2									
Macoma tenta (DSF)																								
Mactra fragilis (SF)			1																					
Modiolus modiolus squamosus (SF)			1			1			1						2						2			
Montacuta sp. A (SF)			3																					
Musculus lateralis (SF)		1																						
Noetia pondorosa (SF)																								
Nucula proxima (SF)																		2						
Orobitella limpida (SF)																								
Ostrea equestris (SF)											1													2
Pandora bushiana (SF)									2				1		1						2			
Papyridea soleniformis (SF)																								
Parvilucina multilineata (SF)		1					2						1					2						
Pitar fulminata (SF)			1							3								1						
Pleuromeris tridentata (SF)			1							2					1							1		
Plicatula gibbosa (SF)															1									
Pteromeris porplana (SF)									1															
Raeta plicatella (SF)													1											
Semele bollastriata (DSF)	1		2			2																	1	
Semele nuculoides (DSF)				1						1						4								
Sphenia antillensis (SF)																								
Tellina iris (DSF)	10	25					3	3						3						1				
Tellina sp. (DSF)								1		2														
Tivela floridana (SF)				1																				
Trachycardium egmontianum (SF)		1																						
Varicorbula operculata (SF)																								
Bivalve sp. A (Q)																					1			
Arthropoda																								
Pycnogonida sp. (Q)													1											
Ostracoda (SF)																								
Species A (SF)			17			4			1		2	2					6							
Species B (SF)						1																	1	
Species C (SF)		1									4	1					2							
Species E (SF)																								
Species F (SF)								1						1										
Species G (SF)				1																				
Species H (SF)			2			3					1	4									2			1
Species J (SF)																								
Species K (SF)																								
Species L (SF)						1		1			1			1				1						
Species M (SF)			4			3										1								
Species N (SF)											1													
Species O (SF)																								

(Feeding type designations: C-Carnivore; O-Omnivore; DF- Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q-Others; H-Herbivore)

TABLE L-4
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Arthropoda (continued)																								
Species P (SF)			1																					
Species Q (SF)	1						2						1											
Species R (SF)																			1					
Species S (SF)							1						1											
Species T (SF)							1																	
Species U (SF)								1						2						1				
Species V (SF)									1															
Species W (SF)																3								
Unidentified Species (SF)												1												
Cirrepedia (SF)																								
Balanus trigonus (SF)									1									2					11	22
Balanus venustus (SF)												1	1		1			1			1		7	20
Balanus sp. (SF)						4											2						9	9
Cirriped cypris (SF)		1				11																		
Stomatopoda																								
Nannosquilla taylori ? (C)																								
Mysidacea (SF)																								
Bowmaniella sp. (SF)					3	1			2		1								1	1				
Heteromysis formosa (SF)																								
Mysidium sp. (SF)																								
Mysidopsis sp. (SF)							4																	
Unidentified Species (SF)																								
Cumacea (SF)																								
Cyclaspis pustula ? (SF)	5						132	11	1															
Cyclaspis varians (SF)	26	2	1	1	2	5	115	11	3	4	2	2												
Oxyurostylis smithi (SF)	44	6	2	2	6	16	25	7		1														
Cumacea sp. A (SF)																								
Cumacea sp. B (SF)	6		1			3	10					1			1									
Cumacea sp. C (SF)																	1							
Tanaidacea (O)																								
Apseudes sp. A (O)			1			2					3	2			10		4	1			1		1	
Heterotanais sp. A (O)						1					1				3		3	79			1			11
Leptochelia sp. A (O)																		9						
Tanaidacea sp. A (O)										4					2	1	6							
Isopoda																								
Ancinus depressus (O)										1														
Apanthura magnifica (O)																					1			
Asellota sp. (Q)												1												
Chiridotea arenicola (O)										2														
Eurydice littoralis (O)				4					3	5	1	1			1	6	7				1			
Horoloanthura irpex (O)	1											2			3						1			
Microcerberus sp. A (DF)			7		5	15			24		18	11			37		49				10			
Panathura formosa (O)			8			32			3		11	12			3		4	12			12		4	7

(Feeding type designations: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q-Others; H-Herbivore)

TABLE L-4
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Isopoda (continued)																								
Xenanthura brevitelson ? (O)														3						2				
Anthurid sp. (Q)		1																						
Amphipoda																								
Acanthohaustorius sp. A (DF)																					2			
Bathyporeia sp. A (DF)							1			7						1								
Colomastix halichondriae (C)																								
Corophium acherusicum (DF)																								
Corophium acherusicum ? (DF)																								
Elasmopus sp. A (DF)											2				3		2	10						1
Elasmopus ? sp. A (DF)																								
Erichthonius brasiliensis (DF)								1	4		2	5												
Erichthonius sp. A (DF)																								
Eriopisa ? sp. A (DF)									3			3												
Homiaegina minuta (Q)																								
Ingolfiella n. sp. (DF)	1	2									2						3							
Jeddo ? sp. A (DF)																								
Lembos smithi (DF)			7																		1			1
Liljeborgia sp. A (DF)			24	1	4	2			3		2				5			5					2	1
Luconacia incerta (Q)	1					1							2		2		6							
Lysianopsis alba (C)																		2						
Maera sp. A (DF)						2			2			5			7			31						
Megaluropus sp. A (DF)							2	2		2	1				1		1	2						
Melita appendiculata (DF)			10			6						15			1			5					1	
Melita sp. A (DF)			38			14			1		6	37			1		4	19						1
Microdeutopus sp. A (DF)							1		7									2						3
Microdeutopus sp. A (DF)			26			11	1																	
Monoculodes cf. *intermedius* (DF)	7	4					1						1											
Paraphoxus spinosus (Q)																			3					
Photis sp. A (DF)												1												
Photis sp. B (DF)			6			1												11						3
Pontogeneia longleyi (DF)																	2							
Protohaustorius sp. A (DF)				4				7		81		1				3			8					
Pseudoplatyishnopus sp. A (DF)							6	1					6	1					6	2				
Pseudunciola sp. A (DF)		1	4	1		3												49						8
Rudilemboides sp. A (DF)					2																			
Stenothoe crenulata (DF)																		1						
Synchelidium americanum (DF)	19						7	3					2							3				
Synopia ultramarina (DF)													1		1								3	
Tiron sp. A (DF)				1		4	1	1	3	4	3	5			5	2	3						2	
Trichophoxus sp. A (DF)				3			1			1						12						2		
Trichophoxus sp. B (DF)	1									16		1							13					

(Feeding type designations: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q-Others; H-Herbivore)

TABLE L-4

(continued)

NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Amphipoda (continued)																								
Unciola dissimilis ? (DF)			1		1																			
Lysianassid sp. (C)									2			1												
Decapoda																								
Aepinus septemspinosus (Q)																	1							
Albunea paretti (C)																				2				
Albunea sp. (C)													2											
Alpheus normanni (H)											1							5					1	1
Alpheus sp. (H)									3									1						
Automate evermanni (Q)																		1						
Callianassa ? sp. (SF)																								
Dissodactylus mollitae (Q)					1																			
Dissodactylus crinitichelis (Q)																5								
Ebalia cariosa (Q)						1												1						
Euceramus praelongus (SF)	2	1	2			5												1						2
Euryplax nitida (Q)												1						3						
Hepatus sp. (Q)																								
Heterocrypta granulata (Q)						1						1												3
Hexapanopeus angustifrons (Q)																								1
Hypoconcha arcuata (Q)																		1						
Latreutes parvulus (Q)			1		1				1		1	1												
Leptochela papulata (Q)																								
Leptochela serratorbita (Q)	3	1											1	1							1			
Libinia sp. (Q)		1																						
Lucifer faxoni (SF)									1				3	1	3									
Lucifer sp. (SF)													1											
Megalobrachium soratium (Q)														1										2
Neopontonides beaufortensis (Q)															1									
Ogyrides sp. (DSF)								1												1				
Ovalipes sp. (Q)	1	1																						
Paguristes hummi (Q)																	1	4					1	1
Pagurus annulipes-bonnairensis (Q)		1													1			3						
Pagurus carolinensis (Q)																								1
Panopeus occidentalis (Q)						1																		
Parthenope serrata ? (Q)																								
Pelia mutica (Q)																		1						6
Periclimenes americanus (Q)												1						1						
Persephona mediterranea (Q)														1									1	
Pinnixa floridana (Q)		1	1			1									1			1						
Pinnixa sp. (Q)														1				1			1			5
Portunus sp. (C)			1																					
Processa bermudensis (Q)											1						1							
Processa hemphilli (Q)						1		1	1															

(Feeding type designation: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q-Others; H-Herbivore)

TABLE L-4
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST: LUCIE PLANT
1977

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Decapoda (continued)																								
Processa sp.(Q)																								
Sicyonia laevigata (C)						1																		3
Sicyonia sp. (C)																								1
Sicyonia ? sp. (C)																								
Solenocera ? sp. (Q)																		1						
Synalpheus townsendi ? (Q)																								
Synalpheus sp. (Q)						1																		
Tozeuma sp. A (O)																								
Trachypenaeus sp. (Q)																								
Upogebia sp. (Q)								1																
Alpheid sp. (Q)											1													
Anomuran postlarvae (Q)			4										3	3										
Brachyuran postlarvae (Q)	1		1	2	1	1	1										1	1					1	
Caridea sp. (Q)									1															
Crab megalopa (Q)																								
Majid sp. (Q)																								
Paguroidea sp. (Q)	3			1	1	1	1		1			1			1		1	5						4
Penaeid sp. (O)																								1
Pinnotherid sp. (Q)					3															1				
Porcellanid sp. (Q)																								
Processid sp. (Q)																		1						
Xanthid sp. (Q)																		2						12
Collumbola																								
Anurida maritima (Q)																					1			
Sipunculida (DF)	9	15	77		26	42	3		340	1	201	249	1	3	402	4	255	39			315	2	78	8
Echiurida (DF)													1										1	15
Phoronida (SF)																								17
Echinodermata																								
Echinoidea (Q)																								
Arbacia punctulata (O)																								1
Encope michelini (DF)																1								
Lytechinus variegatus (O)			7			2																		
Mellita quinquiesperforata(DF)		5		2	9			2		3	1												6	
Echinoid sp. (endocyclic) (Q)																								
Echinoid sp. (exocyclic) (Q)															1				1		2	6		
Unidentified Species (Q)												1												
Mellitidae sp. (DF)	1	6		2				1		1					1		2					1		
Holothuroidea (DF)																								
Leptosynapta sp. (DF)		4													2		1				1			
Trachythyonidium ? sp. (Q)																					1			
Unidentified Species (DF)			104		1	61																		
Ophiuroidea (DF)																								
Amphiodia pulchella (DF)	1	2	28		8	98			3		2	84			1			4						2
Amphiodia ? sp. A (DF)									1															
Amphipholis squamata (DF)			7			2												5						1

(Feeding type designation: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q-Others; H-Herbivore)

TABLE L-4
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY BENTHIC GRABS
BY STATION AND QUARTER
ST. LUCIE PLANT
1977

	Quarter and Station																							
	1st Quarter						2nd Quarter						3rd Quarter						4th Quarter					
Species and Feeding Type[a]	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
Echinodermata (continued)																								
Ophiactis sp. (DF)					1	3																	5	9
Ophioderma sp. (DF)																		1						
Ophiolepis elegans (DF)			7		1	3						2			1			2					1	2
Ophiolepis sp. (DF)						1																		
Ophiophragmus septus (DF)																		1						
Ophiophragmus wurdemani (DF)																								
Ophiophragmus sp. (DF)																								
Amphiurid sp. (DF)			26		2	32			1			7						3						
Ophiotrichid sp. (DF)																								
Unidentified Species (DF)			32		8	43			1			1									6			
Cephalochordata																								
Branchiostoma caribaeum (SF)				2					28		1	6			4		33				8	2	2	1
TOTAL	538	232	2870	103	458	2331	372	87	1692	266	1132	2044	114	100	1743	756	1486	2111	69	51	1082	121	808	1896

(Feeding type designations: C-Carnivore; O-Omnivore; DF-Deposit Feeder; DSF-Deposit Suspension Feeder; SF-Suspension Feeder; Q-Others; H-Herbivore)

TABLE L-5

NUMBER OF MACROINVERTEBRATES COLLECTED BY OTTER TRAWL
STATIONS 0-5
ST. LUCIE PLANT
1976-1977

Species	Station 0		Station 1		Station 2		Station 3		Station 4		Station 5	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
MOLLUSCA												
Gastropoda												
Alaba incerta							1	0	0	3		
Anachis avara			2	1							0	1
A. floridana	2	0	0	4			0	1			0	4
A. iontha	7	2	0	18	13	5	1	3	5	22	5	41
A. lafresnayi					1	0	1	0	0	3	3	4
A. obesa			1	3			0	1				
Aplysia wilcoxi	4	1			0	3						
Aplysia sp.	3	0					2	0			1	0
Armina tigrina							0	1				
Caecum cooperi											1	0
Calliostoma jujubinum											0	1
C. pulchrum	0	1										
C. yucatecanum					0	2						
Calyptraea centralis	1	3			4	0			0	1	7	1
Corambe sp.	0	1	1	0								
Crepidula aculeata	464	73										
C. fornicata	20	1	5	23	1188	78	14	6	71	23	449	89
C. plana	2	1	0	1	17	1	0	1	2	0	13	0
Diodora cayenensis					5	0			2	4	7	2
Dorididae sp.	2	1			0	1						
Fasciolaria hunteria			1	0					1	2	0	2
F. tulipa	1	0							1	0		
Litiopa malanostoma	1	0										

TABLE L-5
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY OTTER TRAWL
STATIONS 0-5
ST. LUCIE PLANT
1976-1977

Species	Station 0		Station 1		Station 2		Station 3		Station 4		Station 5	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
MOLLUSCA continued												
Gastropoda continued												
Mitrella argus	4	0	1	0					1	0		
M. lunata	0	1	0	10	0	6	1	0	0	2	2	162
Murex pomum	1	1			0	1	1	0	0	1	0	3
Nassarius consensus	2	0			0	7			0	1	2	3
Odostomia seminuda					2	0						
Petaloconchus irregularis	2	0							0	1		
Pleurobranchaea hedgpethi			1	0	0	3					1	0
Pleurobranchia sp.			0	1								
Pleuroploca gigantea	1	0							0	1	0	1
Polinices lacteus	0	1										
Prunum roscida	2	0							0	1	0	1
Seila adamsi					1	0			1	5	2	0
Sigatica carolinensis	1	0										
Tricolia affinis pterocladica	2	0	1	4							1	0
Turbo castanea	32	36	4	14	47	10	1	6	30	49	133	127
Barleeia tincta			0	2								
Acmaea pustulata									0	1		
Polinices duplicatus									0	1		
Polyplacophora												
Chaetopleura apiculata	26	10	0	2	43	31	2	0	50	23	100	93

TABLE L-5
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY OTTER TRAWL
STATIONS 0-5
ST. LUCIE PLANT
1976-1977

Species	Station 0		Station 1		Station 2		Station 3		Station 4		Station 5	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
MOLLUSCA continued												
Polyplacophora continued												
Ischnochiton boogii					1	0	0	1				
I. hartmeyeri											8	0
I. papillosus	1	2	0	1	3	6			11	9	7	2
Lepidochitona liozonis									0	3	0	1
Bivalvia												
Aequipecten muscosus									1	0	0	1
Anadara braziliana	2	0										
A. ovalis	1	0										
A. transversa			2	0							3	3
Anomia simplex	2	4	3	0	171	22			76	2	126	11
Arca zebra	87	5			1	1			0	5	1	8
Argopecten gibbus	3	0			11	2			10	0	2	1
Chama congregata	7	4			17	9			20	33	43	19
C. macerophylla					0	1						
Chione grus	15	2			13	6			9	1	45	56
C. intapurpurea					1	2					1	0
Diplothyra smithii					0	3			0	2	7	0
Gastrochaena hians					0	1			0	1		
Glycymeris spectralis					0	1	1	0				
Lioberus castaneus									0	1		
Lithophaga aristata					0	1			0	2		
L. bisulcata					4	0			0	22	3	0

TABLE L-5
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY OTTER TRAWL
STATIONS 0-5
ST. LUCIE PLANT
1976-1977

Species	Station 0		Station 1		Station 2		Station 3		Station 4		Station 5	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
MOLLUSCA continued												
Bivalvia continued												
Modiolus modiolus squamosus											1	0
Musculus lateralis	2	0			1	0						
Noetia ponderosa									2	1	2	0
Ostrea equestris	6	1			7	2			1	3	12	6
Pitar fulminata											0	2
Pleuromeris tridentata									1	0		
Plicatula gibbosa					1	1					1	0
Pseudochama radians											2	0
Pteromeris perplana											1	0
Sphenia antillensis	0	1							0	2		
Trachycardium egmontianum	1	0										
T. muricatum	1	0	0	1								
Barbatia domingensis									0	1		
Crassinella lunulata											1	0
Cephalopoda												
Loligo pealei	0	55	1	0	8	0	0	4	15	3	3	6
L. plei			0	20	8	92	0	19	0	39	2	24
Lolliguncula brevis	1	0	1	0							2	0
Octopus joubini	1	1									2	0
Pickfordiateuthis pulchella	0	1	0	1	0	3			0	1	0	6

TABLE L-5
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY OTTER TRAWL
STATIONS 0-5
ST. LUCIE PLANT
1976-1977

Species	Station 0		Station 1		Station 2		Station 3		Station 4		Station 5	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
ARTHROPODA												
Stomatopoda												
Gonodactylus bredini	2	0			8	5			5	6	4	8
Meiosquilla tricarinata											1	0
Squilla neglecta	1	6	6	1								
Penaeidea												
Acetes americanus	26	13	5	26			0	1	2	1	0	195
Lucifer faxoni	2	0	0	1			0	1			0	2
Metapenaeopsis goodei	15	12	1	34	12	69	19	7	5	13	18	34
Metapenaeopsis sp.	4	2			3	5	11	4	1	11	4	10
Penaeus aztecus aztecus	0	2	0	9							0	1
P. brasiliensis	1	1			0	1	0	2			2	0
P. duorarum duorarum	11	18	0	12	0	6			3	1	29	18
Penaeus sp.	6	7	5	8								
Sicyonia brevirostris	3	2			11	11	2	1	6	0	13	7
S. dorsalis	18	5	22	9	3	0	1	0			1	0
S. laevigata	3	8			0	2			0	4	1	5
S. typica					1	3	3	5	4	0		
Sicyonia sp.											0	1
Solenocera atlantidis			0	2							1	0
Trachypenaeus constrictus	493	288	403	326	98	45	76	52	83	49	171	67
Trachypenaeus sp.	0	80	0	110	0	2			0	3	0	15
Trachypeneopsis mobilispinis			1	0	0	1	32	83	1	0		

TABLE L-5
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY OTTER TRAWL
STATIONS 0-5
ST. LUCIE PLANT
1976-1977

Species	Station 0		Station 1		Station 2		Station 3		Station 4		Station 5	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
ARTHROPODA continued												
Caridea												
Alpheus normanni	0	11	0	1	0	2			0	5	0	4
Alpheus sp.			1	0					2	0	5	2
Gnathophyllum modestum											1	0
Hippolyte zostericola	0	1										
Latreutes fucorum	1	7	0	2	0	3	0	1	0	3	0	13
L. parvulus			1	3							0	1
Leander paulensis	1	0	0	4								
L. tenuicornis	2	1	1	1	0	2					0	1
Leptochela carinata					0	1					1	0
L. papulata					0	1	0	2	0	5	0	1
L. serratorbita	10	54	14	35	3	4	9	13	1	14	8	7
Leptochela sp.											1	0
Lysmata wurdemanni	0	1	0	1								
Lysmata sp.											0	1
Nikoides schmitti	0	4	0	8							2	1
Nikoides sp.					1	0						
Periclimenes americanus	2	20	2	7	0	2	0	2	2	13	11	26
P. longicaudatus	21	25	12	101	7	148	1	14	8	67	24	167
P. pedersoni					0	2					0	5
Periclimenes sp. A	0	2			0	5						
Processa bermudensis	0	3	3	0	2	13	1	0	0	3	1	9
P. hemphilli	35	18	6	15	9	5	1	7	10	4	17	22
P. cf. *vicina*					1	0						
Processa sp. A							1	40				

TABLE L-5
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY OTTER TRAWL
STATIONS 0-5
ST. LUCIE PLANT
1976-1977

Species	Station 0		Station 1		Station 2		Station 3		Station 4		Station 5	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
ARTHROPODA continued												
Caridea continued												
Processa sp.	0	2	1	1	0	4	0	1				
Processidae sp.	1	0							0	1	1	1
Synalpheus townsendi					1	0			0	3	0	1
Synalpheus sp.					5	0						
Tozeuma serratum			0	1	1	3	1	0	3	1	1	0
Tozeuma sp. A	0	1	0	1	0	35	0	3	0	1	0	2
Neopontonides beaufortensis					0	1						
Macrura												
Panulirus sp.	0	3					0	1			0	2
Scyllarus americanus									0	2	3	1
Upogebia affinis			0	1								
Anomura												
Dardanus fucosus	1	0			2	1	0	1	2	3	5	8
Megalobrachium soratium					1	0			2	0	0	1
Munida sp.											1	0
Paguristes hummi	5	5	1	7			0	4			0	50
Pagurus annulipes-bonnairensis	9	8	4	6							2	19
P. carolinensis	0	1	4	0			0	2	0	3.	1	16
P. operculatus											0	2
Pagurus sp.			0	1	1	0	0	1				
Paguroidea sp.	1	0	0	1	0	1						

TABLE L-5
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY OTTER TRAWL
STATIONS 0-5
ST. LUCIE PLANT
1976-1977

Species	Station 0		Station 1		Station 2		Station 3		Station 4		Station 5	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
ARTHROPODA continued												
Anomura continued												
Petrochirus diogenes	5	4	0	1					0	2	2	2
Porcellana sayana	1	0									4	0
Brachyura												
Arenaeus cribrarius	6	6	1	2			4	1			2	3
Calappa angusta					0	1					0	1
C. flammea	4	0	1	0	2	1	0	1	1	1	6	4
C. ocellata	1	2									0	1
Calappa sp.			0	1	1	0			1	0	0	1
Callinectes ornatus	3	0	3	6							0	2
C. sapidus	1	0	1	2								
C. similis	1	1	1	0								
Callinectes sp.	2	1										
Cronius tumidulus	0	1	1	1	0	1			0	1	0	6
Cronius sp.							0	1				
Dissodactylus sp.	1	0										
Dromidia antillensis									0	1	0	1
Ebalia cariosa	2	0			0	1			1	1	2	0
Euryplax nitida	0	1							1	0		
Hepatus epheliticus	22	7	4	0	1	1			0	1	6	2
Heterocrypta granulata	3	0	1	1								
Hexapanopeus angustifrons			0	1	0	1					0	178
Hypoconcha arcuata	2	3			2	0			1	0	1	0
H. sabulosa											2	0

TABLE L-5
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY OTTER TRAWL
STATIONS 0-5
ST. LUCIE PLANT
1976-1977

Species	Station 0		Station 1		Station 2		Station 3		Station 4		Station 5	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
ARTHROPODA continued												
Brachyura continued												
Hypoconcha sp.	1	0										
Libinia emarginata					0	2					0	1
Menippe mercenaria	1	0										
Mithrax forceps					0	1					0	1
Mithrax sp.							0	2	0	2		
Ovalipes ocellatus floridanus	1	0					1	0				
Panopeus occidentalis	6	1	1	4	3	11			5	3	3	3
Panopeus sp.					1	0						
Parthenope serrata					1	0						
Pelia mutica					1	0			1	1	1	1
Persephona mediterranea	3	0									1	0
Pilumnus dasypodus					0	6			1	0	0	23
P. sayi											0	2
Pilumnus sp.					1	0			1	0		
Pitho sp.	1	0	2	1								
Podochela riisei	2	7	1	2	2	3	1	4	0	9	1	8
P. sidneyi					3	0	2	0	1	0	1	1
Portunus anceps					0	1	22	18	1	2		
P. depressifrons											1	0
P. gibbesii	20	8	1	8	8	10	17	24	8	7	14	11
P. ordwayi					1	0					3	5
P. spinimanus	50	13	2	5	92	27	5	6	47	15	82	47
Portunus sp.	1	5	1	7	2	0	0	4	2	0	0	21

TABLE L-5
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY OTTER TRAWL
STATIONS 0-5
ST. LUCIE PLANT
1976-1977

Species	Station 0		Station 1		Station 2		Station 3		Station 4		Station 5	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
ARTHROPODA continued												
Brachyura continued												
Portunidae sp.	2	1							0	1		
Ranilia sp.	1	0	1	0								
Stenocionops furcata furcata	0	1										
Stenorynchus seticornis					0	1					1	0
Xanthidae sp.			3	1			0	1	2	2	0	3
Epialtus sp.			0	1								
ECHINODERMATA												
Echinoidea												
Arbacia punctulata	7	2	1	0	29	10			3	14	72	88
Encope michelini	1	1	1	0	5	3	4	1	8	1	15	0
Encope sp.									2	0	2	0
Lytechinus variegatus	10	2	0	1	10	29			1	6	38	134
Mellita quinquiesperforata	112	61	14	0	11	1	1	0	3205	375	3	2
Holothuroidea												
Holothuroidea sp.					1	0			1	0	1	0
Asteroidea												
Astropecten duplicatus	3	0	2	2	3	0			1	0	3	6
Luidia clathrata					1	0						

TABLE L-5
(continued)
NUMBER OF MACROINVERTEBRATES COLLECTED BY OTTER TRAWL
STATIONS 0-5
ST. LUCIE PLANT
1976-1977

Species	Station 0		Station 1		Station 2		Station 3		Station 4		Station 5	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
ECHINODERMATA continued												
Ophiuroidea												
Amphiodia pulchella	1	0										
Ophioderma brevispinum			0	1					1	0		
Ophiolepis elegans	6	2	3	2	6	2			6	1	18	10
Ophiophragmus wurdemani	1	0										
Ophiothrix angulata	0	1	0	1	2	2	1	0	2	10	16	5
Total No. of taxa	94	77	53	67	67	78	33	44	62	80	92	97
Total No. of individuals	1668	951	563	892	1927	799	241	354	3754	947	1633	1980

APPENDIX M

P H Y T O P L A N K T O N

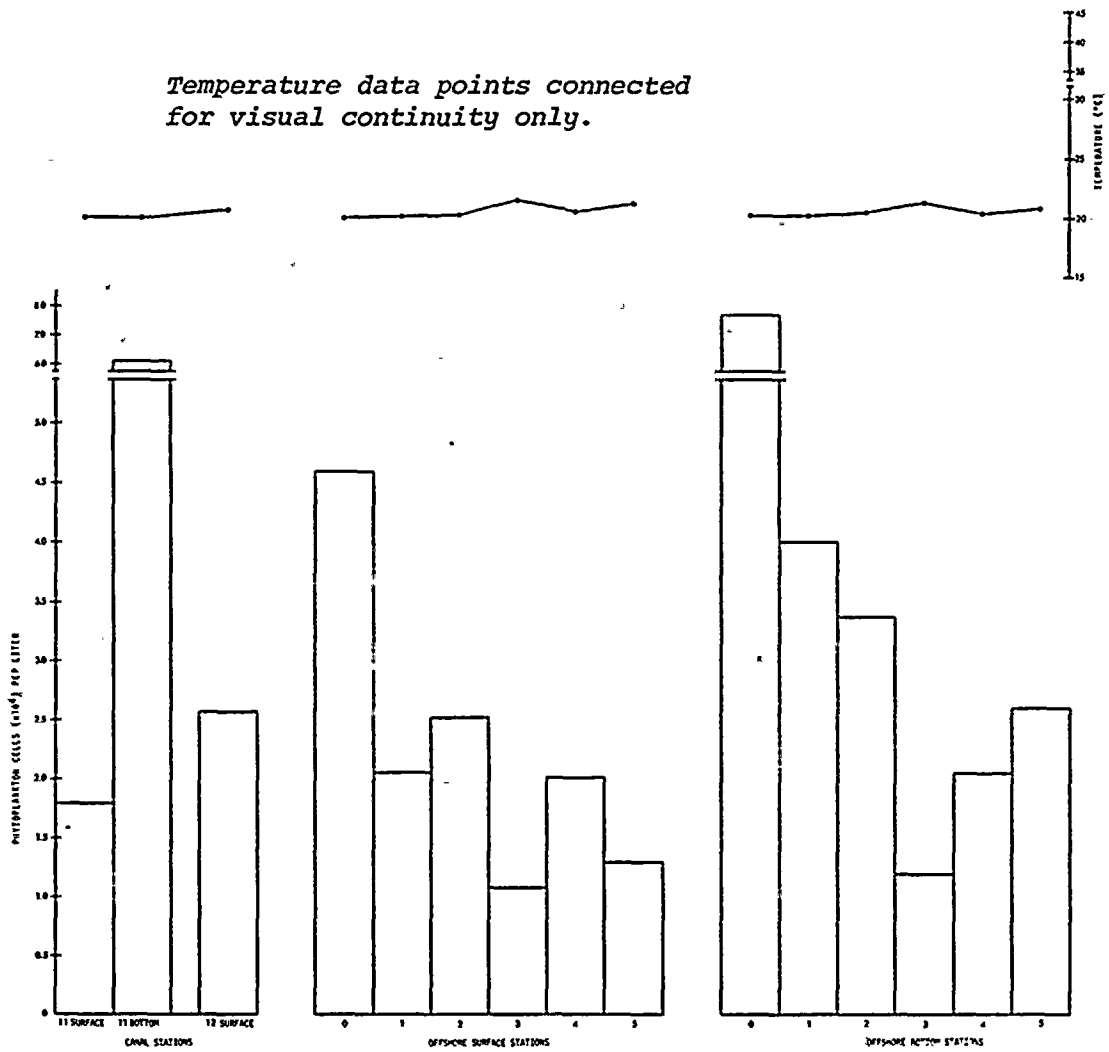


Figure M-1. Phytoplankton density and water temperature, St. Lucie Plant, 10 November 1976.

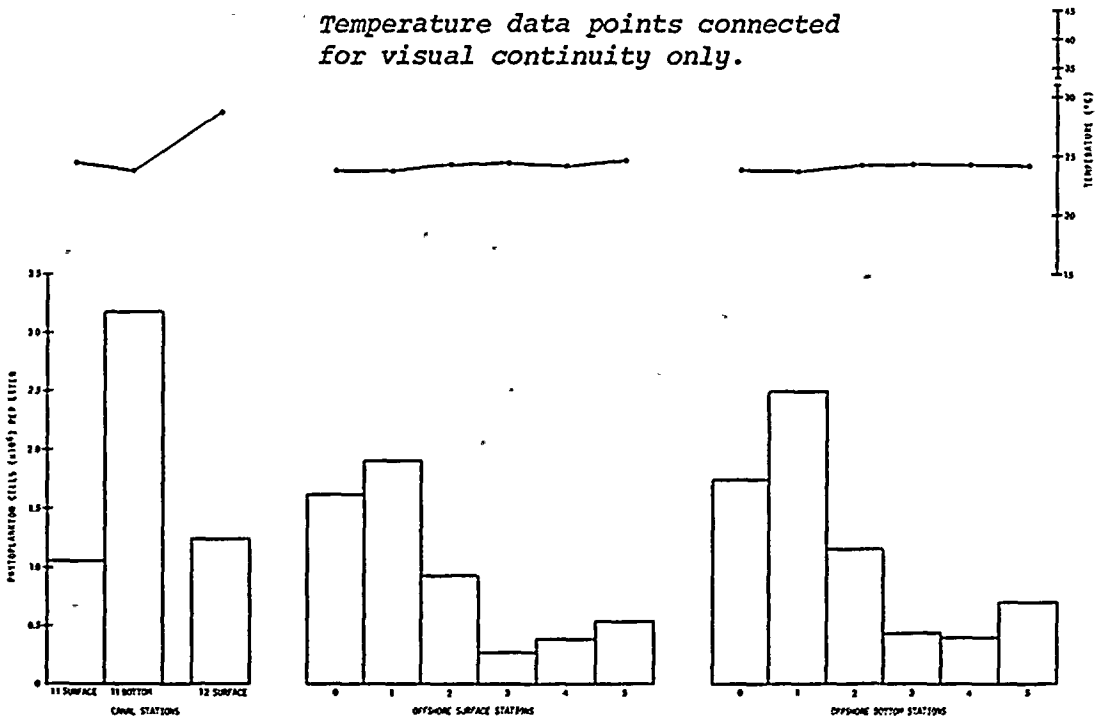
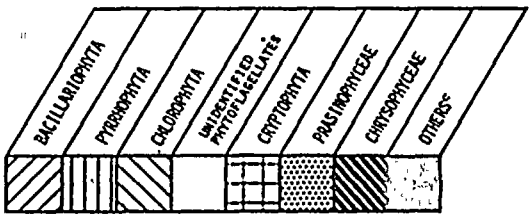


Figure M-2. Phytoplankton density and water temperature, St. Lucie Plant, 13 December 1976.



[a] Percentage composition based on average density of surface and bottom samples.

[b] Percentage composition based on single-depth samples collected in immediate discharge.

[c] Any group representing <5% of the total density was included in the OTHERS category.

Legend for Figure M-3 (following page)

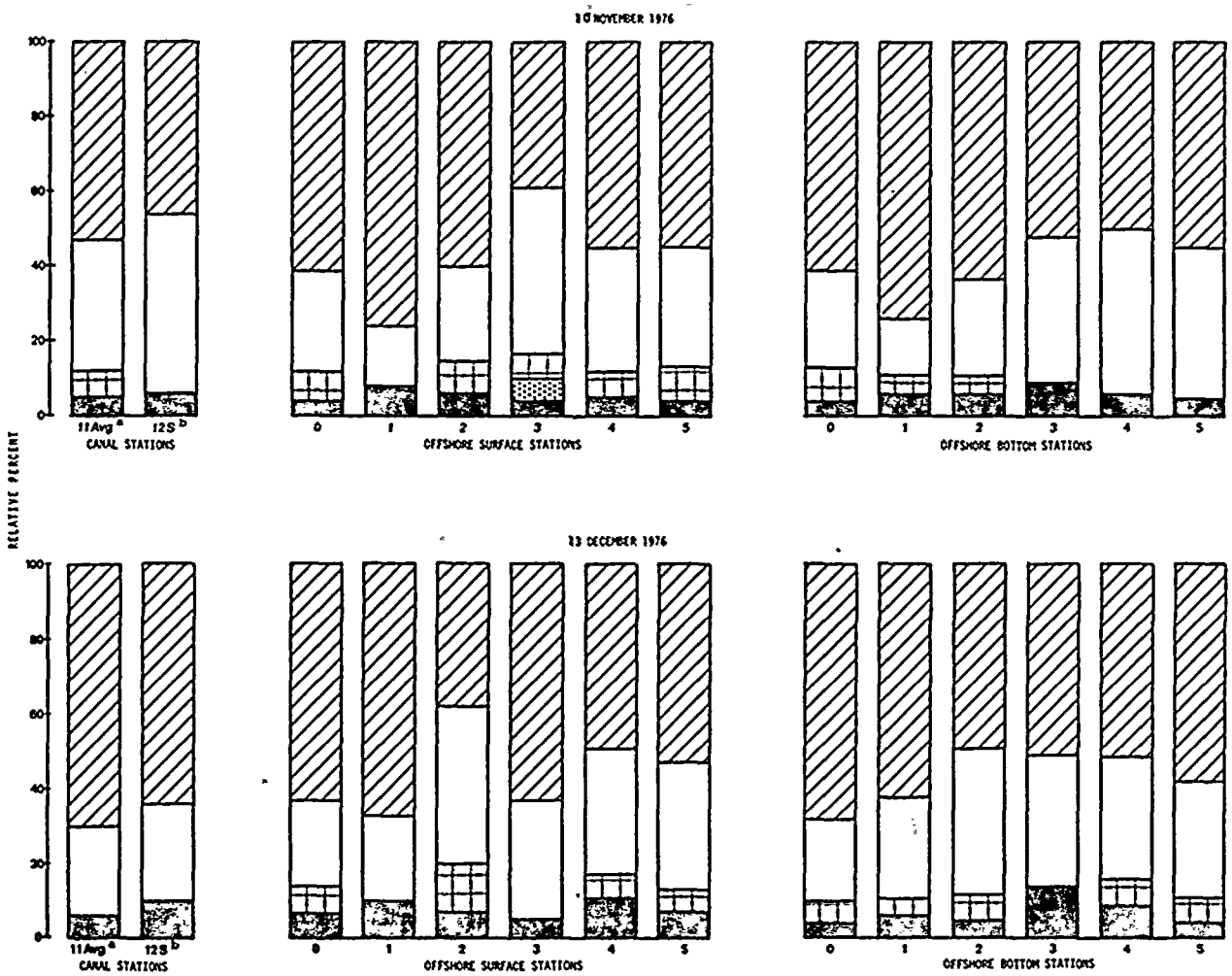


Figure M-3. Phytoplankton percentage composition at the St. Lucie Plant, 10 November and 13 December 1976.

TABLE M-1

PHYTOPLANKTON DENSITY[a] AND PERCENTAGE COMPOSITION[b]
ST. LUCIE PLANT
13 DECEMBER 1976

TAXON	STATION AND DEPTH[c]															
	11			12	0		1		2		3		4		5	
	S	B	AVG.	S	S	B	S	B	S	B	S	B	S	B	S	B
Bacillariophyta (diatoms)	623,284.7 (59)	2,349,061.1 (74)	1,486,172.9 (70)	800,059.1 (64)	1,037,650.5 (63)	1,190,678.5 (68)	1,273,612.8 (67)	1,540,408.9 (62)	353,040.5 (38)	562,290.5 (49)	166,896.9 (63)	223,768.1 (51)	187,627.2 (49)	214,356.7 (51)	285,801.5 (53)	408,379.0 (58)
Pyrrhophyta (dinoflagellates)	22,871.6 (2)		11,435.8 (1)	7,615.6 (1)	34,319.9 (2)	15,231.1 (1)	21,397.0 (1)	32,220.6 (1)	5,345.1 (1)	10,673.5 (1)	16.7 (<1)	15,252.0 (3)	5,728.4 (2)	13,343.8 (3)	8,173.8 (2)	7,632.2 (1)
Chlorophyta (green algae)	5,711.7 (1)		2,855.9 (<1)	15,231.1 (1)	15,297.8 (1)	30,528.9 (2)	32,020.5 (2)	24,015.4 (1)	13,341.9 (1)	21,513.7 (2)	7,615.6 (3)	15,231.1 (3)	15,231.1 (4)	3,807.8 (1)	4,895.7 (1)	7,615.6 (1)
Cyanophyta (blue-green algae)	325.0 (<1)		162.5 (<1)	33.3 (<1)	333.3 (<1)		4,000.0 (<1)	125.0 (<1)	100.0 (<1)	50.0 (<1)	166.7 (<1)	379.2 (<1)	20.8 (<1)	275.0 (<1)	1,028.5 (<1)	158.4 (<1)
Euglenophyta (euglenoids)						3,807.8 (<1)										
Cryptophyta (cryptophytes)	51,405.1 (5)	106,617.9 (3)	79,011.5 (4)	49,501.2 (4)	110,425.7 (7)	102,810.1 (6)	80,051.2 (4)	136,087.1 (5)	117,408.5 (13)	82,719.6 (7)	1,903.9 (1)	17,135.0 (4)	22,846.7 (6)	28,558.4 (7)	34,270.0 (6)	51,405.1 (7)
Xanthophyta (xanthophytes)						3,807.8 (<1)										
Chrysophyceae (yellow-brown algae and silicoflagellates)				3,807.8 (<1)	7,615.6 (<1)	3,807.8 (<1)	2,668.4 (<1)	12,007.7 (<1)	2,668.4 (<1)	2,668.4 (<1)		3,807.8 (1)		3,807.8 (1)		
Haptophyceae (haptophytes including coccolithophores)															1,631.9 (<1)	
Prasinophyceae (prasinophytes)	17,135.0 (2)	30,462.3 (1)	23,798.7 (1)	30,462.2 (2)	49,501.2 (3)	15,231.1 (1)	42,694.0 (2)	56,035.8 (2)	32,020.5 (3)	21,347.0 (2)	3,807.8 (1)	5,711.7 (1)	17,135.0 (4)	15,231.1 (4)	13,055.2 (2)	13,327.2 (2)
Unidentified phytoflagellates	339,844.6 (32)	654,938.7 (21)	497,391.7 (24)	319,853.8 (26)	380,778.3 (23)	380,778.3 (22)	440,281.8 (23)	684,438.1 (27)	389,582.7 (42)	445,618.5 (39)	85,675.1 (32)	154,215.2 (35)	131,368.5 (34)	137,080.2 (33)	181,141.7 (34)	220,851.4 (31)
Others		30,462.3 (1)	15,231.1 (1)	19,038.9 (2)			13,341.9 (1)	12,007.7 (<1)	13,341.8 (1)	8,005.1 (1)		3,807.8 (1)	1,903.9 (<1)	1,903.9 (<1)	8,159.5 (2)	
Total phytoplankton	1,060,577.7	3,171,542.3	2,116,060.1	1,245,602.9	1,635,922.3	1,746,680.9	1,910,067.6	2,497,346.3	926,849.4	1,154,886.3	266,082.7	439,307.7	381,861.6	418,364.7	538,157.8	709,368.9

[a] Values are expressed as cells per liter and represent the mean of three replicates.
[b] Percentage values are given in parentheses.
[c] S = Surface; B = Bottom; Avg. = The average of intake S and B values.

TABLE M-2

PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
13 DECEMBER 1976

SPECIES	STATION AND DEPTH[b]															
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (diatoms)															
Amphiprora spp.									2668.4		1903.9			3263.8	1903.9
Amphora spp.	2855.8		3807.8		3807.8	13341.9	56035.9				11423.4	24750.6	19038.9	3263.8	3807.8
Asterionella japonica		15231.1	7615.5					2668.4		3807.8				1631.9	
Biddulphia alternans		45693.4	3807.8		7615.6	13341.9	20012.8	2668.4		5711.7	1903.9		1903.9		
B. aurita						5336.7									3807.8
B. longicruris	2855.8	15231.1													
B. mobiliensis										1903.9					
B. rhombus	8567.5	60924.5	11423.3	3807.8	3807.8					1903.9		1903.9	3807.8	3263.8	
Biddulphia spp.															
Campylosira cymbelliformis	5711.7	441702.8	129464.6		15231.1	29352.1	20012.8	2668.4	21347.0	5711.7				19582.9	13327.2
	12.5					50.0		25.0		20.8			20.8		
Cerataulina bergonii					3807.8										7615.6
Chaetoceros laevis															
C. wighami	22846.7			26654.5	49501.2	16010.2	24015.4	40025.6	2668.4	1903.9	9519.5	3807.8	1903.9	4895.7	15231.1
Chaetoceros spp.				3807.8											
Corethron hystrix		15231.1									3807.8		1903.9		
Coscinodiscus lineatus	75.0	666.7	100.0	66.7	50.0	183.3	200.0	400.0	400.0	33.3	25.0	20.8	29.2	21.4	25.0
C. radiatus	5711.7	30462.3				2668.4			2668.4	1903.9	1903.9				1903.9
Coscinodiscus spp.		30462.3													
Cyclotella sp. 1		15231.1	3807.8			5336.7							[illegible]		
Cyclotella spp.															
Cymbella spp.	17135.0	45693.4	11423.3			10673.5	24015.4	5336.7	13341.9	11423.3	3807.8	1903.9		3263.8	1903.9
Diploneis sp. 1[†]					3807.8										
Eunotogramma marinum[†]		60924.5											12.5		
Fragilaria ? sp.						66.7	50.0		16.7	33.3					
Guinardia flaccida		133.3													
Gyrosigma terryanum		200.0	25.0									4.2			
Gyrosigma spp.															
Isthmia enervis[†]								2668.4	10673.5				1903.9	4895.7	
Leptocylindrus danicus			7615.6	3807.8			4002.6								
Melosira sulcata															
Navicula lyra v. *lyra*	137.5	66.7	8.3	150.0	133.3	133.3	275.0	191.7	283.3	8.3	4.2	25.0	4.2	150.0	91.7
N. wawrikae							4002.6								
Navicula sp. 6															
Nitzschia acicularis v. *closterioides*	5711.7		3807.8	3807.8	15231.1							9519.4		4895.7	9519.5
	22846.7	30462.3	15231.1	38077.8	45693.4	32020.5	40025.6	21347.0	40025.6	5711.7	15231.1	17135.0	24750.6	27742.4	32366.1
N. closterium		15231.1			3807.8	2668.4			5336.7	1903.9	1903.9	1903.9			1903.9
N. constricta	34270.0	76155.7	30462.2	26654.5	26654.5	106735.0	44028.2	66709.4	29352.1	7615.6	15231.1	5711.7	9519.5	27742.4	5711.7
N. delicatissima	2855.8	15231.1				2668.4		2668.4		3807.8				3263.8	5711.7
N. longissima			191.7	1416.7	2133.3	2250.0	2175.0	2541.7	3116.7	1075.0	916.7	941.7	987.5	1450.0	2016.7
N. paradoxa						13341.9									
N. pungens v. *atlantica*		133.3			16.7				33.3				4.2	14.3	8.3
N. sigmoidea															1903.9
N. spathulata		133.3	8.3		16.7							4.2		14.3	8.3
Nitzschia sp. 1			8.3												
Nitzschia sp. 2	8567.5	121849.1	7615.5		3807.8			2668.4	2668.4	15231.1	7615.6	1903.9	13327.2	6527.6	
Rhaphoneis surirella				50.0				25.0	16.7		16.7		4.2	7.1	25.0
Rhizosolenia alata							25.0	8.3							
R. alata f. *indica*	25.0			33.3		133.3		41.7	33.3	41.7	45.8	37.5	25.0	21.4	50.0
R. calcar avis							4002.6								
R. fragilissima															

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

[†] See Table M-15 for synonomous name.

TABLE M-2
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
13 DECEMBER 1976

	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
SPECIES	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Rhizosolenia imbricata										12.5					33.3
R. imbricata v. *shrubsolei*	12.5	66.7						16.7				8.3			25.0
R. setigera	225.0	266.7	16.7	150.0	150.0	500.0	525.0	133.3	483.3		4.2	4.2	8.3	35.7	225.0
R. stolterfothii							4002.6	2668.4							
R. styliformis													8.3		
Scoliopleura sp.										1903.9	1903.9				
Skeletonema costatum	308430.4	213235.9	342700.5	685401.0	803442.2	816522.6	1092699.3	82719.6	242822.1	30462.3	60924.5	79963.4	51405.0	86491.1	178965.8
Streptotheca thamensis										8.3					
Surirella robusta		66.7	16.7												
Thalassionema nitzschioides		45693.4			7615.6	34688.9			34688.9						1903.9
Thalassiosira sp. 1	11423.3		22846.7	19038.9	22846.7	50699.1	16010.2		2668.4		5711.7		3807.8	14687.2	1903.9
Thalassiothrix frauenfeldii	137.5			66.7	133.3	33.3		50.0	116.7	25.0				35.7	158.3
T. mediterranea v. *pacifica*	50.0	133.3			16.7	116.7	150.0	16.7	16.7					50.0	50.0
Tropidoneis lepidoptera	11423.3		7615.5	49501.2							1903.9		11423.3	1631.9	3807.8
Tropidoneis sp. 2													1903.9		
Unidentified centric diatoms <20μ	14279.2	121849.1	30462.2	22846.7	3807.8	45039.7	72046.1	26683.7	50699.1	11423.3	17135.0		5711.7	6527.6	17135.0
Unidentified centric diatoms >20μ									2668.4						
Unidentified pennate diatoms <20μ	125656.8	852943.4	137080.2	133272.4	144695.8	58704.[illegible]	96061.5	82719.6	72046.1	47597.3	47597.3	36173.9	45693.4	53852.9	87579.0
Unidentified pennate diatoms >20μ	11423.3	76155.7	22846.7	19038.9	22846.7	8005.1	16010.3	5336.7	21347.0	5711.7	13327.3	1903.9	13327.2	6527.6	7615.6
Unidentified pennate diatoms >200μ		266.7							16.7						16.7
Unidentified signoid diatom sp. 1	37.5	1333.3	50.0				25.0	33.3	66.7				16.7	50.0	116.7
TOTAL BACILLARIOPHYTA	623,284.7	2,349,061.1	800,059.1	1,037,650.5	1,190,678.5	1,273,612.8	1,540,408.9	353,040.5	562,290.5	166,896.9	223,768.1	187,627.2	214,356.7	285,801.5	408,379.0
PYRRHOPHYTA (dinoflagellates)															
Amphidinium sp. 2											3807.8				
Amphidinium spp.											1903.9				
Ceratium buceros f. *molle*											4.2				
C. furca v. *eugrammum*	12.5			16.7			150.0					4.2	8.3		8.3
C. fusus															8.3
C. fusus v. *seta*	12.5						50.0			4.2		8.3			
C. teres				33.3						8.3	8.3	4.2	8.3	14.3	
C. trichoceros										4.2					
Ceratium sp. 3						50.0		8.3			8.3				
Gymnodinium aurantium				11423.3		8005.1			5336.7			1903.9			
G. simplex													1903.9		
Gymnodinium spp.	11423.3		3807.8	11423.3	3807.8		4002.6				3807.8		9519.4	4895.7	3807.8
Gyrodinium sp. 1								2668.4	2668.4						1903.9
Peridinium spp.			3807.8		7615.5		4002.6					1903.9		1631.9	1903.9
Prorocentrum spp.						2668.4									
Unidentified dinoflagellates	11423.3			11423.3	3807.8	10673.5	24015.4	2668.4	2668.4		5711.7	1903.9	1903.9	1631.9	
TOTAL PYRRHOPHYTA	22,871.6		7,615.6	34,319.9	15,231.1	21,397.0	32,220.6	5,345.1	10,673.5	16.7	15,252.0	5,728.4	13,343.8	8,173.8	7,632.2

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-2
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
13 DECEMBER 1976

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
CHLOROPHYTA (green algae)															
Chlamydomonas sp.	5711.7		3807.8	3807.8	3807.8	8005.1				1903.9	1903.9	1903.9		1631.9	3807.8
Polyedriopsis quadrispina															1903.9
Chlorophyte sp. 1			11423.3	11423.3	26654.4	24015.4	24015.4	13341.9	21347.0	5711.7	13327.2	13327.2	3807.8	3263.8	1903.9
Filamentous chlorophytes				66.7	66.7				166.7						
TOTAL CHLOROPHYTA	5,711.7		15,231.1	15,297.8	30,528.9	32,020.5	24,015.4	13,341.9	21,513.7	7,615.6	15,231.1	15,231.1	3,807.8	4,895.7	7,615.6
CYANOPHYTA (blue-green algae)															
Anabaena spp.	125.0														16.7
Oscillatoria spp.	200.0		33.3	333.3		4000.0	125.0	100.0	50.0	166.7	379.2	20.8	275.0	1028.5	141.7
TOTAL CYANOPHYTA	325.0		33.3	333.3		4,000.0	125.0	100.0	50.0	166.7	379.2	20.8	275.0	1,028.5	158.4
EUGLENOPHYTA (euglenoids)															
Euglena sp. 1					3807.8										
TOTAL EUGLENOPHYTA					3,807.8										
CRYPTOPHYTA (cryptophytes)															
Cryptophyte spp.	51405.1	106617.9	49501.2	110425.7	102810.1	80051.2	136087.1	117408.5	82719.6	1903.9	17135.0	22846.7	28558.4	34270.0	51405.1
TOTAL CRYPTOPHYTA	51,405.1	106,617.9	49,501.2	10,425.7	102,810.1	80,051.2	136,087.1	117,408.5	82,719.6	1,903.9	17,135.0	22,846.7	28,558.4	34,270.0	51,405.1
XANTHOPHYTA (xanthophytes)															
Olisthodiscus sp.					3807.8										
TOTAL XANTHOPHYTA					3,807.8										
CHRYSOPHYCEAE (yellow-brown algae and silicoflagellates)															
Meringosphaera mediterranea[†]				7615.6	3807.8								3807.8		
Chrysophyte sp. 1[†]						2669.4	8005.1								
Chrysophyte sp. 3											3807.8				
DICTYOCHALES (silicoflagellates)															
Dictyocha sp.							4002.6		2668.4						
Silicoflagellate spp.			3807.8					2668.4							
TOTAL CHRYSOPHYCEAE			3,807.8	7,615.6	3,807.8	2,668.4	12,007.7	2,668.4	2,668.4		3,807.8		3,807.8		
HAPTOPHYCEAE (haptophytes including coccolithophores)															
Haptophyte sp. 1														1631.9	
TOTAL HAPTOPHYCEAE														1,631.9	
PRASINOPHYCEAE (prasinophytes)															
Prasinophyte sp. 1	17135.0	30462.3	30462.2	45693.4	15231.1	42694.0	56035.8	32020.5	21347.0	3807.8	5711.7	15231.1	13327.2	13055.2	13327.2
Unidentified prasinophytes				3807.8								1903.9	1903.9		
TOTAL PRASINOPHYCEAE	17,135.0	30,462.3	30,462.2	49,501.2	15,231.1	42,694.0	56,035.8	32,020.5	21,347.0	3,807.8	5,711.7	17,135.0	15,231.1	13,055.2	13,327.2
UNIDENTIFIED PHYTOFLAGELLATES															
Phytoflagellate sp. 4	2855.8				3807.8						3807.8	1903.9		1631.9	
Phytoflagellate sp. 7[†]							4002.6					1903.9		1631.9	3807.8
Unidentified phytoflagellates >10μ	8567.5	60924.5					8005.1			1903.9			1903.9	1631.9	
Unidentified phytoflagellates <10μ	328421.3	594014.2	319853.8	380778.3	376970.5	440281.8	672430.4	389582.7	445618.5	83771.2	150407.4	127560.7	135176.3	176246.0	217043.6
TOTAL UNIDENTIFIED PHYTOFLAGELLATES	339,844.6	654,938.7	319,853.8	380,778.3	380,778.3	440,281.8	684,438.1	389,582.7	445,618.5	85,675.1	154,215.2	131,368.5	137,080.2	181,141.7	220,851.4

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

[†] See Table M-15 for synonomous name.

TABLE M-2
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
13 DECEMBER 1976

	STATION AND DEPTH[b]																	
	11		12	0		1		2		3		4		5	
SPECIES	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
OTHERS															
Unidentified coccoid 3		30462.3	19038.9			13341.9	12007.7	13341.8	8005.1		3807.8	1903.9	1903.9	8159.5	
TOTAL OTHERS		30,462.3	19,038.9			13,341.9	12,007.7	13,341.8	8,005.1		3,807.8	1,903.9	1,903.9	8,159.5	
TOTAL PHYTOPLANKTON	1,060,577.7	3,171,542.3	1,245,602.9	1,635,922.3	1,746,680.9	1,910,067.6	2,497,346.3	926,849.4	1,154,836.3	266,082.7	439,307.7	381,861.6	418,364.7	538,157.8	709,368.9

[a] Values are mean of three replicates.
[b] S = Surface; B = Bottom.
† See Table M-15 for synonomous name.

TABLE M-3 I

PHYTOPLANKTON DENSITY[a] AND PERCENTAGE COMPOSITION[b]

ST. LUCIE PLANT
25 JANUARY 1977

TAXON	STATION AND DEPTH[c]															
	11			12	0		1		2		3		4		5	
	S	B	AVG.	S	S	B	S	B	S	B	S	B	S	B	S	B
Bacillariophyta (diatoms)	635,652.3 (41)	2,057,591.9 (44)	1,346,622.9 (43)	1,046,036.5 (51)	512,492.6 (24)	467,422.6 (25)	335,695.2 (32)	434,972.8 (32)	178,419.6 (30)	182,368.9 (23)	188,381.4 (23)	90,363.4 (19)	276,941.9 (22)	769,339.8 (30)	96,302.9 (14)	245,814.6 (30)
Pyrrhophyta (dinoflagellates)	20,330.4 (1)	76,155.6 (2)	48,243.0 (2)	11,423.4 (1)	24,165.2 (1)	16,035.3 (1)	25,714.9 (2)	25,201.3 (2)	9,158.7 (2)	27,446.1 (3)	17,185.0 (2)	8,732.0 (2)	10,706.9 (1)	12,032.7 (<1)	7,682.2 (1)	7,657.2 (1)
Chlorophyta (green algae)	40,616.4 (3)	50,770.4 (1)	45,693.4 (1)	34,270.0 (2)	50,699.1 (2)	100,064.0 (5)		27,416.0 (2)	13,708.0 (2)	22,846.7 (3)	32,366.2 (4)	15,231.1 (3)	48,030.7 (4)	76,048.7 (3)	26,654.5 (4)	28,558.4 (4)
Cyanophyta (blue-green algae)	88.9 (<1)	611.1 (<1)	350.0 (<1)			175.0 (<1)		20.0 (<1)	260.0 (<1)	140.0 (<1)		85.7 (<1)	183.3 (<1)	325.0 (<1)		58.3 (<1)
Euglenophyta (euglenoids)					5,336.7 (<1)		2,855.8 (<1)									
Cryptophyta (cryptophytes)	198,004.7 (13)	533,089.6 (11)	365,547.2 (12)	234,178.7 (11)	320,204.9 (15)	352,225.4 (19)	128,512.7 (12)	182,773.6 (13)	66,255.4 (11)	132,510.9 (17)	79,963.4 (10)	52,221.0 (11)	181,449.4 (14)	376,240.8 (15)	97,098.5 (15)	102,810.1 (13)
Xanthophyta (xanthophytes)																
Chrysophyceae (yellow-brown algae and silicoflagellates)	15,231.1 (1)		7,615.6 (<1)	5,711.7 (<1)			2,855.8 (<1)	15,992.7 (1)	2,284.7 (<1)	2,284.7 (<1)	1,903.9 (<1)		2,668.4 (<1)	4,002.6 (<1)	5,711.7 (1)	1,903.9 (<1)
Haptophyceae (haptophytes including coccolithophores)																
Prasinophyceae (prasinophytes)	35,539.3 (2)	152,311.3 (3)	93,925.3 (3)	45,693.3 (2)	93,393.1 (4)	104,066.6 (5)	42,837.5 (4)	52,547.4 (4)	20,562.0 (3)	43,408.7 (6)	66,636.2 (8)	30,462.3 (6)	90,724.7 (7)	124,079.4 (5)	49,501.2 (7)	47,597.2 (6)
Unidentified phytoflagellates	578,783.1 (37)	1,726,195.0 (37)	1,152,489.1 (37)	645,419.2 (31)	1,083,360.1 (51)	812,520.1 (43)	491,204.0 (47)	603,152.9 (44)	303,861.2 (50)	347,269.8 (44)	418,856.2 (52)	274,160.4 (58)	635,073.1 (51)	1,112,712.2 (44)	386,490.0 (58)	369,355.0 (46)
Others	30,462.2 (2)	50,770.4 (1)	40,616.3 (1)	39,981.7 (2)	34,688.9 (2)	40,025.6 (2)	8,567.5 (1)	18,277.3 (1)	9,138.7 (2)	29,700.7 (4)	3,807.8 (<1)	4,351.8 (1)	8,005.1 (1)	56,035.9 (2)		3,807.8 (<1)
Total phytoplankton	1,554,708.4	4,647,495.3	3,101,102.8	2,062,714.5	2,124,340.6	1,892,534.6	1,038,243.4	1,360,354.0	603,648.3	787,976.5	809,100.1	475,607.7	1,253,783.8	2,530,817.1	669,441.0	807,562.5

[a] Values are expressed as cells per liter and represent the mean of three replicates.

[b] Percentage values are given in parentheses.

[c] S = Surface; B = Bottom; Avg. = The average of intake S and B values.

TABLE M-4

PHYTOPLANKTON DENSITY[a] AND PERCENTAGE COMPOSITION[b]

ST. LUCIE PLANT
15 FEBRUARY 1977

TAXON	STATION AND DEPTH[c]															
	11			12		0		1		2		3		4		5
	S	B	AVG.	S	S	B	S	B	S	B	S	B	S	B	S	B
Bacillariophyta (diatoms)	354,561.3 (35)	345,705.9 (32)	350,133.6 (33)	594,363.8 (45)	400,706.1 (30)	260,577.3 (28)	572,198.8 (41)	627,667.8 (44)	269,847.6 (35)	275,717.9 (33)	176,825.5 (29)	144,488.6 (32)	235,173.1 (30)	189,293.5 (28)	289,404.2 (29)	320,162.5 (38)
Pyrrhophyta (dinoflagellates)	2,855.8 (<1)	8,567.5 (1)	5,711.7 (1)	3,807.8 (<1)	21,347.1 (2)	17,789.1 (2)	29,385.4 (2)	21,347.0 (1)	14,680.3 (2)	16,014.4 (2)	9,626.0 (2)	7,484.7 (2)	23,491.6 (3)	16,030.2 (2)	22,846.4 (2)	26,439.6 (3)
Chlorophyta (green algae)	17,135.0 (2)	17,135.0 (2)	17,135.0 (2)	15,231.0 (1)	53,367.5 (4)	42,694.0 (5)	21,347.0 (2)	24,015.4 (2)	48,030.7 (6)	56,035.9 (7)	51,232.8 (9)	23,481.6 (5)	45,896.0 (6)	52,300.1 (8)	21,214.8 (2)	31,220.0 (4)
Cyanophyta (blue-green algae)	137.5 (<1)	212.5 (<1)	200.0 (<1)	166.7 (<1)	200.0 (<1)	72.2 (<1)		100.0 (<1)	29.2 (<1)	25.0 (<1)	93.3 (<1)	10.0 (<1)	90.0 (<1)	90.0 (<1)	407.1 (<1)	45.0 (<1)
Euglenophyta (euglenoids)					2,668.4 (<1)										1,631.9 (<1)	
Cryptophyta (cryptophytes)	108,521.8 (11)	145,647.7 (13)	127,084.8 (12)	83,771.2 (6)	234,816.9 (17)	122,745.2 (13)	154,765.7 (11)	141,423.9 (10)	86,722.2 (11)	81,385.4 (10)	61,906.3 (10)	36,289.9 (8)	87,522.7 (11)	65,108.3 (10)	97,914.4 (10)	103,266.1 (12)
Xanthophyta (xanthophytes)																
Chrysophyceae (yellow-brown algae and silicoflagellates)	5,711.6 (1)	5,711.6 (1)	5,711.6 (1)		5,336.7 (<1)	5,336.7 (1)	2,668.4 (<1)	8,005.1 (1)			1,067.3 (<1)	1,067.3 (<1)	1,067.3 (<1)	2,134.7 (<1)	8,159.5 (1)	7,204.7 (1)
Haptophyceae (haptophytes including coccolithophores)																
Prasinophyceae (prasinophytes)	34,270.0 (3)	65,684.3 (6)	49,977.2 (5)	34,270.0 (3)	64,041.0 (5)	58,704.2 (6)	37,357.2 (3)	34,688.9 (2)	12,007.7 (2)	21,347.0 (3)	23,481.6 (4)	14,942.8 (3)	34,155.1 (4)	39,491.9 (6)	39,165.7 (4)	52,833.9 (6)
Unidentified phytoflagellates	491,203.9 (48)	485,492.3 (45)	488,348.1 (46)	571,167.5 (43)	563,027.0 (42)	398,477.2 (43)	571,032.2 (41)	565,695.4 (39)	328,210.0 (43)	378,909.2 (45)	274,308.8 (46)	220,941.4 (49)	346,888.6 (45)	306,329.3 (45)	520,578.4 (52)	304,995.2 (36)
Others	8,567.5 (1)	5,711.7 (1)	7,139.6 (1)	11,423.3 (1)	5,336.7 (<1)	16,010.2 (2)	16,010.2 (1)	16,010.2 (1)	4,002.6 (1)	5,336.8 (1)	1,067.3 (<1)	1,067.3 (<1)	2,134.7 (<1)	3,202.0 (<1)	4,895.7 (<1)	
Total phytoplankton	1,022,964.4	1,079,868.5	1,051,416.5	1,314,201.3	1,350,847.4	922,406.1	1,404,764.9	1,438,953.6	763,530.3	834,771.6	599,608.9	449,773.6	776,419.1	673,980.0	1,006,218.3	846,167.0

[a] Values are expressed as cells per liter and represent the mean of three replicates.

[b] Percentage values are given in parentheses.

[c] S = Surface; B = Bottom; Avg. = The average of intake S and B values.

TABLE M-5

PHYTOPLANKTON DENSITY[a] AND PERCENTAGE COMPOSITION[b]
ST. LUCIE PLANT
11 MARCH 1977

TAXON	STATION AND DEPTH[c]															
	11			12		0		1		2		3		4		5	
	S	B	AVG.	S	S	B	S	B	S	B	S	B	S	B	S	B
Bacillariophyta (diatoms)	412,448.8 (58)	323,584.2 (53)	368,016.5 (56)	255,428.8 (45)	544,776.4 (58)	1,283,491.0 (76)	491,273.0 (59)	890,484.5 (61)	209,189.8 (38)	617,407.8 (58)	215,398.4 (50)	235,055.3 (54)	319,181.5 (51)	1,709,985.3 (80)	365,953.6 (45)	1,629,665.4 (70)
Pyrrhophyta (dinoflagellates)	11,431.7 (2)	8,579.9 (1)	10,005.8 (2)	2,954.1 (1)	24,075.3 (3)	16,110.2 (1)	22,984.1 (3)	23,021.7 (2)	10,370.8 (2)	16,043.7 (1)	16,071.6 (4)	14,270.6 (3)	20,903.2 (3)	18,678.6 (1)	8,679.9 (1)	38,111.1 (2)
Chlorophyta (green algae)	17,226.7 (2)	17,135.0 (3)	17,180.9 (3)	2,929.1 (1)	12,808.2 (1)	10,006.4 (1)	5,711.7 (1)	22,846.7 (2)	6,861.5 (1)	5,336.7 (<1)	14,231.3 (3)	14,231.3 (3)	6,404.1 (1)	5,370.0 (<1)	8,567.5 (1)	22,846.7 (1)
Cyanophyta (blue-green algae)	666.7 (<1)		333.4 (<1)	50.0 (<1)	60.0 (<1)	187.5 (<1)	125.0 (<1)		1107.2 (<1)		66.7 (<1)	16.7 (<1)	10.0 (<1)	66.7 (<1)		
Euglenophyta (euglenoids)					3202.0 (<1)											
Cryptophyta (cryptophytes)	19,038.9 (3)	11,423.3 (2)	15,231.1 (2)	38,077.8 (7)	46,429.7 (5)	52,033.3 (3)	28,558.3 (3)	22,846.7 (2)	67,471.8 (12)	56,035.8 (5)	17,789.2 (4)	12,452.4 (3)	44,828.7 (7)	56,035.9 (3)	42,837.5 (5)	64,732.3 (3)
Xanthophyta (xanthophytes)																
Chrysophyceae (yellow-brown algae and silicoflagellates)						4002.5 (<1)			1143.6 (<1)		1778.9 (<1)		1601.0 (<1)		2855.8 (<1)	
Haptophyceae (haptophytes including coccolithophores)																
Prasinophyceae (prasinophytes)	9,519.5 (1)	8,567.5 (1)	9,043.5 (1)	8,787.2 (2)	16,010.2 (2)	14,009.0 (1)	8,567.5 (1)		17,153.9 (3)	2,668.4 (<1)	5,336.8 (1)	889.5 (<1)	9,606.1 (2)	5,336.7 (<1)	19,990.8 (2)	7,615.6 (<1)
Unidentified phytoflagellates	226,563.1 (32)	231,322.9 (38)	228,943.0 (35)	254,828.6 (45)	296,189.6 (31)	286,183.2 (17)	265,592.8 (32)	479,780.7 (33)	231,005.0 (42)	373,572.4 (35)	158,323.6 (37)	159,213.0 (37)	216,138.4 (35)	325,541.7 (15)	354,123.8 (44)	536,897.4 (23)
Others	11,423.4 (2)	5,711.7 (1)	8,567.6 (1)	2,929.1 (1)	1,601.0 (<1)	16,010.2 (1)	5,711.7 (1)	11,423.3 (1)	1,143.6 (<1)		1,778.9 (<1)		4,803.1 (1)	18,678.6 (1)	5,711.7 (1)	34,270.0 (1)
Total phytoplankton	708,318.8	606,324.5	657,321.7	565,984.7	945,152.4	1,682,033.3	828,523.9	1,450,403.6	545,447.2	1,071,064.8	430,775.4	436,128.8	623,476.1	2,139,693.5	808,720.6	2,334,138.5

[a] Values are expressed as cells per liter and represent the mean of three replicates.

[b] Percentage values are given in parentheses.

[c] S = Surface; B = Bottom; Avg. = The average of intake S and B values.

TABLE M-6

PHYTOPLANKTON DENSITY[a] AND PERCENTAGE COMPOSITION[b]
ST. LUCIE PLANT
19 APRIL 1977

TAXON	STATION AND DEPTH[c]															
	11			12	0		1		2		3		4		5	
	S	B	AVG.	S	S	B	S	B	S	B	S	B	S	B	S	B
Bacillariophyta (diatoms)	721,579.4 (62)	521,645.8 (59)	621,462.6 (61)	836,923.5 (55)	455,239.8 (63)	1,044,082.4 (71)	597,479.1 (51)	719,617.1 (57)	247,509.1 (50)	194,727.6 (45)	89,096.3 (12)	143,817.9 (20)	171,125.4 (41)	191,947.3 (47)	245,253.2 (39)	239,435.7 (49)
Pyrrhophyta (dinoflagellates)	12,714.7 (1)	30,487.3 (3)	21,601.0 (2)	35,550.4 (2)	14,459.2 (2)	18,728.6 (1)	26,767.1 (2)	38,099.3 (3)	14,969.4 (3)	23,198.4 (5)	14,969.4 (2)	26,703.6 (4)	17,104.3 (4)	17,090.9 (4)	13,935.5 (2)	21,366.8 (4)
Chlorophyta (green algae)	43,299.2 (4)	64,732.3 (7)	54,015.8 (5)	96,463.8 (6)		16,010.2 (1)	21,347.0 (2)	12,007.7 (1)	17,077.5 (3)	11,562.9 (3)	12,808.2 (2)	39,491.9 (6)	22,414.3 (5)	8,538.8 (2)	6,404.1 (1)	23,481.7 (5)
Cyanophyta (blue-green algae)	166.7 (<1)	66.7 (<1)	116.7 (<1)	344.5 (<1)	190.0 (<1)	266.7 (<1)	150.0 (<1)	125.0 (<1)		666.7 (<1)	126.7 (<1)	26.7 (<1)			13.3 (<1)	1,093.3 (<1)
Euglenophyta (euglenoids)				2,538.5 (1)		2,668.4 (<1)	2,668.4 (<1)			889.5 (<1)						
Cryptophyta (cryptophytes)	30,462.3 (3)	26,654.5 (3)	28,558.4 (3)	48,231.9 (3)	46,429.7 (6)	74,714.5 (5)	96,061.5 (8)	88,056.4 (7)	28,818.4 (6)	43,583.4 (10)	60,838.9 (8)	74,714.5 (10)	13,875.5 (3)	27,751.1 (7)	43,761.3 (7)	45,896.0 (9)
Xanthophyta (xanthophytes)																
Chrysophyceae (yellow-brown algae and silico-flagellates)				2,538.5 (<1)	4,803.1 (1)				53,367.5 (11)	1,778.9 (<1)	294,588.5 (39)	1,067.3 (<1)		7,471.4 (2)	67,243.0 (11)	
Haptophyceae (haptophytes including coccolithophores)																
Prasinophyceae (prasinophytes)	30,462.3 (3)	11,423.4 (1)	20,942.9 (2)	38,077.8 (3)	6,404.1 (1)	10,673.5 (1)	5,336.8 (<1)	34,021.7 (3)	5,336.7 (1)	11,562.9 (3)	22,414.3 (3)	18,144.9 (3)	3,202.0 (1)	3,202.0 (1)	12,808.1 (2)	4,269.4 (1)
Unidentified phytoflagellates	317,315.2 (27)	230,370.9 (26)	273,843.1 (27)	436,625.8 (29)	168,107.6 (23)	296,189.5 (20)	400,256.1 (34)	358,229.3 (28)	120,610.5 (25)	139,645.0 (32)	261,500.6 (34)	406,660.2 (57)	183,584.1 (44)	147,294.2 (36)	232,682.2 (37)	139,822.8 (29)
Others		3,807.8 (<1)	1,903.9 (<1)	15,231.1 (1)	22,414.3 (3)	2,668.4 (<1)	13,341.8 (1)	10,006.4 (1)	4,269.4 (1)	3,557.8 (1)	2,134.7 (<1)	6,404.1 (1)	5,336.7 (1)	4,269.4 (1)	6,404.1 (1)	13,875.5 (3)
Total phytoplankton	1,155,999.8	889,188.7	1,022,444.4	1,512,525.8	718,047.8	1,466,002.2	1,163,407.8	1,260,162.9	491,958.5	431,173.1	758,477.6	717,031.1	416,642.3	407,565.1	628,504.8	489,241.2

[a] Values are expressed as cells per liter and represent the mean of three replicates.

[b] Percentage values are given in parentheses.

[c] S = Surface; B = Bottom; Avg. = The average of intake S and B values.

TABLE M-7

PHYTOPLANKTON DENSITY[a] AND PERCENTAGE COMPOSITION[b]
ST. LUCIE PLANT
10 MAY 1977

TAXON	STATION AND DEPTH[c]															
	11			12	0		1		2		3		4		5	
	S	B	AVG.	S	S	B	S	B	S	B	S	B	S	B	S	B
Bacillariophyta (diatoms)	169,504.7 (15)	288,127.9 (30)	228,816.3 (22)	304,756.0 (43)	250,564.0 (27)	254,293.8 (28)	352,659.0 (35)	614,076.2 (39)	162,954.2 (23)	258,254.6 (24)	108,219.1 (17)	167,395.5 (21)	199,002.0 (31)	206,160.3 (25)	107,299.8 (23)	364,670.4 (38)
Pyrrhophyta (dinoflagellates)	62,828.4 (5)	48,462.4 (5)	55,645.4 (5)	19,038.9 (3)	86,912.8 (9)	62,045.7 (7)	54,701.9 (5)	52,033.4 (3)	57,370.3 (8)	46,439.7 (4)	45,370.8 (7)	67,598.6 (8)	68,068.6 (11)	50,339.3 (6)	42,026.8 (9)	27,029.7 (3)
Chlorophyta (green algae)	129,464.7 (11)	81,694.3 (9)	105,579.5 (10)	34,328.3 (5)	10,292.3 (1)	13,008.3 (1)	25,349.6 (3)	41,359.8 (3)	26,683.8 (4)	43,327.7 (4)	29,352.1 (5)	16,010.2 (2)	56,035.9 (9)	37,738.4 (5)	22,014.0 (5)	44,028.2 (5)
Cyanophyta (blue-green algae)		36.4 (<1)	18.2 (<1)	166.7 (<1)	25.0 (<1)	3.1 (<1)	41.7 (<1)		8.3 (<1)	20.0 (<1)		11.1 (<1)		21.4 (<1)	25.0 (<1)	68.8 (<1)
Euglenophyta (euglenoids)		2,769.2 (<1)	1,384.6 (<1)		1,143.6 (<1)				1,334.2 (<1)							
Cryptophyta (cryptophytes)	167,542.5 (15)	135,695.6 (14)	151,619.1 (14)	123,752.9 (18)	150,953.8 (16)	125,080.0 (14)	122,745.2 (12)	173,444.4 (11)	122,745.2 (17)	204,931.1 (19)	109,403.4 (18)	183,228.4 (23)	41,359.8 (6)	120,076.9 (15)	77,049.3 (16)	140,089.6 (15)
Xanthophyta (xanthophytes)																
Chrysophyceae (yellow-brown algae and silicoflagellates)	13,327.2 (1)	1,384.6 (<1)	7,355.9 (1)		2,287.2 (<1)	1,000.6 (<1)		8,005.2 (1)	5,336.8 (1)	6,404.0 (1)		3,557.8 (<1)			2,001.3 (<1)	2,001.3 (<1)
Haptophyceae (haptophytes including coccolithophores)	13,327.2 (1)		6,663.6 (1)								2,668.4 (<1)					
Prasinophyceae (prasinophytes)	66,636.2 (6)	59,539.9 (6)	63,088.1 (6)	11,423.4 (2)	38,882.1 (4)	29,018.6 (3)	29,352.1 (3)	81,385.4 (5)	25,349.6 (4)	30,419.5 (3)	21,347.0 (3)	28,462.7 (4)	21,347.0 (3)	35,451.3 (4)	20,012.8 (4)	37,023.6 (4)
unidentified phytoflagellates	523,570.2 (46)	330,930.9 (35)	427,250.6 (41)	196,100.8 (28)	376,240.9 (41)	393,251.6 (44)	397,587.9 (40)	585,708.1 (37)	306,863.1 (43)	483,509.5 (45)	294,855.5 (47)	327,320.5 (41)	241,487.9 (38)	353,369.0 (43)	198,126.7 (42)	335,214.5 (35)
Others	1,903.9 (<1)	2,769.3 (<1)	2,336.6 (<1)	13,327.2 (2)	6,861.5 (1)	22,014.1 (2)	13,341.9 (1)	12,007.7 (1)	4,002.6 (1)	9,606.1 (1)	10,673.5 (2)	12,452.4 (2)	14,676.1 (2)	13,723.1 (2)	4,002.5 (1)	2,001.3 (<1)
Total phytoplankton	1,148,105.0	951,410.5	1,049,757.9	702,894.2	924,163.2	899,715.8	995,779.3	1,568,020.2	712,648.1	1,082,912.2	621,889.8	806,037.2	641,977.3	816,879.7	472,558.2	952,127.4

[a] Values are expressed as cells per liter and represent the mean of three replicates.

[b] Percentage values are given in parentheses.

[c] S = Surface; B = Bottom; Avg. = The average of intake S and B values.

TABLE M-8

PHYTOPLANKTON DENSITY[a] AND PERCENTAGE COMPOSITION[b]

ST. LUCIE PLANT

14 JUNE 1977

TAXON	STATION AND DEPTH[c]															
	11			12	0		1		2		3		4		5	
	S	B	AVG.	S	S	B	S	B	S	B	S	B	S	B	S	B
Bacillariophyta (diatoms)	160,637.7 (17)	453,401.6 (28)	307,019.7 (24)	133,696.1 (39)	75,120.7 (17)	168,838.4 (17)	392,419.8 (47)	255,952.8 (36)	484,992.7 (49)	112,896.7 (21)	117,100.8 (23)	82,130.5 (21)	356,915.2 (53)	62,585.8 (13)	1,383,176.3 (65)	229,517.4 (34)
Pyrrhophyta (dinoflagellates)	78,749.8 (8)	49,567.8 (3)	64,158.8 (5)	6,884.0 (2)	38,437.7 (9)	41,368.1 (4)	36,823.5 (4)	46,449.6 (7)	57,420.3 (6)	48,047.4 (9)	28,911.7 (6)	20,468.7 (5)	31,057.1 (5)	25,622.7 (5)	149,568.9 (7)	44,621.6 (7)
Chlorophyta (green algae)	81,299.4 (8)	102,810.1 (6)	92,054.8 (7)	11,423.4 (3)	53,434.8 (12)	64,041.0 (7)	70,445.1 (8)	56,035.9 (8)	61,389.3 (6)	33,354.7 (6)	75,781.8 (15)	31,131.0 (8)	38,024.3 (6)	27,751.1 (6)	77,916.5 (4)	33,164.1 (5)
Cyanophyta (blue-green algae)	133.3 (<1)	1,566.7 (<1)	850.0 (<1)	4,425.0 (1)	33.3 (<1)		850.0 (<1)	560.0 (<1)	250.0 (<1)	33.3 (<1)	73.3 (<1)	11.1 (<1)	1,006.3 (<1)	26.7 (<1)	40.0 (<1)	57.1 (<1)
Euglenophyta (euglenoids)		3,807.8 (<1)	1,903.9 (<1)				1,601.0 (<1)	1,601.0 (<1)	2,688.4 (<1)		2,134.7 (<1)		2,001.3 (<1)		1,067.3 (<1)	1,143.6 (<1)
Cryptophyta (cryptophytes)	78,694.2 (8)	102,810.1 (6)	90,752.2 (7)	13,708.1 (4)	27,751.1 (6)	149,429.0 (15)	40,025.6 (5)	70,445.1 (10)	44,028.2 (4)	53,367.5 (10)	17,077.6 (3)	28,462.7 (7)	27,017.3 (4)	44,828.7 (10)	28,818.4 (1)	59,466.6 (9)
Xanthophyta (xanthophytes)																
Chrysophyceae (yellow-brown algae and silicoflagellates)	5,077.1 (1)		2,538.6 (<1)		6,404.0 (1)	1,334.2 (<1)	3,202.0 (<1)	6,404.1 (1)	2,668.4 (<1)	2,668.4 (<1)		1,778.9 (<1)	1,000.6 (<1)	1,067.3 (<1)	1,067.3 (<1)	5,718.0 (1)
Haptophyceae (haptophytes including coccolithophores																
Prasinophyceae (prasinophytes)	48,232.0 (5)	68,540.0 (4)	58,386.0 (5)		25,616.3 (6)	138,755.4 (14)	12,808.2 (2)	32,020.4 (5)	9,339.3 (1)	10,673.5 (2)	1,067.3 (<1)	15,120.9 (4)	4,002.5 (1)	26,683.7 (6)	6,404.1 (<1)	35,451.3 (5)
Unidentified phytoflagellates	517,858.5 (53)	833,904.6 (52)	675,881.6 (52)	169,065.7 (50)	214,537.3 (48)	408,261.3 (42)	273,775.1 (33)	238,552.6 (34)	321,539.2 (33)	289,518.6 (53)	257,231.3 (51)	211,691.2 (54)	211,135.2 (31)	277,510.9 (59)	470,701.2 (22)	261,881.9 (39)
Others					2,134.7 (<1)		1,601.0 (<1)		1,334.2 (<1)		1,067.3 (<1)	889.5 (<1)	2,001.3 (<1)	2,134.7 (<1)	2,134.7 (<1)	2,287.2 (<1)
Total phytoplankton	970,682.0	1,616,408.7	1,293,545.6	339,202.3	444,469.9	972,027.4	833,551.3	708,021.5	985,630.0	550,560.1	500,445.8	391,684.5	674,161.1	468,211.6	2,120,894.7	673,308.8

[a] Values are expressed as cells per liter and represent the mean of three replicates.

[b] Percentage values are given in parentheses.

[c] S = Surface; B = Bottom; Avg. = The average of intake S and B values.

TABLE M-9

PHYTOPLANKTON DENSITY[a] AND PERCENTAGE COMPOSITION[b]
ST. LUCIE PLANT
12 JULY 1977

TAXON	STATION AND DEPTH[c]															
	11			12	0		1		2		3		4		5	
	S	B	AVG.	S	S	B	S	B	S	B	S	B	S	B	S	B
Bacillariophyta (diatoms)	154,160.9 (22)	514,452.8 (36)	334,306.9 (31)	452,485.1 (54)	90,213.9 (23)	127,934.3 (20)	177,665.9 (33)	139,427.8 (27)	59,237.5 (27)	179,739.3 (33)	122,483.8 (33)	338,822.4 (50)	176,490.7 (40)	338,487.2 (45)	40,851.2 (13)	258,730.7 (34)
Pyrrhophyta (dinoflagellates)	32,647.2 (5)	34,286.7 (2)	33,467.1 (3)	53,342.3 (6)	38,118.2 (10)	37,708.9 (6)	20,346.2 (4)	25,642.9 (5)	18,712.0 (8)	8,684.8 (2)	32,037.3 (9)	4,282.6 (1)	28,496.0 (6)	26,755.9 (4)	18,019.9 (6)	22,681.2 (3)
Chlorophyta (green algae)	20,694.6 (3)	15,231.2 (1)	17,962.9 (2)	3,974.5 (<1)	9,005.7 (2)	8,805.7 (1)	9,606.1 (2)	9,606.0 (2)	5,870.4 (3)	17,344.4 (3)	7,115.7 (2)	24,549.0 (4)	3,557.8 (1)	17,789.1 (2)	9,339.3 (3)	13,458.6 (2)
Cyanophyta (blue-green algae)	709.5 (<1)	6,157.8 (<1)	3,433.7 (<1)	26,266.7 (3)	100.0 (<1)	100.0 (<1)	820.0 (<1)	806.6 (<1)	243.3 (<1)	62.5 (<1)	177.8 (<1)	400.0 (<1)	11.1 (<1)	355.5 (<1)	25.0 (<1)	33.3 (<1)
Euglenophyta (euglenoids)	1,087.9 (<1)		544.0 (<1)		1,000.6 (<1)			1,067.3 (<1)						889.5 (<1)		
Cryptophyta (cryptophytes)	56,572.8 (8)	87,579.0 (6)	72,075.9 (7)	3,807.8 (<1)	36,023.1 (9)	94,460.4 (14)	39,491.9 (7)	62,973.6 (12)	13,341.9 (6)	50,032.0 (9)	25,794.3 (7)	37,357.2 (6)	26,683.7 (6)	60,483.2 (8)	36,023.1 (11)	129,416.2 (17)
Xanthophyta (xanthophytes)																
Chrysophyceae (yellow-brown algae)					2,001.3 (<1)	800.5 (<1)			1,067.3 (<1)					889.5 (<1)	667.1 (<1)	2,668.4 (<1)
Haptophyceae (haptophytes including coccolithophores)																
Prasinophyceae (prasinophytes)	21,758.7 (3)	60,924.4 (4)	41,341.6 (4)	11,423.4 (1)	7,004.4 (2)	145,693.2 (22)	36,289.9 (7)	43,761.3 (8)	3,735.7 (2)	93,393.0 (17)	8,894.6 (2)	25,616.4 (4)	14,231.3 (3)	64,930.4 (9)	7,338.1 (2)	109,403.3 (14)
Unidentified phytoflagellates	422,120.0 (59)	696,824.3 (49)	559,472.2 (53)	289,391.5 (34)	202,129.3 (52)	236,951.7 (36)	251,894.5 (47)	240,153.6 (46)	119,543.2 (54)	200,128.1 (36)	177,002.2 (47)	241,221.0 (36)	196,570.2 (44)	241,043.2 (32)	204,130.7 (65)	217,472.6 (29)
Others					2,001.3 (1)	2,401.5 (<1)				1,334.2 (<1)	889.5 (<1)	1,067.3 (<1)				8,005.1 (1)
TOTAL PHYTOPLANKTON	709,751.8	1,415,456.2	1,062,604.3	840,691.3	387,597.8	654,906.2	536,114.5	523,439.1	221,751.3	550,718.3	374,395.2	673,315.5	446,040.8	751,623.5	316,394.4	761,869.4

[a] Values are expressed as cells per liter and represent the mean of three replicates.

[b] Percentage values are given in parentheses.

[c] S = Surface; B = Bottom; Avg. = The average of intake S and B values.

TABLE M-10

PHYTOPLANKTON DENSITY[a] AND PERCENTAGE COMPOSITION[b]
ST. LUCIE PLANT
23 AUGUST 1977

TAXON	STATION AND DEPTH[c]															
	11			12		0		1		2		3		4		5	
	S	B	AVG.	S	S	B	S	B	S	B	S	B	S	B	S	B
Bacillariophyta (diatoms)	169,055.4 (18)	437,375.4 (20)	303,215.4 (23)	196,426.4 (52)	73,255.0 (24)	182,539.2 (33)	167,284.4 (27)	155,429.6 (23)	126,105.6 (34)	107,912.2 (20)	227,039.9 (23)	147,954.0 (18)	142,848.1 (26)	171,973.2 (26)	81,469.6 (20)	126,025.4 (21)
Phrrhophyta (dinoflagellates)	28,558.4 (3)	17,135.0 (1)	22,846.7 (2)	7,615.6 (2)	6,404.1 (2)	8,545.4 (2)	13,350.3 (2)	10,018.9 (2)	14,248.2 (4)	11,207.2 (2)	30,017.7 (3)	20,582.1 (2)	9,606.1 (2)	18,678.7 (3)	20,955.2 (5)	21,323.6 (4)
Chlorophyta (green algae)	20,942.8 (2)	85,675.1 (5)	53,309.0 (4)	15,339.4 (4)	11,207.1 (4)	27,751.0 (5)	20,012.8 (3)	36,023.1 (5)	22,236.5 (6)	32,020.5 (6)	31,414.2 (3)	41,124.1 (5)	36,823.6 (7)	24,015.4 (4)	31,414.2 (8)	70,063.2 (12)
Cyanophyta (blue-green algae)	233.3 (<1)	875.0 (<1)	554.2 (<1)	6,041.1 (2)	30.0 (<1)		3,325.9 (1)	87.5 (<1)	5.6 (<1)	40.0 (<1)	37.5 (<1)		160.0 (<1)	50.0 (<1)		
Euglenophyta (euglenoids)											1,427.9 (4)					
Cryptophyta (cryptophytes)	78,059.5 (8)	79,963.4 (5)	79,011.5 (6)	15,231.1 (4)	18,411.8 (6)	75,781.8 (14)	89,390.5 (14)	84,053.8 (13)	21,347.0 (6)	104,066.6 (20)	34,270.0 (3)	100,525.5 (12)	38,424.6 (7)	98,729.9 (15)	5,711.7 (1)	54,832.1 (9)
Xanthophyta (xanthophytes)																
Chrysophyceae-(yellow-brown algae)					3,202.0 (1)	1,067.3 (<1)	1,334.2 (<1)									
Haptophyceae (haptophytes including coccolithophores)																
Prasingphyceae (prasinophytes)	30,462.2 (3)	28,558.3 (2)	29,510.3 (2)	1,903.9 (1)	3,202.0 (1)	26,683.7 (5)	38,691.4 (6)	8,005.1 (1)	1,779.0 (<1)	4,803.0 (1)		11,423.3 (1)	1,601.0 (<1)	8,005.2 (1)	1,903.8 (<1)	15,231.1 (3)
Unidentified phytoflagellates	630,188.1 (66)	1,005,254.7 (61)	817,721.4 (63)	137,080.2 (36)	191,322.5 (62)	210,267.8 (38)	284,181.9 (46)	368,235.7 (56)	185,007.3 (50)	264,169.1 (50)	676,833.6 (68)	504,912.0 (61)	323,407.0 (58)	325,541.7 (50)	262,737.0 (65)	319,853.8 (53)
Others						14,942.9 (3)	1,334.2 (<1)		889.5 (<1)	6,404.1 (1)				2,668.4 (<1)		1,523.1 (<1)
Total phytoplankton	957,499.7	1,654,836.9	1,306,168.3	379,637.7	307,034.5	547,579.1	618,905.6	661,853.7	371,618.7	530,622.7	1,001,040.8	826,521.0	552,870.4	649,662.5	404,191.5	608,852.3

[a] Values are expressed as cells per liter and represent the mean of three replicates, except 4B which is the mean of two replicates.

[b] Percentage values are given in parentheses.

[c] S = Surface; B = Bottom; Avg. = The average of intake S and B values.

TABLE M-11

PHYTOPLANKTON DENSITY[a] AND PERCENTAGE COMPOSITION[b]
ST. LUCIE PLANT
13 SEPTEMBER 1977

TAXON	STATION AND DEPTH[c]															
	11			12	0		1		2		3		4		5	
	S	B	AVG.	S	S	B	S	B	S	B	S	B	S	B	S	B
Bacillariophyta (diatoms)	666,070.8 (54)	630,879.3 (47)	648,475.1 (50)	579,258.6 (70)	413,914.6 (52)	541,784.4 (60)	791,669.9 (55)	1,223,587.1 (57)	754,809.8 (52)	240,532.0 (36)	441,242.9 (50)	208,469.8 (31)	649,076.5 (55)	424,614.9 (51)	655,015.2 (61)	399,314.3 (43)
Pyrrhophyta (dinoflagellates)	26,654.4 (2)	45,693.3 (3)	36,197.9 (4)	38,094.5 (5)	32,086.9 (4)	23,125.8 (3)	57,116.7 (4)	79,963.4 (4)	69,394.3 (5)	26,700.5 (4)	45,730.9 (5)	31,414.1 (5)	66,709.4 (6)	26,717.2 (3)	50,699.1 (5)	37,374.0 (4)
Chlorophyta (green algae)	19,205.6 (2)	45,693.4 (3)	32,449.5 (2)	15,231.1 (2)	21,413.6 (3)	19,568.0 (2)	34,270.0 (2)	39,981.7 (2)	16,010.3 (1)	18,678.6 (3)	11,423.3 (1)	28,558.3 (4)	5,336.7 (<1)	37,357.2 (4)	21,347.0 (2)	45,362.4 (5)
Cyanophyta (blue-green algae)	150.0 (<1)	140.0 (<1)	145.0 (<1)	583.3 (<1)	44.5 (<1)		333.3 (<1)						100.0 (<1)			
Eygleonophyta (euglenoids)					1,778.9 (<1)		3,807.8 (<1)						5,336.8 (<1)			
Cryptophyta (cryptophytes)	26,654.4 (2)	36,554.7 (3)	31,604.6 (2)	11,423.3 (1)	42,694.0 (5)	32,020.5 (4)	38,077.8 (3)	34,270.0 (2)	56,035.9 (4)	64,041.0 (10)	19,990.8 (2)	34,270.0 (5)	45,362.4 (4)	29,352.1 (4)	24,015.3 (2)	48,030.7 (5)
Xanthophyta (xanthophytes)																
Chrysophyceae (yellow-brown algae and silicoflagellates)					1,778.9 (<1)				2,668.4 (<1)		5,711.7 (1)	8,567.5 (1)	2,668.4 (<1)		2,668.4 (<1)	
Haptophyceae (haptophytes including coccolithophotes)									2,668.4 (<1)							
Prasinophyceae (prasinophytes)	45,693.4 (4)	31,985.3 (2)	38,839.4 (3)	11,423.3 (1)	14,231.3 (2)	33,799.4 (4)	76,155.6 (5)	97,098.4 (5)	42,694.0 (3)	26,683.7 (4)	14,279.1 (2)	17,135.0 (3)	34,688.9 (3)	5,336.8 (1)	10,673.4 (1)	29,352.1 (3)
Unidentified phytoflagellates	449,318.4 (36)	539,182.1 (40)	494,250.3 (38)	163,734.6 (20)	266,837.4 (34)	256,163.9 (28)	441,702.8 (31)	651,130.9 (30)	506,991.1 (35)	282,847.7 (43)	342,700.5 (39)	345,556.3 (51)	365,567.3 (31)	312,199.8 (37)	304,194.6 (28)	368,235.6 (40)
Others		9,138.7 (1)	4,569.4 (<1)	11,423.3 (1)				11,423.3 (1)								2,668.4 (<1)
Total phytoplankton	1,233,747.0	1,339,266.8	1,286,507.2	831,172.0	794,780.1	906,462.0	1,443,133.9	2,137,454.8	1,451,272.2	659,483.5	881,079.2	673,971.0	1,174,846.4	835,578.0	1,068,613.0	930,337.5

[a] Values are expressed as cells per liter and represent the mean of three replicates.
[b] Percentage values are given in parentheses.
[c] S = Surface; B = Bottom; Avg. = The average of intake S and B values.

TABLE M-12

PHYTOPLANKTON DENSITY[a] AND PERCENTAGE COMPOSITION[b]

ST. LUCIE PLANT
11 OCTOBER 1977

TAXON	STATION AND DEPTH[c]															
	11			12	0		1		2		3		4		5	
	S	B	AVG.	S	S	B	S	B	S	B	S	B	S	B	S	B
Bacillariophyta (diatoms)	455,628.4 (32)	571,653.1 (38)	513,640.8 (35)	1,116,529.7 (64)	431,388.6 (41)	2,158,692.1 (68)	527,495.6 (29)	672,065.2 (39)	336,875.0 (31)	240,113.4 (25)	277,047.5 (34)	350,151.9 (30)	345,452.0 (34)	401,953.8 (39)	288,335.4 (36)	415,374.5 (33)
Pyrrhophyta (dinoflagellates)	72,381.0 (5)	49,551.1 (3)	60,996.1 (4)	85,883.7 (5)	11,806.7 (1)	45,693.5 (1)	64,091.1 (4)	56,086.0 (3)	34,855.5 (3)	24,015.4 (2)	21,330.3 (3)	13,392.0 (1)	26,783.7 (3)	12,082.7 (1)	31,444.6 (4)	16,026.9 (1)
Chlorophyta (green algae)	65,399.0 (5)	58,200.0 (4)	61,799.5 (4)	67,469.5 (4)	39,011.1 (4)	23,613.4 (1)	45,928.2 (3)	73,921.1 (4)	59,170.9 (5)	81,401.2 (8)	34,235.2 (4)	97,828.2 (9)	49,230.7 (5)	44,028.2 (4)	46,366.0 (6)	90,573.1 (7)
Cyanophyta (blue-green algae)	783.0 (<1)	2,200.0 (<1)	1,491.7 (<1)	19,125.0 (1)	83.3 (<1)	800.0 (<1)	275.0 (<1)	1,100.0 (<1)	383.3 (<1)	250.0 (<1)	100.0 (<1)	116.7 (<1)	733.3 (<1)	75.0 (<1)	233.4 (<1)	333.3 (<1)
Euglenophyta (euglenoids)						7,615.6 (<1)						5,336.7 (<1)				
Cryptophyta (cryptophytes)	140,888.0 (10)	72,347.9 (5)	106,618.0 (7)	57,116.7 (3)	41,885.6 (4)	137,080.2 (4)	128,082.0 (7)	132,084.5 (8)	104,066.6 (9)	117,408.5 (12)	71,586.3 (9)	112,071.7 (10)	56,035.9 (5)	84,053.8 (8)	53,619.3 (7)	66,709.4 (5)
Xanthophyta (xanthophytes)																
Chrysophyceae (yellow-brown algae and silicoflagellates)							4,002.6 (4)		2,668.4 (4)	5,336.7 (1)						
Haptophyceae (haptophytes including coccolithophores)																
Prasinophyceae (prasinophytes)	26,654.5 (2)	45,693.3 (3)	36,173.9 (2)		15,231.0 (1)	91,386.8 (3)	32,020.6 (2)	20,012.8 (1)	13,341.9 (1)	18,678.6 (2)	3,046.2 (<1)	10,673.5 (1)	5,336.7 (1)	12,007.7 (1)	4,468.3 (1)	13,341.8 (1)
Unidentified phytoflagellates	677,785.5 (47)	693,016.5 (46)	685,401.0 (47)	399,817.2 (23)	517,858.5 (49)	708,247.6 (22)	1,012,648.1 (56)	780,499.6 (45)	547,016.7 (50)	474,970.7 (49)	411,240.6 (50)	557,711.3 (48)	536,343.2 (53)	476,304.9 (46)	384,271.6 (48)	653,751.8 (52)
Others				9,519.5 (1)		7,615.6 (<1)		4,002.6 (<1)				2,668.4 (<1)		4,002.6 (<1)		
Total Phytoplankton	1,439,519.7	1,492,661.9	1,466,091.0	1,755,461.3	1,057,264.8	3,180,744.8	1,814,543.2	1,739,771.8	1,098,378.3	962,174.5	818,586.1	1,149,950.4	1,019,915.5	1,034,508.7	808,738.6	1,256,110.8

[a] Values are expressed as cells per liter and represent the mean of three replicates, except 48 which is the mean of two replicates.

[b] Percentage values are given in parentheses.

[c] S = Surface; B = Bottom; Avg. = The average of intake S and B values.

TABLE M-13

PHYTOPLANKTON DENSITY[a] AND PERCENTAGE COMPOSITION[b]

ST. LUCIE PLANT

2 NOVEMBER 1977

TAXON	STATION AND DEPTH[c]															
	11			12	0		1		2		3		4		5	
	S	B	AVG.	S	S	B	S	B	S	B	S	B	S	B	S	B
Bacillariophyta (diatoms)	3,986,717.2 (82)	4,630,604.1 (91)	4,308,660.7 (89)	3,896,771.7 (88)	4,860,562.2 (80)	5,237,546.7 (79)	5,446,173.8 (84)	8,488,725.3 (37)	4,076,012.4 (68)	4,374,950.1 (67)	3,814,933.3 (65)	3,414,843.9 (64)	2,158,942.2 (79)	3,296,156.4 (71)	4,009,469.5 (77)	3,789,074.3 (74)
Pyrrhophyta (dinoflagellates)	19,080.7 (<1)	28,558.5 (1)	23,819.6 (<1)		20,096.0 (<1)	6,754.3 (<1)	19,288.9 (<1)	45,693.4 (<1)	40,358.9 (1)		67,042.6 (1)	26,683.7 (1)	58,804.0 (2)	8,894.6 (<1)	166.7 (<1)	27,100.5 (1)
Chlorophyta (green algae)					13,341.9 (<1)	80,092.9 (1)			120,076.8 (2)	40,025.6 (1)	106,735.0 (2)	40,025.6 (1)	66.7 (<1)	35,578.3 (1)	80,051.2 (2)	53,367.5 (1)
Cyanophyta (blue-green algae)	833.3 (<1)	708.3 (<1)	770.8 (<1)	1,500.0 (<1)	750.0 (<1)	291.6 (< 1)	1,166.7 (<1)	500.0 (<1)	750.0 (<1)	1,250.0 (<1)	2,083.3 (<1)	1,250.0 (<1)	1,000.0 (<1)	333.3 (<1)	833.3 (<1)	1,416.7 (<1)
Euglenophyta (euglenoids)										13,341.9 (<1)						
Crytophyta (cryptophytes)	76,155.6 (2)	47,597.3 (1)	61,876.5 (1)	38,077.8 (1)	226,811.8 (4)	126,747.8 (2)	57,116.7 (1)	68,540.1 (1)	226,811.8 (4)	213,469.9 (3)	186,786.2 (3)	213,469.9 (4)	64,041.0 (2)	160,102.5 (3)	186,786.2 (4)	80,051.2 (2)
Xanthophyta (xanthophytes)																
Chrysophyceae (yellow-brown algae and silicoflagellates)	9,519.5 (4)		4,759.8 (<1)		6,670.9 (<1)	13,341.8 (<1)			13,341.9 (<1)	40,025.6 (1)	53,367.5 (1)	13,341.9 (<1)		26,683.7 (1)		13,341.9 (<1)
Haptophyceae (haptophytes including coccolithophores)																
Prasinophyceae (prasinophytes)	9,519.5 (<1)	9,519.5 (<1)	9,519.5 (<1)	19,038.9 (<1)	73,380.3 (1)	13,341.9 (<1)			40,025.6 (1)	13,341.9 (<1)	40,025.6 (1)	13,341.9 (<1)	48,030.7 (2)	35,578.3 (1)		26,683.7 (1)
Unidentified phytoflagellates	342,700.5 (7)	209,428.1 (4)	276,064.3 (6)	342,700.5 (8)	800,512.3 (13)	1,020,653.2 (15)	723,478.8 (11)	913,967.9 (9)	1,387,554.7 (23)	1,507,631.6 (23)	1,360,870.9 (23)	1,374,212.8 (26)	288,184.4 (11)	862,774.4 (19)	880,563.6 (17)	733,803.0 (14)
Others	161,830.8 (4)	180,869.7 (4)	171,350.3 (4)	133,272.4 (3)	46,696.5 (1)	153,431.5 (2)	228,467.0 (4)	205,620.3 (2)	120,076.8 (2)	293,521.1 (5)	226,811.8 (4)	226,811.8 (4)	112,071.7 (4)	222,364.5 (4)	66,709.4 (1)	426,939.9 (8)
Total Phytoplankton	4,606,357.1	5,107,285.5	4,856,821.5	4,431,361.3	6,048,821.9	6,652,201.7	6,475,691.9	9,722,947.0	6,025,008.9	6,497,557.7	5,858,656.2	5,323,981.5	2,731,140.7	4,640,466.0	5,224,579.9	5,151,778.7

[a] Values are expressed as cells per liter and represent the mean of three replicates.

[b] Percentage values are given in parentheses.

[c] S = Surface; B = Bottom; Avg. = The average of intake S and B values.

TABLE M-14

PHYTOPLANKTON DENSITY[a] AND PERCENTAGE COMPOSITION[b]

ST. LUCIE PLANT
1 DECEMBER 1977

	STATION AND DEPTH[c]															
	11			12	0		1		2		3		4		5	
TAXON	S	B	AVG.	S	S	B	S	B	S	B	S	B	S	B	S	B
Bacillariophyta (diatoms)	626,218.0 (62)	2,974,744.9 (69)	1,800,481.5 (68)	477,131.1 (78)	591,846.0 (66)	630,871.6 (70)	73,486.9 (54)	1,011,754.0 (69)	268,553.9 (59)	44,997.7 (53)	101,492.0 (53)	163,142.9 (48)	106,363.6 (33)	104,551.0 (33)	235,285.3 (48)	175,721.0 (40)
Pyrrhophyta (dinoflagellates)	13,335.6 (1)	76,155.6 (2)	44,745.6 (2)	14,279.1 (2)	8,573.9 (1)	15,239.5 (2)	3,470.4 (3)	66,001.7 (4)	14,701.3 (3)	1,247.5 (1)	4,596.0 (2)	14,304.4 (4)	5,584.3 (2)	7,756.8 (2)	11,467.1 (2)	16,326.1 (4)
Chlorophyta (green algae)	26,654.4 (3)	50,770.4 (1)	38,712.5 (1)	11,423.3 (2)	28,589.6 (3)	22,921.7 (3)	3,482.2 (3)	30,506.7 (2)	6,577.6 (1)	3,389.9 (4)	7,615.5 (4)	56.3 (<1)	3,760.1 (1)	3,001.9 (1)	8,611.3 (2)	4,902.8 (1)
Cyanophyta (blue-green algae)	108.3 (<1)	4,555.5 (<1)	2,331.9 (<1)	625.0 (<1)	50.0 (<1)	308.3 (<1)	8.3 (<1)	66.7 (<1)	64.3 (<1)	18.9 (<1)	233.3 (<1)	56.3 (<1)	596.2 (<1)	51.8 (<1)	393.8 (<1)	164.3 (<1)
Euglenophyta (euglenoids)	1,903.9 (<1)		952.0 (<1)													
Cryptophyta (cryptophytes)	72,347.9 (7)	406,163.5 (9)	239,255.7 (9)	19,990.8 (3)	65,684.2 (7)	78,059.5 (9)	6,937.8 (5)	114,233.5 (8)	32,633.1 (7)	6,937.8 (8)	9,138.7 (5)	31,414.2 (9)	38,794.0 (12)	43,287.0 (13)	31,414.2 (6)	32,638.2 (7)
Xanthophyta (xanthophytes)																
Chrysophyceae (yellow-brown algae and silicoflagellates	1,903.9 (<1)		952.0 (<1)			1,903.9 (<1)	266.8 (<1)	7,615.6 (1)	3,263.8 (1)	355.8 (<1)				593.0 (<1)	2,855.9 (1)	
Haptophyceae (haptophytes including coccolithophores)									9,791.4 (2)		21,323.5 (11)	28,558.4 (8)	16,010.3 (5)	40,322.1 (13)	52,833.0 (11)	70,172.0 (16)
Prasinophyceae (prasinophytes)	17,135.0 (2)		8,567.5 (<1)		11,423.4 (1)	5,711.7 (1)	4,002.5 (3)	40,616.5 (3)	6,527.6 (1)	177.9 (<1)	1,523.1 (1)	2,855.9 (1)	6,157.8 (2)	3,557.8 (1)	9,995.4 (2)	8,159.5 (2)
Unidentified phytoflagellates	237,986.5 (24)	685,400.9 (16)	461,693.7 (17)	71,395.9 (12)	185,629.4 (21)	140,888.0 (16)	44,828.6 (33)	198,004.7 (13)	114,233.5 (25)	27,395.3 (32)	44,170.3 (23)	92,814.7 (28)	143,476.3 (45)	116,815.4 (36)	138,508.2 (30)	133,816.4 (30)
Others	5,711.7 (1)	126,926.1 (3)	66,318.9 (2)	14,279.2 (2)	4,283.8 (<1)	9,519.4 (1)	533.7 (<1)	7,615.6 (1)		1,067.3 (1)	1,523.1 (1)	2,855.8 (1)	615.8 (<1)	1,185.9 (<1)	2,855.9 (1)	1,631.9 (<1)
TOTAL PHYTOPLANKTON	1,003,305.3	4,324,716.9	2,664,011.3	609,124.4	896,080.3	905,423.6	137,017.2	1,476,415.0	456,351.5	85,588.1	191,615.5	336,058.9	321,358.4	321,122.7	494,220.1	443,532.2

[a] Values are expressed as cells per liter and represent the mean of three replicates.

[b] Percentage values are given in parentheses.

[c] S = Surface; B = Bottom; Avg. = The average of intake S and B values.

TABLE M-15

SYNONOMOUS NAMES OF PHYTOPLANKTON SPECIES
RECEIVING NOMENCLATURE CHANGES DURING THIS STUDY
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Date of Change	Current taxon	Previous taxon
2/22/77	*Campylosira cymbelliformis*	Unidentified pennate 1
2/23/77	*Biddulphia tuomeyi*	*Biddulphia* sp. 1
2/23/77	*Isthmia enervis*	*Isthmia* sp. 1
3/2/77	*Meringosphaera mediterranea*	Phytoflagellate 5
3/9/77	Phytoflagellate 7	Unidentified coccoid 2
3/16/77	*Eunotogramma marinum*	*Melosira* sp. 1
3/28/77	*Cyclotella* sp. 1	*Cyclotella* sp.
3/28/77	*Diploneis* sp. 1	*Diploneis* sp.
3/28/77	*Plagiogramma* spp.	*Plagiogramma* sp.
3/28/77	*Thalassiothrix* sp. 1	*Thalassiothrix* sp.
4/1/77	*Apendinella radians*	Chrysophyte sp. 1
4/1/77	*Prorocentrum redfieldi*	*Prorocentrum* sp. 1
4/15/77	*Thalassiosira* spp.	*Thalassiosira* ? sp.
8/7/77	*Navicula distans*	*Pinnularia* sp. 1
1/10/78	*Pleurosigma strigosum* v. *strigosum*	*Pleurosigma* sp. 1; unidentified sigmoid diatom 1

TABLE M-16

DESCRIPTIONS OF UNIDENTIFIED CATEGORIES OF PHYTOPLANKTON

BACILLARIOPHYTA

Centric diatom sp. 4: Cells large, cylindrical, and weakly siliceous. Intercalary bands not observed. Chromatophores numerous. Length along pervalvar axis 77-150μ, diameter 30-70μ.

Centric diatom sp. 5: Cells cylindrical and weakly siliceous. Intercalary bands not visible. Blunt process near margin of one valve. Chromatophores numerous. Length along pervalvar axis 65μ, diameter 50μ.

Centric diatoms <20μ: All unidentified centric diatoms less than 20.0μ in diameter.

Centric diatoms >20μ: All unidentifiable centric diatoms more than 20.0μ in diameter.

Pennate diatom sp. 3: Valves constricted in center. Two chromatophores visible. Length along apical axis 18-20μ, width 5μ.

Pennate diatom sp. 4: Cells fusiform in shape, weakly siliceous. Length along apical axis 25μ, width of expanded central area 2μ. No striae visible.

Pennate diatoms <20μ: All unidentifiable pennate diatoms which have a length of less than 20.0μ along the apical axis.

Pennate diatoms >20μ: All unidentifiable pennate diatoms which have a length of more than 20.0μ along the apical axis.

Pennate diatoms >200μ: All unidentifiable pennate diatoms with a length greater than 200.0μ along the apical axis.

Sigmoid diatoms >200μ: All unidentifiable sigmoid, pennate diatoms with a length along the apical axis of greater than 200.0μ.

TABLE M-16
(continued)
DESCRIPTIONS OF UNIDENTIFIED CATEGORIES OF PHYTOPLANKTON

PYRRHOPHYTA

Unidentified dinoflagellates: All unidentified pyrrhophytes, regardless of size.

CHLOROPHYTA

Chlorophyte sp. 1: Cells spherical, small, and lacking flagella. Pyrenoid visible in cell body. Diameter, 2-6μ.

Chlorophyte sp. 2: Cells 2-3μ in diameter. Chloroplast partly filling the cell with pyenoid visible. Cells surrounded by a gelatinous mass 200-400μ in diameter.

Chlorophyte spp.: All unidentifiable unicellular chlorophytes.

Colonial chlorophytes: All unidentifiable nonfilamentous colonial chlorophytes.

Filamentous chlorophytes: All unidentifiable filamentous chlorophytes.

CYANOPHYTA

Cyanophyte sp. 1: Cells elliptical, length 4-5μ, width 2-3μ. Colonial.

CRYPTOPHYTA

Cryptophyte spp.: All unidentifiable cryptophytes.

HAPTOPHYCEAE

Haptophyte sp. 1: Cells small and spherical, diameter 4-9μ. Coccoliths 1-1.5μ in length. Two flagella, equal in length.

Haptophyte sp. 2: Cells 14μ diameter, flagellum visible. Individual coccoliths 3-4μ long, 2μ wide.

TABLE M-16
(continued)
DESCRIPTIONS OF UNIDENTIFIED CATEGORIES OF PHYTOPLANKTON

PRASINOPHYCEAE

Prasinophyte sp. 1: Cells ovoid to pyramidal with two to four chloroplasts. Pyrenoid basal, four flagella of equal length inserted in an anterior depression. Width 4-8μ.

Unidentified prasinophytes: All unidentifiable prasinophytes.

CHRYSOPHYCEAE

Chrysophyte sp. 2: Cells ovoid with numerous flagella inserted near the middle of the body. Body covered with scales 1-2μ in diameter. Length 12μ.

Chrysophyte sp. 3: Cells small, spherical, olive to yellow brown in color. Diameter 3μ. Colonies chainlike.

Silicoflagellate spp.: All unidentifiable chrysophytes belonging to the order Dictyochales (silicoflagellates).

UNIDENTIFIED PHYTOFLAGELLATES

Phytoflagellate sp. 3: Cells small, 7-8μ in diameter with an anterior papilla. Four extremely long (40-60μ) equal flagella.

Phytoflagellate sp. 4: Cells ovoid, 10μ in diameter. Two equal flagella inserted on either side of a small papilla. Parietal chloroplast with pyrenoid.

Phytoflagellate sp. 6: Cells elliptical with a thick wall. Length 7-8μ. Two equal flagella inserted on the central of three short, spinelike projections on one side of the cell.

Phytoflagellate sp. 7: Cells elliptical, length averaging 12μ. Large vacuole occupying anterior half of cell. Two equal flagella inserted in small apical papilla.

Phytoflagellate sp. 8: Undulate, cells small, 7 by 1μ. Two equal flagella inserted anteriorly. Flagella 55μ in length.

TABLE M-16
(continued)
DESCRIPTIONS OF UNIDENTIFIED CATEGORIES OF PHYTOPLANKTON

UNIDENTIFIED PHYTOFLAGELLATES (continued)

Phytoflagellate sp. 9: Cells large and thick walled with irregular shape, possessing a groove at both ends and a dorsal protrusion. One flagellum inserted ventrally. Cell 40μ long, 20-25μ wide.

Unidentified phytoflagellates >10μ: All unidentifiable photoflagellates greater than 10.0μ in length.

Unidentified phytoflagellates <10μ: All unidentifiable phytoflagellates less than 10.0μ in length.

OTHERS

Algal epiphyte 1: Cells small, ovoid and stalked. Length of cell body, 5μ.

Unidentified auxospores: All unidentifiable auxospores.

Unidentified 3: Cells irregularly spherical. One to three large chloroplasts. Diameter, 10-20μ.

Unidentified coccoid 3: Cells irregularly elliptical, 8-10μ in length. Cell contents granular.

TABLE M-17

PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIF PLANT
25 JANUARY 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (diatoms)															
Amphora spp.	5077.0														
Asterionella japonica		25385.2	28558.4	2668.4						1903.9			8005.1		3807.8
Bacteriastrum delicatulum										1903.9					5711.7
Bellerochea malleus v. ?	22.2									116.7					
Biddulphia alternans	5077.0				4002.6			2284.7	2284.7				4002.6		
B. aurita			11423.3	5336.7		11423.3				1903.9			16010.3		
B. longicruris						2855.8									
B. mobiliensis				8005.1											
B. rhombus	5077.0									3807.8			4002.6		
Biddulphia spp.	10154.1	25385.2	11423.3				6854.0	2284.7			2175.9	5336.7	4002.6	1903.9	
Campylosira cymbelliformis†	15231.1	203081.8	57116.7	21347.0	64041.0	19990.9	54832.1	2284.7	15992.7	3807.8	6527.6	5336.7	56035.9		
Cerataulina bergonii			25.0	133.3	275.0	75.0	80.0	60.0	10.0	41.7		183.3		16.7	50.0
Cerataulina sp. 1															58.3
Chaetoceros eibenii				50.0	75.0	25.0	100.0	10.0	110.0		95.2	83.3	75.0	8.3	8.3
C. peruvianus										1903.9					
C. vistulae											2175.9			3807.8	
Chaetoceros spp.	35539.3			24015.4	8005.1	17135.0	27416.0	11423.3	6854.0	11423.4	8703.5	2668.4	20012.8	3807.8	11423.3
Climacosphenia moniligera			25.0												
Coscinodiscus lineatus						2855.8	2284.7								
C. radiatus		111.1	25.0	133.3	150.0	12.5	40.0	30.0		8.3			100.0	8.3	75.0
Coscinodiscus spp.		25385.2	5711.7	2668.4				2284.7					4002.6		7615.5
Cyclotella spp.	5077.0	50770.5	11423.3				2284.7	2284.7							1903.9
Cymatosira belgica												13341.9			
Cymbella spp.							2284.7	2284.7							
Diploneis smithii v. *smithii*					4002.6										
Diploneis sp. 1†	10154.1		5711.7		4002.6	5711.7	9138.7	2284.7	2284.7	3807.8		10673.5	12007.7	3807.8	5711.7
Ditylum sol							20.0	10.0						8.3	
Eucampia cornuta					150.0		140.0	130.0	50.0	83.3	152.4	33.3	75.0	58.3	33.3
Eunotogramma marinum†													4002.6		
Fragilaria inflata							2284.7				2175.9				
Guinardia flaccida		222.2	125.0	416.7	300.0	100.0	380.0	290.0	130.0	141.7	238.1	200.0	325.0	108.3	133.3
Gyrosigma spp.		111.1							10.0	8.3					
Hemiaulus hauckii				8005.1								5336.7	12007.7		
H. membranaceus										1903.9					
H. sinensis							2284.7	4569.3	2284.7						3807.8
Leptocylindrus danicus				13341.9											
Licmophora abbreviata			5711.7												
Melosira sulcata	15231.1		5711.7		4002.6	5711.7	9138.7	6854.0	2284.7	3807.8			12007.7	1903.9	15231.1
Melosira spp.							2284.7								
Navicula halophila v. *halophila*			5711.7												
N. lyra v. *lyra*		111.1							20.0						
N. wawrikae	44.5			116.7	200.0	37.5	130.0	130.0	90.0	91.7	47.6	100.0	275.0	91.7	50.0
Navicula sp. 6				2668.4	4002.6		2284.7						4002.6		
Nitzschia scicularis v. *closterioides*	5077.0	25385.2	11423.3	5336.7	4002.6	8567.5			4569.3		2175.9		4002.6	1903.9	5711.7
N. closterium	20308.2	126926.1	97098.5	29352.1	20012.8	19990.8	22846.7	4569.3	4569.3	5711.7	2175.9	18678.6	36023.1	5711.7	11423.3
N. constricta	5077.0	76155.7	5711.7	2668.4		2855.8	13708.0			3807.8		5336.7	8005.2	1903.9	
N. delicatissima	30462.3	50770.5		21347.0	20012.8	5711.7		13708.0	4569.3	11423.3	8703.5	18678.6	4002.6	3807.8	22846.7
N. filiformis												2668.4			
N. longissima				2668.4					2284.7		2175.9		4002.6		

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE H-17
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
25 JANUARY 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Nitzschia paradoxa	311.1	111.1	100.0	400.0	75.0	37.5	133.3	625.0	83.3	75.0	50.0	240.0			
N. pungens v. *atlantica*		25385.2							1903.9						
N. sigmoidea	22.2				25.0	25.0		50.0			30.0		20.0	8.3	
N. spathulata						2855.8								1903.9	
Nitzschia sp. 1				16.7											
Pinnularia sp. 2	5077.0												2284.7		
Rhaphoneis surirella	20308.2	76155.7	22846.7	5336.7	12007.7	11423.3	32020.5	48030.7	7615.6	22846.7	9138.7	4569.3	20562.0	11423.3	2175.9
Rhizosolenia alata		166.7	25.0	50.0	175.0	12.5	100.0	25.0	8.3	66.7	20.0	60.0	70.0	25.0	38.1
R. alata f. *indica*				16.7				25.0	25.0		30.0	10.0			38.1
R. bergonii					25.0			25.0							
R. calcar avis	44.4			183.3		50.0	83.3	200.0	66.7	108.3	70.0	80.0	90.0	108.3	9.5
R. fragilissima			5711.7	2668.4	16010.3	2855.8	5336.7							7615.6	
R. imbricata	22.2		25.0	83.3	75.0	62.5	50.0	125.0		83.4	70.0		60.0	50.0	
R. imbricata v. *shrubsolei*	244.4	166.7	150.0	283.3	325.0	475.0	200.0	450.0	275.0	391.7	730.0	630.0	400.0	358.3	171.4
R. robusta										8.3		10.0			
R. setigera	66.7	111.1	175.0	100.0	475.0	37.5	33.3	325.0		8.3	60.0	20.0	30.0		28.6
R. stolterfothii	15231.1			5336.7	8005.1	2855.8	5336.7	8005.1	7615.6	11423.3	18277.3	6854.0	4569.3	9519.4	
Scoliopleura sp.												2284.7			
Skeletonema costatum	45693.4	228467.0	119945.2	69377.7	36023.1	22846.7	53367.5	164105.0	15231.1	32366.1	52547.4	15992.7	15992.7	15231.1	2175.9
Striatella unipunctata								25.0							
Thalassionema nitzschioides	25385.2		28558.4	32020.5	12007.7	22846.7	13341.9	8005.1		1903.9	2284.7	9138.7	15992.7	11423.4	2175.9
Thalassiosira sp. 1	50770.4	25385.2	22846.7	5336.7		17135.0			5711.7			2284.7		1903.9	6527.6
Thalassiothrix delicatula				33.3					8.3		20.0				
T. frauenfeldii	88.9	55.6		583.3	425.0	412.5	600.0	1525.0	200.0	716.7	880.0	620.0	520.0	633.3	219.0
T. mediterranea v. *pacifica*				66.7	150.0	12.5	100.0	125.0		8.3	70.0	110.0	90.0	16.7	
Tropidoneis lepidoptera†	15231.1	50770.4	28558.4			5711.7	2668.4		3807.8	1903.9	2284.7	4569.3	2284.7	1903.9	
Unidentified centric diatom sp. 4			25.0	83.3	150.0	125.0	133.3	150.0	133.3	166.7	180.0	20.0	140.0	83.3	66.7
Unidentified centric diatoms <20μ	25385.2	76155.7	97098.5	80051.2	68043.6	28558.4	34688.9	76048.7	3807.8	5711.7	25131.3	5854.0	9138.7	17135.0	4351.7
Unidentified pennate diatoms <20μ	243698.1	786941.9	376970.5	133418.7	148094.8	91386.8	40025.6	208133.2	19038.9	66636.2	130226.2	57116.7	50262.7	49501.2	32638.2
Unidentified pennate diatoms >20μ	20308.2	177696.5	79963.4	26683.7	28018.0	22846.7		36023.1	1903.9	5711.7	31985.4	9138.7	11423.3	1903.9	2175.9
Unidentified pennate diatoms >200μ		111.1		16.7							40.0	10.0	10.0		
Unidentified sigmoid diatom sp. 1†	155.6	111.1	100.0	66.7	75.0	62.5	66.7	300.0	8.3	75.0	30.0	30.0	30.0	25.0	47.6
Unidentified sigmoid diatoms >200μ								25.0							
TOTAL BACILLARIOPHYTA	635,652.3	2,057,591.9	1,046,036.5	512,492.6	467,422.6	335,695.2	276,941.9	769,339.8	96,302.9	245,814.6	434,972.8	178,419.6	182,368.9	188,381.4	90,363.4
PYRRHOPHYTA (dinoflagellates)															
Amphidinium sp. 2		25385.2								1903.9					
Amphisolenia sp. 1									8.3						
Ceratium furca v. *eugrammum*						12.5			25.0	16.7	30.0			8.3	19.0
C. fusus				33.3					16.7		30.0	10.0	20.0	16.7	
C. fusus v. *seta*	22.2			83.3			16.7	25.0	8.3	8.3			10.0	8.3	
C. teres				33.3	25.0		16.7		8.3			10.0			9.5
C. trichoceros														8.3	

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table H-15 for synonomous name.

TABLE M-17
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
25 JANUARY 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
PYRRHOPHYTA (continued)															
Ceratium tripos										8.3					8.3
Ceratium sp. 3							10.0								8.3
Exuviaella spp.										1903.9					
Gymnodinium aurantium							6854.0		2284.7				8005.1		
G. simplex			5711.7			2855.8	9138.7		4569.3	1903.9					
Gymnodinium sp. 2											4351.8				
Gymnodinium spp.	10154.1	25385.2		8005.1		11423.3	4569.3	6854.0	6854.0	3807.8	4351.7	2668.4		5711.7	5711.7
Gyrodinium sp. 1			5711.7		4002.6				2284.7						
Peridinium inconspicuum f. *armatum*									2284.7						
P. trochoideum									2284.7	3807.8		2668.4		1903.9	
Peridinium spp.		25385.2			4002.6	2855.8									
Prorocentrum sp. 1				2668.4											
Unidentified dinoflagellates	10154.1			13341.8	8005.1	8567.5	4569.3	2284.7	6854.0	5711.7		5336.7	4002.6		
TOTAL PYRRHOPHYTA	20,330.4	76,155.6	11,423.4	24,165.2	16,035.3	25,714.9	25,201.3	9,158.7	27,446.1	17,185.0	8,732.0	10,706.9	12,032.7	7,682.2	7,657.2
CHLOROPHYTA (green algae)															
Chlamydomonas sp.			11423.3				6854.0		2284.7	5711.7				1903.9	3807.8
Oocystis ? sp.										1903.9					
Chlorophyte sp. 1	40616.4	50770.4	22846.7	50699.1	100064.0		20562.0	13708.0	20562.0	24750.6	15231.1	48030.7	76048.7	24750.6	24750.6
TOTAL CHLOROPHYTA	40,616.4	50,770.4	34,270.0	50,699.1	100,064.0		27,416.0	13,708.0	22,846.7	32,366.2	15,231.1	48,030.7	76,048.7	26,654.5	28,558.4
CYANOPHYTA (blue-green algae)															
Oscillatoria spp.	88.9	611.1			175.0		20.0	260.0	140.0		85.7	183.3	325.0		58.3
TOTAL CYANOPHYTA	88.9	611.1			175.0		20.0	260.0	140.0		85.7	183.3	325.0		58.3
EUGLENOPHYTA (euglenoids)															
Euglena spp.				5336.7		2855.8									
TOTAL EUGLENOPHYTA				5,336.7		2,855.8									
CRYPTOPHYTA (cryptophytes)															
Chroomonas amphioxeia	10154.1														
Cryptophyte spp.	187850.6	533089.6	234178.7	320204.9	352225.4	128512.7	182773.6	66255.4	132510.9	79963.4	52221.0	181449.4	376240.8	97098.5	102810.1
TOTAL CRYPTOPHYTA	198,004.7	533,089.6	234,178.7	320,204.9	352,225.4	128,512.7	182,773.6	66,255.4	132,510.9	79,963.4	52,221.0	181,449.4	376,240.8	97,098.5	102,810.1
CHRYSOPHYCEAE (yellow-brown algae and silicoflagellates)															
Meringosphaera mediterranea[†]	15231.1					2855.8	15992.7		2284.7					5711.7	1903.9
Chrysophyte sp. 1[†]			5711.7							1903.9		2668.4	4002.6		
DICTYOCHALES (silicoflagellates)															
Silicoflagellate spp.								2284.7							
TOTAL CHRYSOPHYCEAE	15,231.1		5,711.7			2,855.8	15,992.7	2,284.7	2,284.7	1,903.9		2,668.4	4,002.6	5,711.7	1,903.9
PRASINOPHYCEAE (prasinophytes)															
Prasinophyte sp. 1	25385.2	101540.9	34270.0	80051.2	76048.7	39981.7	52547.4	20562.0	43408.7	66636.2	30462.3	80051.2	112071.7	38077.8	32366.1
Tetraselmis sp. 1						2855.8									
Unidentified prasinophytes	10154.1	50770.4	11423.3	13341.9	28017.9							10673.5	12007.7	11423.4	15231.1
TOTAL PRASINOPHYCEAE	35,539.3	152,311.3	45,693.3	93,393.1	104,066.6	42,837.5	52,547.4	20,562.0	43,408.7	66,636.2	30,462.3	90,724.7	124,079.4	49,501.2	47,597.2

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

[†] See Table M-15 for synonomous name.

TABLE H-17
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
25 JANUARY 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
UNIDENTIFIED PHYTOFLAGELLATES															
Phytoflagellate sp. 4				2668.4	4002.6		2284.7		2284.7	1903.9			4002.6	1903.9	3807.8
Phytoflagellate sp. 7[†]				2668.4		2855.8		2284.7	6854.0	3807.8				1903.9	
Unidentified phytoflagellates >10μ				2668.4	4002.6	5711.7	6854.0	2284.7	4569.3	1903.9		8005.1	8005.1	1903.9	
Unidentified phytoflagellates <10μ	578783.1	1726195.0	645419.2	1075354.9	804514.9	482636.5	594014.2	299291.8	333561.8	411240.6	274160.4	627068.0	1100704.5	380778.3	365547.2
TOTAL UNIDENTIFIED PHYTOFLAGELLATES	578,783.1	1,726,195.0	645,419.2	1,083,360.1	812,520.1	491,204.0	603,152.9	303,861.2	347,269.8	418,856.2	274,160.4	635,073.1	1,112,712.2	386,490.0	369,355.0
OTHER															
Unidentified coccoid 3	30462.2	50770.4	39981.7	34688.9	40025.6	8567.5	18277.3	9138.7	29700.7	3807.8	4351.8	8005.1	56035.9		3807.8
TOTAL OTHER	30,462.2	50,770.4	39,981.7	34,688.9	40,025.6	8,567.5	18,277.3	9,138.7	29,700.7	3,807.8	4,351.8	8,005.1	56,035.9		3,807.8
TOTAL PHYTOPLANKTON	1,554,708.4	4,647,495.3	2,062,714.5	2,124,340.6	1,892,534.6	1,038,243.4	1,360,354.0	603,648.3	787,976.5	809,100.1	475,607.7	1,253,783.8	2,530,817.1	669,441.0	807,562.5

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

[†] See Table H-15 for synonomous name.

TABLE H-18

PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
15 FEBRUARY 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (diatoms)															
Amphiprora spp.															2401.6
Asterionella japonica			3807.8	8005.1	1778.9	48030.7		2668.4	2668.4		1067.3			16319.1	4803.1
Biddulphia alternans						5336.7							1067.3		
B. aurita				2668.4			5336.7	2668.4	4002.6	4269.4	2134.7	2134.7	2134.7		
B. longicruris															2401.6
Biddulphia spp.			7615.5											4895.7	
Campylosira cymbelliformis[†]	51405.1	11423.3	45693.4	40025.6	39136.1	104066.6	109403.3	13341.9	8005.1	8538.8	3202.0	30953.1	21347.0	19582.9	14409.2
Cerataulina bergonii					11.1	75.0		20.8	20.8	60.0		26.7	26.7	114.3	15.0
Chaetoceros elbenii		12.5								46.7					
Chaetoceros spp.				2668.4	5336.7		10673.5					3202.0	3202.0		
Climacosphenia moniligera	12.5														
Coscinodiscus lineatus	2855.8					2668.4									
C. radiatus			50.0	41.7	16.7	16.7		12.5	16.7		6.7				
Coscinodiscus spp.		11423.3	3807.8			2668.4	2668.4	5336.7		1067.3	2134.7	1067.3	3202.0	1631.9	2401.6
Cyclotella comta														1631.9	
Cyclotella sp. 2														4895.7	19212.3
Cyclotella spp.	5711.7		3807.8						1334.2					3263.8	
Cymatosira belgica						2668.4	5336.7			1067.3				1631.9	
Cymbella spp.			3807.8		1778.9										2401.6
Diploneis interrupta						2668.4									
D. smithii v. *smithii*								1334.2							
Diploneis sp. 1[†]		8567.5	7615.5	10673.5	5336.7		16010.2	4002.6	4002.6		1067.3	4269.4	2134.7	6527.6	9606.2
Eunotogramma marinum[†]			3807.8				5336.7	2668.4				2134.7			
Grammatophora marina							2668.4								
Guinardia flaccida						8.3				13.3		13.3	13.3		
Gyrosigma spp.	25.0	12.5	16.7												
Hemiaulus membranaceus								5336.7							
Leptocylindrus danicus											2134.7				
Licmophora abbreviata														1631.9	
Lithodesmium undulatum						16.7									
Melosira sulcata		8567.5		10673.5		5336.7				1067.3					2401.6
Melosira spp.														1631.9	
Navicula membranacea						16.7									
N. wawrikae	12.5			41.7	27.8	16.7	16.7	20.8	29.2	40.0	23.3	30.0	13.3	14.3	7.5
Navicula sp. 6	2855.8								2668.4	1067.3		1067.3	1067.3		
Nitzschia acicularis v. *closterioides*	5711.7		3807.8	2668.4	3557.8								4269.4	1631.9	
N. closterium	42549.3	34270.0	26654.4	56035.9	39136.1	53367.5	45362.4	62706.8	57370.0	41626.6	32020.5	51232.8	24549.0	35901.9	67243.1
N. constricta	8567.5	11423.3	15231.1			2668.4		1334.2	2668.4					11423.3	
N. delicatissima					10673.5		13341.9	2668.4	4002.6	7471.4	6404.1	1067.3	4269.4	1631.9	4803.1
N. longissima	2855.8			2668.4		2668.4		2668.4	1334.2						
N. paradoxa	262.5		133.3	150.0	533.3	525.0	266.7	70.8	479.2	226.7	156.7	120.0	186.7	278.6	420.0
N. pungens v. *atlantica*														1631.9	
N. sigmoidea	12.5	25.0	33.4	8.3	5.6	33.3	8.3	16.7	20.8	6.7		10.0	6.7	21.4	15.0
Pinnularia sp. 1[†]						2668.4						2134.7	1067.3		2401.6
Plagiogramma spp.[†]		8567.5	26654.5			2668.4	32020.5		4002.6	2134.7	3202.0	2134.7	3202.0		
Pleurosigma elongatum						8.3									
Pleurosigma sp. 1[†]		25.0	83.3	133.3	44.4	75.0	91.7	112.5	116.7	33.3	40.0	73.3	63.3	42.9	127.5
Rhaphoneis surirella	5711.7	17135.0	15231.1	5336.7	3557.8	10673.5	13341.8	4002.6	18678.6	6404.1	1067.3	6404.1	2134.7	3263.8	
Rhizosolenia alata	12.5				11.1	58.3	8.3		12.5	6.7				7.1	
R. alata f. *indica*		25.0				33.3	16.7	4.2					3.3	7.1	7.5

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

[†] See Table H-15 for synonomous name.

TABLE M-18
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
15 FEBRUARY 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Rhizosolenia bergonii				8.3											
R. calcar avis				8.3			33.3			6.7		10.0		7.1	15.0
R. cylindrus					5.6					13.3	3.3				
R. fragilissima													1067.3		
R. imbricata				16.7	55.6	91.7	41.7	12.5	16.7	33.3	13.3	26.6			15.0
R. imbricata v. *shrubsolei*	75.0	37.5	16.7		11.2	108.3	50.0	4.2	29.2	6.7	13.3	30.0	10.0	35.7	22.5
R. robusta													3.3		7.5
R. setigera		12.5	16.7		50.0	41.7	41.7	20.8	20.8	13.3	6.7		13.3	7.1	15.0
R. stolterfothii				2668.4											
Skeletonema costatum	14279.2	2855.8	26654.4	26683.8	19568.1	8005.1	10673.5	8005.1		2134.7	3202.0			27742.4	12007.7
Striatella unipunctata				16.7											
Thalassionema nitzschioides	8567.5	5711.7				2668.4	5336.7	-	2668.4				7471.4	1631.9	
Thalassiosira sp. 1	2855.8	2855.8	19038.9	16010.2						1067.3				6527.6	4803.1
Thalassiothrix delicatula									4.2		3.3				
T. frauenfeldii	25.0				66.7	41.7	8.3	33.3	83.3	180.0	96.7	13.3	26.7		67.5
T. mediterranea v. *pacifica*									12.5	13.3	16.7	3.3			7.5
Tropidoneis lepidoptera	2855.8	2855.8	11423.3	8005.1	8894.6	5336.7	24015.4		4002.6	1067.3	1067.3		5336.7	6527.6	12007.7
Unidentified centric diatom sp. 4				8.3	11.1		16.7		12.5	13.3	10.0		3.3	14.3	15.0
Unidentified centric diatoms <20μ	14279.2	22846.7	30462.2	40025.6	28462.7	53367.5	61372.6	25349.6	25349.5	20279.6	14942.9	24549.0	16010.2	21214.8	31220.0
Unidentified centric diatoms >20μ								1334.2							
Unidentified pennate diatoms <20μ	168494.4	179917.7	304622.6	146760.6	80051.2	240153.7	248158.8	110737.5	128082.0	65108.3	66175.7	92859.4	77916.5	96282.5	105667.6
Unidentified pennate diatoms >20μ	8567.5	17135.0	34270.0	18678.6	12452.4	13341.8	16010.2	13341.9	4002.6	11740.8	4269.4	9606.1	7471.4	9791.4	19212.3
Unidentified pennate diatoms >200μ														7.1	
Unidentified sigmoid diatoms >200μ				16.6	5.6			12.5			6.7		3.3		
TOTAL BACILLARIOPHYTA	354,561.3	345,705.9	594,363.8	400,706.1	260,577.3	572,198.8	627,667.8	269,847.6	275,717.9	176,825.5	144,488.6	235,173.1	189,293.5	289,404.2	320,162.5
PYRRHOPHYTA (dinoflagellates)															
Amphidinium spp.				2668.4											
Ceratium furca v. *eugrammum*						25.0				13.3	10.0	6.7	6.7		15.0
C. fusus v. *seta*						8.3				6.7	3.3		10.0		
C. teres									4.2			3.3	3.3		
Ceratium sp. 3								4.2							7.5
Exuviaella compressa						5336.7	2668.4		2668.4				1067.3	3263.8	2401.6
Gymnodinium aurantium	2855.8				1778.9		2668.4	8005.1		3202.0	1067.3	3202.0	2134.7	3263.7	
G. simplex (?)				2668.4										3263.8	
Gymnodinium sp. 2			3807.8												
Gymnodinium spp.		2855.8		2668.4	12452.4	8005.1	2668.4		6670.9	1067.3	2134.7	5336.7	8538.8		4803.1
Gyrodinium sp. 1						2668.4		1334.2		2134.7		4269.4		1631.8	2401.6
Peridinium hirobis				2668.4											2401.6
Peridinium spp.														1631.9	
Podolampas palmipes					1778.9										
Prorocentrum sp. 1†							5336.7								
Unidentified dinoflagellates		5711.7		10673.5	1778.9	13341.9	8005.1	5336.8	6670.9	3202.0	4269.4	10673.5	4269.4	9791.4	14409.2
TOTAL PYRRHOPHYTA	2,855.8	8,567.5	3,807.8	21,347.1	17,789.1	29,385.4	21,347.0	14,680.3	16,014.4	9,626.0	7,484.7	23,491.6	16,030.2	22,846.4	26,439.6

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE H-18
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
15 FEBRUARY 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
CHLOROPHYTA (green algae)															
Chlamydomonas sp.			7615.5						2668.4	2134.7	1067.3	1067.3	1067.3	4895.7	
Polyedriopsis quadrispina		2855.8													
Chlorophyte sp. 1	17135.0	14279.2	7615.5	53367.5	42694.0	21347.0	24015.4	48030.7	53367.5	49098.1	22414.3	44828.7	51232.8	16319.1	31220.0
TOTAL CHLOROPHYTA	17,135.0	17,135.0	15,231.0	53,367.5	42,694.0	21,347.0	24,015.4	48,030.7	56,035.9	51,232.8	23,481.6	45,896.0	52,300.1	21,214.8	31,220.0
CYANOPHYTA (blue-green algae)															
Anabaena spp.										20.0					7.5
Oscillatoria spp.	137.5	212.5	166.7	200.0	72.2		100.0	29.2	25.0	73.3	10.0	90.0	90.0	407.1	37.5
TOTAL CYANOPHYTA	137.5	212.5	166.7	200.0	72.2		100.0	29.2	25.0	93.3	10.0	90.0	90.0	407.1	45.0
EUGLENOPHYTA (euglenoids)															
Euglena spp.				2668.4										1631.9	
TOTAL EUGLENOPHYTA				2,668.4										1,631.9	
CRYPTOPHYTA (cryptophytes)															
Cryptophyte spp.	108521.8	145647.7	83771.2	234816.9	122745.2	154765.7	141423.9	86722.2	81385.4	61906.3	36289.9	87522.7	65108.3	97914.4	103266.1
TOTAL CRYPTOPHYTA	108,521.8	145,647.7	83,771.2	234,816.9	122,745.2	154,765.7	141,423.9	86,722.2	81,385.4	61,906.3	36,289.9	87,522.7	65,108.3	97,914.4	103,266.1
CHRYSOPHYCEAE (yellow-brown algae)															
Apedinella radians[†]	2855.8			5336.7			2668.4							1631.9	2401.6
Calycomonas ovalis														4895.7	
Meringosphaera mediterranea[†]		2855.8													
Chrysophyte sp. 2	2855.8	2855.8			5336.7	2668.4	5336.7			1067.3	1067.3	1067.3	2134.7		4803.1
DICTYOCHALES (silicoflagellates)															
Silicoflagellate spp.														1631.9	
TOTAL CHRYSOPHYCEAE	5,711.6	5,711.6		5,336.7	5,336.7	2,668.4	8,005.1			1,067.3	1,067.3	1,067.3	2,134.7	8,159.5	7,204.7
PRASINOPHYCEAE (prasinophytes)															
Pyramimonas amylifera					1778.9										
Tetraselmis sp. 1			3807.8						2668.4	1067.3	1067.3	1067.3	2134.7	4895.7	
Prasinophyte sp. 1	31414.2	59972.6	30462.2	61372.6	55146.4	37357.2	32020.5	12007.7	18678.6	21347.0	13875.5	33087.8	37357.2	34270.0	52833.9
Unidentified prasinophytes	2855.8	5711.7		2668.4	1778.9		2668.4			1067.3					
TOTAL PRASINOPHYCEAE	34,270.0	65,684.3	34,270.0	64,041.0	58,704.2	37,357.2	34,688.9	12,007.7	21,347.0	23,481.6	14,942.8	34,155.1	39,491.9	39,165.7	52,833.9
UNIDENTIFIED PHYTOFLAGELLATES															
Phytoflagellate sp. 4		2855.8		5336.7	7115.6	2668.4		6670.9	4002.6			2134.7			
Phytoflagellate sp. 6					1778.9										
Phytoflagellate sp. 7[†]	11423.3						2668.4	1334.2		3202.0		1067.3	4269.4		
Unidentified phytoflagellates >10μ	2855.8			2668.4					2668.4	5336.7	1067.3	1067.3	5336.7		
Unidentified phytoflagellates <10μ	476924.8	482636.5	571167.5	555021.9	389582.7	568363.8	563027.0	320204.9	372238.2	265770.1	219874.1	342619.3	296723.2	520578.4	304995.2
TOTAL UNIDENTIFIED PHYTOFLAGELLATES	491,203.9	485,492.3	571,167.5	563,027.0	398,477.2	571,032.2	565,695.4	328,210.0	378,909.2	274,308.8	220,941.4	346,888.6	306,329.3	520,578.4	304,995.2
OTHERS															
Unidentified coccoid 3	8567.5	5711.7	11423.3	5336.7	16010.2	16010.2	16010.2	4002.6	5336.8	1067.3	1067.3	2134.7	3202.0	4895.7	
TOTAL OTHERS	8,567.5	5,711.7	11,423.3	5,336.7	16,010.2	16,010.2	16,010.2	4,002.6	5,336.8	1,067.3	1,067.3	2,134.7	3,202.0	4,895.7	

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

[†] See Table H-15 for synonomous name.

TABLE M-18
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
15 FEBRUARY 1977

SPECIES	STATION AND DEPTH[b]																	
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
TOTAL PHYTOPLANKTON	1,022,964.4	1,079,868.5	1,314,201.3	1,350,847.4	922,406.1	1,404,764.9	1,438,953.6	763,530.3	834,771.6	599,608.9	449,773.6	776,419.1	673,980.0	1,006,218.3	846,167.0

[a] Values are mean of three replicates.
[b] S = Surface; B = Bottom.
† See Table M-15 for synonomous name.

TABLE M-19

PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
11 MARCH 1977

	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
SPECIES	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (diatoms)															
Amphora spp.					2001.3			2287.2			889.5				3807.8
Asterionella japonica	49501.2	45693.4	35148.8	80051.2	212135.8	31414.2	79963.4	5718.0	21347.0	9784.0	21347.0	16010.3	96061.5	34270.0	79963.4
A. kariana												6404.1			
Bacteriastrum delicatulum											2668.4	3202.0			
Biddulphia alternans									2668.4		889.5		5336.7		19038.9
B. aurita	1903.9				4002.5	5711.7	11423.3						29352.1		11423.4
B. longicruris															3807.8
B. mobiliensis					8005.1	2855.8									
B. rhombus							5711.7								
Biddulphia spp.	1903.9						5711.7		26683.7						15231.1
Campylosira cymbelliformis[†]	9519.4	19990.8		11207.2	140089.6	5711.7	22846.7	1143.6		1778.9			162770.8	14279.2	118041.3
Cerataulina bergonii			16.7	110.0	437.5	25.0		114.3	383.3	116.7	105.6	40.0	533.3	162.5	50.0
Cerataulina sp. 1											16.7				
Chaetoceros eibenii				30.0	50.0			7.1	33.3	11.1		40.0	283.3		50.0
C. laciniosus				1601.0	16010.2	8567.5	22846.7	13723.1	18678.6	3557.8	4447.3	27217.4	13341.8	5711.7	45693.4
C. lorenzianus				33621.5	12007.7	5711.7			10673.5	8894.6	6226.2	3202.0	13341.8	17135.0	53308.9
C. wighami							28558.4								
Chaetoceros spp.	7615.5	14279.2		12808.2	18011.5	14279.2	11423.3	3430.8	5336.7	2668.4	1778.9	9606.1	2668.4	11423.3	53308.9
Chaetoceros resting spore					4002.6		5711.7						5336.7	8567.5	3807.8
Climacodium frauenfeldianum	75.0							57.1				80.0		100.0	
Climacosphenia moniligera			8.3												
Cocconeis spp.					2001.3										
Corethron hystrix	1903.9														
Coscinodiscus lineatus				3202.0	2001.3				2668.4						3807.8
C. marginatus		2855.8													
C. radiatus			8.3		12.5				16.7				16.7		
Coscinodiscus spp.	1903.9				2001.3	2855.8				889.5			8005.1	2855.8	
Cyclotella spp.		2855.8	2929.1				5711.7				889.5		8005.1		3807.8
Cymatosira belgica					6003.8	8567.5			2668.4				2668.4		
Cymbella spp.										889.5			2668.4		
Diploneis sp. 1	9519.4	5711.7	5858.1	8005.1	24015.4	5711.7	5711.7	4574.4	13341.9	3557.8	6226.2	9606.1	58704.2	8567.5	41885.6
Eucampia cornuta	33.3	50.0		970.0	1200.0	412.5	475.0	392.9	1683.3	94.4	405.6	1250.0	1033.3	425.0	550.0
E. zoodiacus											77.8				
Eunotogramma marinum	7615.6	2855.8				2855.8					889.5				
Fragilaria sp.															95194.6
Guinardia flaccida	83.3	50.0	50.0	250.0	837.5	187.5	425.0	335.7	416.7	133.3	138.9	300.0	883.3	125.0	716.7
Gyrosigma spp.		37.5	25.0			12.5									
Hemiaulus hauckii				3202.1	2001.3			1143.6	2668.4	889.5	2668.4	1601.0			
H. membranaceus			2929.1		8005.1										
Lauderia borealis					10006.4	11423.3				7115.7			8005.1		3807.8
Leptocylindrus danicus	30462.2	25702.5	23432.5	57636.9	194124.2	51405.1	171350.3	17153.8	141423.9	23125.9	47141.3	44828.7	386914.3	68540.1	335084.9
Lithodesmium undulatum									16.7						

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

[†] See Table M-15 for synonomous name.

TABLE M-19
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
11 MARCH 1977

	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
SPECIES	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Melosira sulcata			2929.1	3202.0	16010.3								16010.2		
Melosira spp.	1903.9														
Navicula halophila v. *halophila*															3807.8
N. membranacea					37.5			7.1	100.0			20.0			
N. wavrikae		12.5	8.3	40.0	87.5	50.0	75.0	21.4	66.7	16.7	22.2	20.0	100.0	50.0	133.3
Navicula sp. 6					2001.3						889.5		5336.7		
Nitzschia acicularis v. *closterioides*	7615.6	2855.8			10006.4	2855.8				889.5			5336.7		7615.5
Nitzschia closterium	3807.8		2929.1	16010.3	48030.7	5711.7	17135.0	1143.6	5336.7	4447.3	7115.6	6404.1	42694.0	2855.8	60924.5
N. constricta		2855.8		3202.1	2001.3	2855.8	11423.3				889.5		5336.7	5711.7	7615.5
N. delicatissima	20942.8	5711.7	17574.4	25616.4	66042.3	31414.2	45693.4	11435.9	58704.2	37357.3	30241.6	51232.8	56035.8	31414.2	30462.2
N. fasciculata						2855.8							5336.7		
N. longissima		2855.8													
N. paradoxa			16.7		500.0	137.5	100.0		483.3		300.0		1166.7	62.5	716.7
N. pungens v. *atlantica*	57116.7	17135.0	8787.2	86455.4	108069.2	39981.7	39981.7	67471.8	114740.1	32909.9	27573.2	67243.0	74714.5	34270.0	99002.3
N. sigmoidea			8.3		50.0	25.0		7.1	33.3		5.6	10.0	200.0		66.7
Pinnularia sp. 1					2001.3				2668.4	889.5			5336.7		
Plagiogramma spp.†	3807.8			1601.0	6003.8							3202.0	18678.6		7615.6
Pleurosigma elongatum														12.5	100.0
Pleurosigma sp. 1†	75.0	62.5	50.0	10.0	275.0	150.0	375.0	14.3	50.0		27.8	10.0	716.7	87.5	466.7
Rhaphoneis surirella	5711.7	11423.3	2929.1	4803.1	12007.7		11423.3	2287.2	8005.1	1778.9	7115.7		61372.6	5711.7	41885.6
Rhizosolenia alata	100.0	50.0	83.3	120.0	225.0	175.0	275.0	121.4	350.0	55.6	161.1	190.0	516.7	175.0	783.3
R. alata f. *indica*	16.7		8.3	20.0	100.0	12.5	75.0	7.1	66.7	33.3	16.7	50.0	133.3		66.7
R. bergonii				10.0	25.0				16.7		5.6				33.3
R. calcar avis	50.0	125.0	50.0	80.0	100.0	100.0	350.0	114.3	183.3		5.6	30.0	350.0	62.5	266.7
R. costracanei												10.0			
R. cylindrus	33.3			40.0				14.3	83.3	11.1	33.3	10.0			16.7
R. fragilissima	9519.5	14279.2	2929.1	16010.2	4002.6	2855.8	5711.7	4574.4	8005.1			6404.1	5336.7	8567.5	
R. imbricata	41.7	12.5	8.3	150.0	75.0	87.5	225.0	21.4	66.7	5.6	27.8	120.0	200.0	50.0	200.0
R. imbricata v. *shrubsolei*	416.7	400.0	200.0	130.0	462.5	450.0	750.0	314.3	266.7	38.9	77.8	110.0	650.0	562.5	716.7
R. setigera	41.7	25.0	25.0	140.0	1287.5	275.0	650.0	14.3	466.7	11.1	16.7	70.0	4316.7	100.0	1600.0
R. stolterfothii		5711.7	8787.2	16010.2	48030.8	8567.5	5711.7	10292.3	34688.9	6226.2	4447.3	8005.1	21347.0	8567.5	11423.3
Skeletonema costatum	17135.0	19990.9	2929.1	11207.2	50032.0	5711.7	39981.7		29352.1	16010.2	3557.8	8005.1	50699.1	11423.3	64732.3
Stephanopyxis palmeriana										11.1					
Streptotheca thamensis					25.0										
Surirella robusta														12.5	
Thalassionema nitzschioides	1903.9		2929.1	4803.1	2001.3			2287.2		889.5	4447.3		5336.7		
Thalassiosira sp.1	1903.9	2855.8		1601.0	4002.6	5711.7							5336.7		
Thalassiosira spp.											1778.9			2855.8	
Thalassiothrix delicatula															16.7

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-19
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
11 MARCH 1977

	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
SPECIES	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Thalassiothrix frauenfeldii	208.3	12.5	16.7	1400.0	2137.5	550.0	1100.0	485.7	900.0	372.2	455.6	1130.0	1333.3	762.5	600.0
T. mediterranea v. *pacifica*		12.5		50.0	112.5	50.0		42.9	100.0	44.4	77.8	90.0		50.0	33.3
Tropidoneis lepidoptera	1903.9	2855.8		40025.6	12007.7	2855.8	11423.3	1143.6	10673.5	6226.2	8005.1	1601.0	29352.1	5711.7	
Unidentified centric diatom sp. 4	33.3	25.0	8.3	80.0	637.5	225.0	275.0	107.1	566.7	77.8	38.9	200.0	466.7	462.5	366.7
Unidentified centric diatoms <20μ	17135.0	17135.0	29290.7	12808.2	40025.6	17135.0	51405.1	8005.1	37357.2	5336.7	6226.2	6404.1	96061.5	14279.2	83771.2
Unidentified pennate diatoms <20μ	131368.5	94242.6	90801.0	80051.3	158101.2	188485.3	257025.4	49174.4	50699.1	35578.3	31131.0	35222.5	368235.7	59972.6	274160.4
Unidentified pennate diatoms >20μ	7615.6	2855.8	11716.3	6404.1	18011.5	14279.2	11423.3		2668.4	2668.4	3557.8		16010.2		38077.8
Unidentified pennate diatoms >200μ			8.3				25.0			5.6					
TOTAL BACILLARIOPHYTA	412,448.8	323,584.2	255,428.8	544,776.4	1,283,491.0	491,273.0	890,484.5	209,189.8	617,407.8	215,398.4	235,055.3	319,181.5	1,709,985.3	365,953.6	1,629,665.4
PYRRHOPHYTA (dinoflagellates)															
Amphidinium sp. 2						2855.8									
Amphidinium spp.		2855.8													
Amphisolenia sp. 1											5.6				
Ceratium buceros f. *molle*				10.0			25.0	14.3				10.0		62.5	
C. furca v. *eugrammum*						12.5		28.6		16.7	5.6	20.0		25.0	
C. fusus v. *seta*		12.5	16.7	20.0	25.0	87.5	25.0			16.7	5.6	30.0			
C. pulchellum				10.0		12.5						10.0			
C. teres										11.1	5.6	20.0			
C. trichoceros					12.5		50.0	7.1	16.7	5.6	11.1				
C. tripos						12.5		14.3			5.6				
Ceratium sp. 3	8.3				12.5			7.1	16.7	11.1					
Exuviaella compressa	1903.9			1601.0							889.5		2668.4		
Exuviaella spp.												1601.0		2855.8	
Gymnodinium aurantium		2855.8			2001.3	5711.7				889.5	889.5	1601.0			11423.3
G. galesianum					2001.3						889.5	1601.0			
G. simplex		2855.8	2929.1				5711.7							2855.8	
Gymnodinium sp. 4					4002.5										
Gymnodinium spp.	5711.7			6404.1		2855.8	17135.0			4447.3	1778.9	8005.1	5336.7	2855.8	3807.8
Gyrodinium sp. 1	1903.9					2855.8		1143.6		889.5			2668.4		3807.8
Peridinium depressum			8.3	20.0	50.0	12.5	75.0	7.1	2668.4					25.0	33.3
P. hirobis				1601.0							889.5				
P. trochoideum								3430.8			889.5				
Peridinium spp.						2855.8									
Prorocentrum minimum									2668.4						
Prorocentrum spp.				1601.0	2001.3					889.5					
Unidentified dinoflagellates	1903.9			12808.2	6003.8	5711.7		5717.9	10673.5	8894.6	8005.1	8005.1	8005.1		19038.9
TOTAL PYRRHOPHYTA	11,431.7	8,579.9	2,954.1	24,075.3	16,110.2	22,984.1	23,021.7	10,370.8	16,043.7	16,071.6	14,270.6	20,903.2	18,678.6	8,679.9	38,111.1

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom:

† See Table M-15 for synonomous name.

TABLE H-19
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
11 MARCH 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
CHLOROPHYTA (green algae)															
Chlamydomonas sp.		8567.5									1778.9				
Chlorophyte sp. 1	17135.0	8567.5	2929.1	12808.2	10006.4	5711.7	22846.7	6861.5	5336.7	14231.3	12452.4	6404.1	5336.7	8567.5	22846.7
Filamentous chlorophytes	91.7												33.3		
TOTAL CHLOROPHYTA	17,226.7	17,135.0	2,929.1	12,808.2	10,006.4	5,711.7	22,846.7	6,861.5	5,336.7	14,231.3	14,231.3	6,404.1	5,370.0	8,567.5	22,846.7
CYANOPHYTA (blue-green algae)															
Anabaena spp.												10.0			
Oscillatoria spp.	666.7		50.0	60.0	187.5	125.0		1107.2		66.7	16.7		66.7		
TOTAL CYANOPHYTA	666.7		50.0	60.0	187.5	125.0		1107.2		66.7	16.7	10.0	66.7		
EUGLENOPHYTA (euglenoids)															
Euglena spp.				3202.0											
TOTAL EUGLENOPHYTA				3,202.0											
CRYPTOPHYTA (cryptophytes)															
Cryptophyte spp.	19038.9	11423.3	38077.8	46429.7	52033.3	28558.3	22846.7	67471.8	56035.8	17789.2	12452.4	44828.7	56035.9	42837.5	64732.3
TOTAL CRYPTOPHYTA	19,038.9	11,423.3	38,077.8	46,429.7	52,033.3	28,558.3	22,846.7	67,471.8	56,035.8	17,789.2	12,452.4	44,828.7	56,035.9	42,837.5	64,732.3
CHRYSOPHYCEAE (yellow-brown algae and silicoflagellates)															
Apedinella radians†								1143.6							
Calycomonas ovalis														2855.8	
Chrysophyte sp. 2					4002.5					1778.9		1601.0			
TOTAL CHRYSOPHYCEAE					4,002.5			1,143.6		1,778.9		1,601.0		2,855.8	
PRASINOPHYCEAE (prasinophytes)															
Tetraselmis sp. 1	3807.8			1601.0		2855.8		10292.3		889.5		1601.0		11423.3	3807.8
Prasinophyte sp. 1	5711.7	5711.7	8787.2	14409.2	14009.0			6861.6	2668.4	4447.3	889.5	8005.1	5336.7	8567.5	
Unidentified prasinophytes		2855.8				5711.7									3807.8
TOTAL PRASINOPHYCEAE	9,519.5	8,567.5	8,787.2	16,010.2	14,009.0	8,567.5		17,153.9	2,668.4	5,336.8	889.5	9,606.1	5,336.7	19,990.8	7,615.6
UNIDENTIFIED PHYTOFLAGELLATES															
Phytoflagellate sp. 4	1903.9					2855.8		2287.2							
Unidentified phytoflagellates >10μ	1903.9											3202.1			
Unidentified phytoflagellates <10μ	222755.3	231322.9	254828.6	296189.6	286183.2	262737.0	479780.7	228717.8	373572.4	158323.6	159213.0	212936.3	325541.7	354123.8	536897.4
TOTAL UNIDENTIFIED PHYTOFLAGELLATES	226,563.1	231,322.9	254,828.6	296,189.6	286,183.2	265,592.8	479,780.7	231,005.0	373,572.4	158,323.6	159,213.0	216,138.4	325,541.7	354,123.8	536,897.4
OTHERS															
Unidentified coccoid 3	11423.4	5711.7	2929.1	1601.0	16010.2	5711.7	11423.3	1143.6		1778.9		4803.1	18678.6	5711.7	34270.0
TOTAL OTHERS	11,423.4	5,711.7	2,929.1	1,601.0	16,010.2	5,711.7	11,423.3	1,143.6		1,778.9		4,803.1	18,678.6	5,711.7	34,270.0
TOTAL PHYTOPLANKTON	708,318.8	606,324.5	565,984.7	945,152.4	1,682,033.3	828,523.9	1,450,403.6	545,447.2	1,071,064.8	430,775.4	436,128.8	623,476.1	2,139,693.5	808,720.6	2,334,138.5

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table H-15 for synonomous name.

TABLE H-20

PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
19 APRIL 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (diatoms)															
Amphora spp.			5077.0				2001.3								
Asterionella japonica	281775.9	199908.6	347777.5	225744.5	533674.9	181449.5	258165.2	80051.2	48030.8	13875.5	49098.1	44828.7	107802.3	93926.8	85388.0
Bacteriastrum delicatulum			2538.5									1067.3		1067.3	
Biddulphia alternans	2538.5	3807.8	2538.5	1601.0	2668.4	2668.4		2134.7		1067.3		1067.3		2134.7	
B. aurita	5077.0	1903.9		1601.0	5336.7	2668.4			889.5		2134.7	1067.3			1067.3
B. longicruris	2538.5							1067.3							
B. mobiliensis	2538.5		2538.5												
Biddulphia spp.		1903.9	12692.6	4803.1	5336.7										
Campylosira cymbelliformis[‡]	2538.5			9606.1	8005.1	77382.9	16010.3	9606.1	3557.8	5336.7	7471.4	2134.7	4269.4	2134.7	1067.3
Cerataulina bergonii	233.3	33.3	11.1	550.0	500.0	1516.7	2112.5	1006.7	1572.2	106.7	53.3	1520.0	980.0	1613.3	1713.3
Chaetoceros anastomosans							8005.1								3202.0
C. eibenii				20.0				20.0		6.7		6.7	13.3		
C. laciniosus								1067.3							
C. laevis															2134.7
C. lorenzianus						5336.7	2001.3								3202.0
Chaetoceros spp.			10154.1		13341.9	10673.5		18144.9	5336.7			3202.0	2134.7	19212.3	10673.5
Chaetoceros resting spore	7615.6														
Cocconeis fluviatilis v. *fluviatilis*		1903.9													
C. pediculus v. *pediculus*	2538.5														
Corethron hystrix						2668.4									
Coscinodiscus lineatus												1067.3			
C. radiatus			33.3												
Coscinodiscus spp.						5336.7					1067.3				
Cyclotella spp.				4803.1				1067.3							
Cymatosira belgica			5077.0						8894.6						
Cymbella spp.	2538.5						4002.5	2134.7		1067.3					
Dactyliosolen mediterraneus								80.0							
Diploneis didyma v. *didyma*				1601.0		2668.4							1067.3		
Diploneis smithii v. *smithii*												2134.7			
Diploneis sp. 1[‡]	5077.1	1903.9	2538.5	1601.0	5336.7	2668.4		1067.3	1778.9	1067.3	4269.4	3202.0	6404.1	1067.3	4269.4
Eucampia cornuta					33.3	33.3	75.0					13.3	13.3	6.7	33.3
Eunotogramma marinum[‡]			5077.0											1067.3	
Fragilaria ? sp.	15231.1	11423.3													
Guinardia flaccida	44.4					33.3	62.5	33.3	122.2		6.7	86.7	40.0		33.3
Gyrosigma spp.		16.7	11.1												
Hemiaulus hauckii								1067.3							
H. sinensis								2134.7							
Leptocylindrus danicus	2538.5			8005.1	8005.1	24015.4		6404.1	8005.1			7471.4			5336.7
Melosira sulcata															2134.7
Navicula halophila v. *halophila*			2538.5												
N. lyra v. *lyra*							12.5								
N. wawrikae	577.8	300.0	555.5	280.0	466.7	716.7	937.5	560.0	611.1	66.7	93.3	893.3	400.0	933.3	1113.3

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

[‡] See Table H-15 for synonomous name.

TABLE H-20
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
19 APRIL 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Navicula sp. 6								1067.3		1067.3		1067.3		1067.3	1067.3
Nitzschia acicularis v. *closterioides*	5077.0	3807.8	10154.1	1601.0			2001.3							1067.3	
N. closterium	33000.8	20942.8	43154.9	16010.3	32020.5	13341.8	22014.1	5336.7	4447.3	4269.4	5336.7	4269.4	3202.0	12808.2	8535.8
N. constricta	2538.5	1903.9	7615.6			2668.4					1067.3				
N. delicatissima	66001.6	30462.3	71078.6	16010.2	104066.6	42694.0	110070.4	13875.5	19568.1		4269.4	25616.4	1067.3	13875.5	27751.1
N. filiformis															1067.3
N. paradoxa							162.5		61.1		80.0	86.7	80.0	186.7	120.0
N. pungens v. *atlantica*						2668.4	8005.1							5336.7	
Nitzschia sigmoidea									5.6						
N. spathulata		3807.8													
Nitzschia sp. 2			11.1												
Pinnularia sp. 1†					8005.1		2001.3		889.5						
Plagiogramma spp.†	5077.1	11423.4		1601.0	5336.7		2001.3	1067.3	889.5			1067.3			
Pleurosigma elongatum		8.3									13.3				
Pleurosigma sp. 1†	11.1	8.3	44.4	20.0				33.3	22.2	60.0	13.3	26.7	60.0	40.0	26.7
Rhaphoneis surirella		3807.8		1601.0	2668.4	2668.4				2134.7		3202.0		1067.3	2134.7
Rhizosolenia alata	11.1	75.0	122.2	50.0	133.3	66.7	225.0	53.3	161.1	20.0	13.3	286.7	13.3	73.3	80.0
R. alata f. *indica*						33.3			5.6	6.7		6.7			
R. bergonii	33.3	8.3	66.7					6.7	11.1					6.7	
R. calcar avis			33.3	30.0	16.7	133.3	237.5	60.0	205.5			300.0		113.3	240.0
R. fragilissima	10154.1	11423.4	12692.6		8005.1	8005.1	8005.1	5336.7				2134.7	1067.3	2134.7	7471.4
R. imbricata	77.8	41.7	33.3	150.0	100.0	200.0	150.0	186.7	600.0	73.3	226.7	386.7	206.7	186.7	226.7
R. imbricata v. *shrubsolei*	33.3	33.3	22.2	110.0	33.3	50.0	100.0	46.7	77.8	6.7	86.7	213.3	26.7	46.7	120.0
R. robusta															6.7
R. setigera	22.2	8.3	1466.7	20.0	16.7	116.7	1650.0		5.6				6.7	20.0	33.3
R. stolterfothii	15231.1	13327.2	15231.1	19212.3	10673.5	16010.2	12007.7	7471.4	18678.6	1067.3	3202.0	17077.6	11740.8	19212.3	4269.4
Skeletonema costatum	20308.2	9519.5	27923.7	41626.6	42694.0	5336.7	58037.1		4447.3			5336.7			
Streptotheca thamensis								6.7							
Synedra sp. 1											6.7				
Thalassionema nitzschioides		7615.6			5336.7			1067.3	1778.9	9606.1		2134.7	5336.7	1067.3	3202.0
Thalassiosira sp. 1		3807.8	5077.0				6003.8								
Thalassiosira spp.	15231.2	1903.9													
Thalassiothrix delicatula							12.5	6.7				6.7			6.7
T. frauenfeldii	1233.3	925.0	1277.8	560.0	1183.3	1083.3	1675.0	473.3	422.2	106.7	106.7	773.3	646.7	813.3	680.0
T. mediterranea v. *pacifica*	888.9	425.0	588.9	360.0	933.3	1116.7	1750.0	506.7	483.4	40.0	80.0	940.0	540.0	1060.0	1233.3
Tropidoneis lepidoptera	17769.7	5711.7	2538.5	4803.1	13341.9	21347.0	16010.2	12808.2	6226.2	1067.3	1067.3	1067.3	2134.7		5336.7
Unidentified centric diatom sp. 4	11.1							6.7	11.1	13.3		140.0			13.3
Unidentified centric diatoms <20μ	30462.3	20942.8	27923.7	9606.1	26683.7	18678.6	32020.5	10673.5	4447.3	3202.0	4269.4	4269.4	6404.1	9606.1	
Unidentified centric diatoms >20μ							2001.3					1067.3			10673.5

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table H-15 for synonomous name.

TABLE II-20
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
19 APRIL 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Unidentified pennate diatoms <20μ	134541.7	127560.7	172619.5	75248.2	181449.5	122745.2	126080.7	54434.8	49809.7	41626.6	55502.2	25616.4	32020.5	44828.7	42694.0
Unidentified pennate diatoms >20μ	30462.3	19038.9	38077.8	6404.1	18678.6	18678.6	14009.0	5336.7	2668.4	2134.7	4269.4	4269.4	4269.4	7471.4	1067.3
Unidentified pennate diatoms >200μ			11.1						5.6		13.3				6.7
TOTAL BACILLARIOPHYTA	721,579.4	521,645.8	836,923.5	455,239.8	1,044,082.4	597,479.1	719,617.1	247,509.1	194,727.6	89,096.3	143,817.9	171,125.4	191,947.3	245,253.2	239,435.7
PYRRHOPHYTA (dinoflagellates)															
Amphidinium sp. 2										1067.3					
Amphidinium spp.			2538.5						889.5						
Ceratium buceros f. *molle*									5.6					13.3	
C. furca v. *eugrammum*	11.1	25.0	11.1	30.0	33.3	33.3	37.5	26.7	27.8	13.3		13.3		13.3	
C. fusus				10.0			12.5								
C. fusus v. *seta*													6.7	6.7	
C. pulchellum												6.7		6.7	
C. tores				10.0			25.0		16.7	13.3		6.7	6.7	20.0	
Ceratium trichoceros									5.6						
C. tripos						33.3			16.7						
Ceratium sp. 3	11.1				16.7	16.7							1067.3		
Dinophysis exigua												6404.1	3202.0	2134.7	1067.3
Gymnodinium aurantium	2538.5	1903.9	2538.5				4002.5	3202.0	7115.7	4269.4	5336.7				
G. galesianum							2001.3								
G. simplex (?)		1903.9													
Gymnodinium sp. 2		1903.9													
Gymnodinium sp. 4	2538.5	1903.9				2668.4						2134.7	8538.8	2134.7	7471.4
Gymnodinium spp.	5077.0		5077.0	1601.0	8005.1	10673.5	10006.4	1067.3	5336.7	2134.7	3202.0			1067.3	1067.3
Gyrodinium sp. 1									889.5						20.0
Notiluca sp.											20.0				
Peridinium hirobis				4803.1	2668.4	2668.4									
P. inconspicuum f. *armatum*			10154.1												
P. trochoideum			2538.5					1067.3	889.5						
Peridinium spp.		3807.8	7615.6							1067.3					1067.3
Prorocentrum minimum															
Prorocentrum spp.								1067.3			1067.3	8538.8	4269.4	8538.8	10673.5
Unidentified dinoflagellates	2538.5	19038.9	5077.1	8005.1	8005.1	10673.5	22014.1	8538.8	8005.1	6404.1	17077.6	17,104.3	17,090.9	13,935.5	21,366.8
TOTAL PYRRHOPHYTA	12,714.7	30,487.3	35,550.4	14,459.2	18,728.6	26,767.1	38,099.3	14,969.4	23,198.4	14,969.4	26,703.6				
CHLOROPHYTA (green algae)															
Chlamydomonas sp.	2538.5														
Chlorophyte sp. 1	40616.3	64732.3	96463.8		16010.2	21347.0	12007.7	17077.5	11562.9	12808.2	39491.9	22414.3	8538.8	6404.1	23481.7
Filamentous chlorophytes	144.4														
TOTAL CHLOROPHYTA	43,299.2	64,732.3	96,463.8		16,010.2	21,347.0	12,007.7	17,077.5	11,562.9	12,808.2	39,491.9	22,414.3	8,538.8	6,404.1	23,481.7

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

[‡] See Table M-15 for synonomous name.

TABLE H-20
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
19 APRIL 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
CYANOPHYTA (blue-green algae)															
Oscillatoria spp.	166.7	66.7	344.5	190.0	266.7	150.0	125.0		666.7	126.7	26.7			13.3	1093.3
TOTAL CYANOPHYTA	166.7	66.7	344.5	190.0	266.7	150.0	125.0		666.7	126.7	26.7			13.3	1,093.3
EUGLENOPHYTA (euglenoids)															
Euglena spp.			2538.5		2668.4	2668.4			889.5						
TOTAL EUGLENOPHYTA			2,538.5		2,668.4	2,668.4			889.5						
CRYPTOPHYTA (cryptophytes)															
Cryptophyte spp.	30462.3	26654.5	48231.9	46429.7	74714.5	96061.5	88056.4	28818.4	43383.4	60838.9	74714.5	13875.5	27751.1	43761.3	45896.0
TOTAL CRYPTOPHYTA	30,462.3	26,654.5	48,231.9	46,429.7	74,714.5	96,061.5	88,056.4	28,818.4	43,583.4	60,838.9	74,714.5	13,875.5	27,751.1	43,761.3	45,896.0
CHRYSOPHYCEAE (yellow-brown algae and silicoflagellates)															
Calycomonas ovalis			2538.5												
Chrysophyte sp. 2									1778.9						
Chrysophyte sp. 3				4803.1				53367.5		294588.5	1067.3		7471.4	67243.0	
TOTAL CHRYSOPHYCEAE			2,538.5	4,803.1				53,367.5	1,778.9	294,588.5	1,067.3		7,471.4	67,243.0	
PRASINOPHYCEAE (prasinophytes)															
Tetraselmis sp. 1	15231.1	1903.9	12692.6			2668.4	4002.5		1778.9					3202.0	
Prasinophyte sp. 1	10154.1	5711.7	20308.2	6404.1	10673.5	2668.4	30019.2	5336.7	9784.0	21347.0	18144.9	3202.0	3202.0	9606.1	4269.4
Unidentified prasinophytes	5077.1	3807.8	5077.0							1067.3					
TOTAL PRASINOPHYCEAE	30,462.3	11,423.4	38,077.8	6,404.1	10,673.5	5,336.8	34,021.7	5,336.7	11,562.9	22,414.3	18,144.9	3,202.0	3,202.0	12,808.1	4,269.4
UNIDENTIFIED PHYTOFLAGELLATES															
Phytoflagellate sp. 4		1903.9				5336.7							1067.3	1067.3	1067.3
Phytoflagellate sp. 7		1903.9				2668.4	2001.3		889.5		2134.7				
Unidentified phytoflagellates >10μ	2538.5			4803.1	5336.7	8005.1				1067.3	5336.7	1067.3	1067.3	1067.3	
Unidentified phytoflagellates <10μ	314776.7	226563.1	436625.8	163304.5	290852.8	384245.9	356228.0	120610.5	138755.5	260433.3	399188.8	182516.8	145159.6	230547.6	138755.5
TOTAL UNIDENTIFIED PHYTOFLAGELLATES	317,315.2	230,370.9	436,625.8	168,107.6	296,189.5	400,256.1	358,229.3	120,610.5	139,645.0	261,500.6	406,660.2	183,584.1	147,294.2	232,682.2	139,822.8
OTHER															
Unidentified coccoid 3		3807.8	15231.1	22414.3	2668.4	13341.8	10006.4	4269.4	3557.8	2134.7	6404.1	5336.7	4269.4	6404.1	13875.5
TOTAL OTHER		3,807.8	15,231.1	22,414.3	2,668.4	13,341.8	10,006.4	4,269.4	3,557.8	2,134.7	6,404.1	5,336.7	4,269.4	6,404.1	13,875.5
TOTAL PHYTOPLANKTON	1,155,999.8	889,188.7	1,512,525.8	718,047.8	1,466,002.2	1,163,407.8	1,260,162.9	491,958.5	431,173.1	758,477.6	717,031.1	416,642.3	407,565.1	628,504.8	489,241.2

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table H-15 for synonomous name.

TABLE M-21

PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
10 MAY 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (diatoms)															
Amphora spp.			1903.9												
Asterionella japonica	5711.7	4153.9	1903.9	2287.2	6003.9	2668.4	16010.2		4803.1			1334.2	3430.8		1000.6
Biddulphia alternans						1334.2			1601.0		1778.9		2287.2		
B. aurita		1384.6								1334.2					2001.3
B. longicruris													1143.6		
B. mobiliensis				1143.6											
Biddulphia spp.							1334.2								
Campylosira cymbelliformis[†]				4574.4		14676.1		1334.2	9606.1	6670.9	7115.6	8005.1	1143.6		1000.6
Cerataulina bergonii							25.0								18.8
Chaetoceros elbenii								8.3							
C. peruvianus				1143.6											
Chaetoceros spp.					11007.0							5336.7			
Climacodium frauenfeldianum									20.0						
Cocconeis spp.									1601.0						
Coscinodiscus radiatus															12.5
Coscinodiscus spp.			1903.9				1334.2								1000.6
Cyclotella spp.						1334.2									
Cymatosira belgica						1334.2			3202.0						
Cymbella spp.		4153.9	5711.7						1601.0		1778.9				
Diploneis smithii v. *smithii*				1143.6									1143.6		1000.6
Diploneis sp. 1[†]		2769.3	1903.9		1000.6	1334.2		2668.4	3202.0			1334.2		1000.6	1000.6
Eucampia cornuta					3.1										
Eunotogramma marinum[†]	1903.9		1903.9												
Guinardia flaccida				10.7	15.6		50.0		10.0						75.0
Gyrosigma spp.	8.3	12.1	91.7												
Licomophora abbreviata				1143.6					1601.0			1334.2			
Melosira sulcata								2668.4		1334.2			2287.2		5003.2
Navicula lyra v. *lyra*			8.3												
N. membranacea													21.4		
N. wawrikae	25.0	12.1		14.3	15.6	25.0	58.3	25.0	20.0	58.3		58.3	35.7	50.0	75.0
Navicula sp. 6											1778.9				
Nitzschia acicularis v. *closterioides*		1384.6	1903.9		1000.6	2668.4	5336.8	1334.2	4803.1				1143.6		
N. closterium	17135.0	33231.6	34270.0	16010.3	25016.0	14676.0	33354.7	13341.9	27217.4	13341.8	26683.7	8005.1	19441.0	5003.2	14008.9
N. constricta											1778.9				
N. delicatissima	5711.7	4153.9	13327.2	51461.5	31019.8	22681.2	22681.2	14676.1	16010.2	13341.9	32020.5	42694.0	13723.1	14009.0	20012.8
N. longissima			1903.9						1601.0						
N. paradoxa									100.0						
N. pungens v. *atlantica*		2769.3					4002.6								
N. sigmoidea									10.0						
N. spathulata		2769.3													
Pleurosigma sp. 1[†]		24.3	8.3	3.6			8.3		10.0		11.1	8.3			
Rhaphoneis surirella	1903.9	4153.9	1903.9	1143.6		2668.4	2668.4				1778.9				
Rhizosolenia alata		12.1				8.3			10.0						
R. calcar avis				3.6	3.1	33.3	25.0		20.0				7.1	12.5	25.0
R. fragilissima					2001.3										3001.9
R. imbricata							25.0		50.0				7.1		31.3
R. imbricata v. *shrubsolei*	8.3	6.1		7.1		8.3			10.0	8.3		25.0	42.9		62.5

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

[†] See Table M-15 for synonomous name.

TABLE M-21
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
10 MAY 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Rhizosolenia robusta									10.0						
R. setigera		30.3	8.3	3.6	6.3									6.3	
R. stolterfothii							1334.2								1000.6
Skeletonema costatum	45693.4	120464.4	123753.0	59466.6	97062.1	224143.5	456292.0	46696.5	54434.8	9339.3	3557.8	53367.5	97205.1	40025.6	256163.9
Stauroneis anceps v. *americana*				1143.6	1000.6										
Synedra sp. 1									10.0			8.3	28.6	12.5	
Thalassionema nitzschioides				6861.5	2001.3	2668.4	2668.4	9339.3	20813.3	4002.6	7115.6	20012.8	2287.2	2001.3	5003.2
Thalassiosira sp. 1				2287.2	2001.3			2668.4							
Thalassiothrix frauenfeldii	16.7	24.3		64.3	81.3	158.3	91.7	50.0	120.0	50.0	122.2	33.3	114.3	131.3	106.3
T. mediterranea v. *pacifica*				7.1	6.3	66.7	50.0	91.7	70.0	16.7	44.4	75.0	42.8	18.8	25.0
Tropidoneis lepidoptera		13484.6	1903.9												2001.3
Tropidoneis sp. 1	1903.9														
Unidentified centric diatom sp. 4						116.7	8.3	8.3	10.0				7.1		6.3
Unidentified centric diatoms <20μ	24750.6	19385.1	20942.8	18297.4	15009.6	8005.1	14676.1	9339.3	24015.3	6671.0	10673.5	6670.9	17153.8	11007.0	11007.0
Unidentified pennate diatoms <20μ	57116.7	66463.1	51405.1	80051.2	54034.6	46696.6	46696.5	49364.9	76849.2	45362.4	67598.8	41359.8	40025.6	31019.8	37023.7
Unidentified pennate diatoms >20μ	7615.6	19385.1	38077.8	2287.2	6003.8	5336.8	5336.8	9339.3	4803.1	6670.9	3557.8	9339.3	3430.8	3001.9	3001.9
Unidentified pennate diatoms >200μ			16.7	3.6					10.0	8.3			7.1		
Unidentified sigmoid diatoms >200μ						16.7	8.3			8.3					
TOTAL BACILLARIOPHYTA	169,504.7	288,127.9	304,756.0	250,564.0	254,293.8	352,659.0	614,076.2	162,954.2	253,254.6	108,219.1	167,395.5	199,002.0	206,160.3	107,299.8	364,670.4
PYRRHOPHYTA (dinoflagellates)															
Amphidinium sp. 1					1000.6							2668.4			
Amphidinium sp. 2				1143.6	2001.3					1334.2		1334.2			
Amphidinium spp.	1903.9							1334.2			3557.8		3430.8		
Amphisolenia sp. 1										8.3					
Ceratium furca v. *eugrammum*					3.1				10.0			8.3	7.1		6.3
C. fusus v. *seta*					3.1										
C. teres												8.3	7.1		
Ceratium sp. 3												8.3	7.1		6.3
Exuviaella baltica		1384.6											2287.2	5003.2	1000.6
E. compressa										1334.2		5336.8			1000.6
Exuviaella spp.		1384.6				1334.2	2668.4	5336.8	4803.1	4002.6	3557.8	9339.3			
Gymnodinium aurantium	7615.6	4153.9		18297.4	19012.1	4002.6	6671.0	2668.4	12808.2	13341.9	17789.1	13341.9	8005.1	4002.5	6003.8
G. galesianum														3001.9	2001.3
G. simplex	13327.2	1384.6	1903.9		1000.6	1334.2						1334.2	1143.6		
Gymnodinium sp. 4			1903.9												
Gymnodinium spp.	7615.6	5538.6	7615.5	13723.1	16010.2	4002.6	8005.1	12007.7	12808.2	8005.1	16010.2	8005.1	9148.7	5003.2	4002.5
Gyrodinium sp. 1	1903.9			8005.1		2668.4	4002.6	1334.2		1334.2	1778.9	4002.6	2287.2	2001.3	1000.6
Peridinium hirobis	7615.5	1384.6		3430.8		2668.4	1334.2	5336.8					2287.2		
P. trochoideum		2769.3	1903.9	3430.8	3001.9	4002.6	4002.6				1778.9		1143.6	2001.3	
Peridinium spp.	3807.8	1384.6		1143.6				4002.6		1334.2			1143.6		1000.6
Prorocentrum micans												1334.2			
P. minimum								1334.2		1334.2					
Unidentified dinoflagellates	19038.9	29077.6	5711.7	37738.4	20012.8	34688.9	25349.5	24015.4	16010.2	13341.9	23125.9	21347.0	19441.0	21013.4	11007.1
TOTAL PYRRHOPHYTA	62,828.4	48,462.4	19,038.9	86,912.8	62,045.7	54,701.9	52,033.4	57,370.3	46,439.7	45,370.8	67,598.6	68,068.6	50,339.3	42,026.8	27,029.7

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-21
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
10 MAY 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
CHLOROPHYTA (green algae)															
Chlamydomonas sp.	11432.4	11077.2	7615.5			2668.4		1334.2						1000.6	3001.9
Chlorophyte sp. 1	118041.3	70617.1	26654.5	10292.3	13008.3	22681.2	41359.8	25349.6	43227.7	29352.1	16010.2	56035.9	37738.4	21013.4	41026.3
Filamentous chlorophytes			58.3						100.0						
TOTAL CHLOROPHYTA	129,464.7	81,694.3	34,328.3	10,292.3	13,008.3	25,349.6	41,359.8	26,683.8	43,327.7	29,352.1	16,010.2	56,035.9	37,738.4	22,014.0	44,028.2
CYANOPHYTA (blue-green algae)															
Oscillatoria spp.		36.4	166.7	25.0	3.1	41.7		8.3	20.0		11.1		21.4	25.0	68.8
TOTAL CYANOPHYTA		36.4	166.7	25.0	3.1	41.7		8.3	20.0		11.1		21.4	25.0	68.8
EUGLENOPHYTA (euglenoids)															
Euglena sp. 1		1384.6													
Euglena spp.		1384.6		1143.6				1334.2							
TOTAL EUGLENOPHYTA		2769.2		1143.6				1334.2							
CRYPTOPHYTA (cryptophytes)															
Cryptophyte spp.	167542.5	135695.6	123752.9	150953.8	125080.0	122745.2	173444.4	122745.2	204931.1	109403.4	183228.4	41359.8	120076.9	77049.3	140089.6
TOTAL CRYPTOPHYTA	167,542.5	135,695.6	123,752.9	150,953.8	125,080.0	122,745.2	173,444.4	122,745.2	204,931.1	109,403.4	183,228.4	41,359.8	120,076.9	77,049.3	140,089.6
CHRYSOPHYCEAE (yellow-brown algae and silicoflagellates)															
Apedinella radians								4002.6	1601.0		1778.9			2001.3	
Chrysophyte sp. 2	13327.2	1384.6		1143.6	1000.6		4002.6	1334.2	1601.0		1778.9				2001.3
Chrysophyte sp. 3							2668.4								
DICTYOCHALES (silicoflagellates)															
Dictyocha sp.							1334.2		3202.0						
Silicoflagellate spp.				1143.6											
TOTAL CHRYSOPHYCEAE	13,327.2	1,384.6		2,287.2	1,000.6		8,005.2	5,336.8	6,404.0		3,557.8			2,001.3	2,001.3
HAPTOPHYCEAE (haptophytes including coccolithophores)															
Haptophyte sp. 1	13327.2									2668.4					
TOTAL HAPTOPHYCEAE	13,327.2									2,668.4					
PRASINOPHYCEAE (prasinophytes)															
Pyramimonas amylifera	1903.9														
Tetraselmis sp. 1	9519.4	2769.3		3430.8	3001.9	1334.2							2287.2		1000.6
Prasinophyte sp. 1	30462.3	27693.0	5711.7	34307.7	26016.7	28017.9	81385.4	25349.6	30419.5	21347.0	28462.7	21347.0	33164.1	20012.8	35022.4
Unidentified prasinophytes	24750.6	29077.6	5711.7	1143.6											1000.6
TOTAL PRASINOPHYCEAE	66,636.2	59,539.9	11,423.4	38,882.1	29,018.6	29,352.1	81,385.4	25,349.6	30,419.5	21,347.0	28,462.7	21,347.0	35,451.3	20,012.8	37,023.6
UNIDENTIFIED PHYTOFLAGELLATES															
Phytoflagellate sp. 4	1903.9					6671.0	6670.9	2668.4		1334.2					
Phytoflagellate sp. 6								1334.2							
Phytoflagellate sp. 7[†]	1903.9	12461.8	1903.9	4574.4	13008.3	14676.1	6670.9	2668.4	6404.1	2668.4	14231.3	1334.2	10292.3	6003.8	11007.0
Unidentified phytoflagellates >10μ		1384.6		4574.4	4002.5	1334.2	6670.9	8005.1	3202.1	5336.8	3557.8		5717.9	3001.9	3001.9
Unidentified phytoflagellates <10μ	519762.4	317084.5	194196.9	367092.1	376240.8	374906.6	565695.4	292187.0	473903.3	285516.1	309531.4	240153.7	337358.8	189121.0	321205.6
TOTAL UNIDENTIFIED PHYTOFLAGELLATES	523,570.2	330,930.9	196,100.8	376,240.9	393,251.6	397,587.9	585,708.1	306,863.1	483,509.5	294,855.5	327,320.5	241,487.9	353,369.0	198,126.7	335,214.5

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

[†] See Table M-15 for synonomous name.

TABLE M-21
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
10 MAY 1977

	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
SPECIES	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
OTHERS															
Unidentified coccoid 3	1903.9	2769.3	13327.2	6861.5	22014.1	13341.9	12007.7	4002.6	9606.1	10673.5	12452.4	14676.1	13723.1	4002.5	2001.3
TOTAL OTHERS	1,903.9	2,769.3	13,327.2	6,861.5	22,014.1	13,341.9	12,007.7	4,002.6	9,606.1	10,673.5	12,452.4	14,676.1	13,723.1	4,002.5	2,001.3
TOTAL PHYTOPLANKTON	1,148,105.0	951,410.5	702,894.2	924,163.2	899,715.8	995,779.3	1,568,020.2	712,648.1	1,082,912.2	621,889.8	806,037.2	641,977.3	816,879.7	472,558.2	952,127.4

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-22

PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
14 JUNE 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (diatoms)															
Amphiprora paludosa							1601.0								
Amphiprora spp.	2538.5														
Amphora spp.			2284.7							1067.3					
Asterionella japonica		11423.3		1067.3		3202.0	14409.2	2668.4							
Bacteriastrum delicatulum						1601.0									
Biddulphia alternans		11423.3						1334.2							2287.2
B. aurita				1067.3		3202.0	6404.1	2668.4	5336.7			1000.6			3430.8
B. mobiliensis	5077.1	3807.8													
Campylosira cymbelliformis		7615.6			9339.3		4803.1	2668.4	5336.7				1067.3		
Cerataulina bergonii	66.7	66.7						8.3			22.2			20.0	21.4
Chaetoceros brevis											2668.4				
C. decipiens												2001.3			
C. didymus										3202.0					
C. didymus v. *anglica*												5003.2			3430.8
C. eibenii	77.8			26.7	25.0	20.0	20.0		33.3	26.7	5.6	12.5			
C. gracilis								2668.4	1334.2			2001.3		8538.8	1143.6
C. laciniosus						3202.0		4002.6	2668.4					13875.5	
C. laevis						3202.0		10673.5		6404.1	9784.0	2001.3		26683.7	3430.8
C. lorenzianus														3202.0	
C. vistulae												1000.6			
Chaetoceros spp.	12692.6		4569.4	1067.3		16010.2	1601.0	44028.2	2668.4	2134.7	889.5	35022.4		78983.9	4574.4
Chaetoceros resting spore	2538.5														
Climacosphenia moniligera		16.7	15.0											33.3	28.6
Cocconeis fluviatilis v. *fluviatilis*												1000.6	1067.3		
Cocconeis spp.		3807.8										1000.6			
Corethron hystrix														1067.3	
Coscinodiscus lineatus		11423.3							1334.2						
C. radiatus		50.0	30.0												
Coscinodiscus spp.	2538.5	3807.8													
Cyclotella spp.		3807.8				3202.1	1601.0								
Cymatosira belgica									1334.2						
Cymbella spp.		7615.5	13708.0		2668.4						889.5				1143.6
Diploneis didyma v. *didyma*					1334.2										
Diploneis sp. 1†		3807.8		1067.3	1334.2	1601.0	1601.0	1334.2		4269.4					2287.2
Eucampia cornuta							10.0	58.3							
Eunotogramma marinum†	2538.5							1334.2							
Fragilaria ? sp.		11423.3													
Guinardia flaccida			15.0	20.0	133.3	100.0	90.0	41.7	25.0		66.7	6.3	193.3	26.7	128.6
Gyrosigma balticum v. *balticum*		3300.0	270.0												
Gyrosigma spp.	22.2														
Hemiaulus membranaceus													7471.4		
Isthmia enervis †														6.7	

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE H-22
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
14 JUNE 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Leptocylindrus danicus							6404.1			1067.3	889.5				
Licmophora abbreviata		3807.8				3202.1	1601.0						1067.3	1067.3	
Melosira sulcata			4569.4		4002.6		9606.1						2134.7		
Navicula distans†		3807.8													
N. lyra v. *lyra*		33.3													
N. membranacea	11.1				8.3										
N. wawrikae	55.5	166.7	105.0	100.0	58.3	110.0	70.0	241.7	41.7	200.0	22.2	225.0	20.0	360.0	128.6
Navicula sp. 6					2668.4								1067.3		
Nitzschia closterium	25385.2	49501.1	2284.7	5336.7	25349.5	19212.3	6404.1	4002.6	9339.3	7471.4	889.5	12007.7	7471.4	10673.5	13723.1
Nitzschia constricta	2538.5	3807.8			1334.2		3202.1		1334.2						
N. delicatissima	17769.7	11423.3	15992.7	6404.1		38424.6	16010.2	64041.0	8005.1	26683.7	889.5	59037.8		139822.8	22871.8
N. longissima		7615.6		1067.3	1334.2										1143.6
N. paradoxa	33.3		120.0		2666.7	860.0	380.0	50.0	183.3			31.3	133.3	553.3	621.4
N. pungens v. *atlantica*				5336.7								7004.5		2134.7	
N. sigmoidea		33.3			16.7										
N. spathulata	5077.1	3807.8													
Nitzschia sp. 2	22.2	16.7	15.0	6.7	1583.3	130.0	280.0	103.3	183.3	6.7	11.1	68.8	73.3	86.7	414.3
Plagiogramma spp.?													2134.7		1143.6
Pleurosigma elongatum			75.0						8.3						
Pleurosigma sp. 1†	44.4	116.7	60.0		16.7		10.0	16.7	8.3				6.7		
Rhaphoneis surirella		3807.8					1601.0	2668.4	2668.4						
Rhizosolenia alata	22.2									13.3				13.3	7.1
R. alata f. *indica*													6.7		
R. bergonii	22.2		15.0												
R. calcar avis				6.7	25.0	20.0		8.3	8.3	26.7	5.6	6.3	13.3		7.1
R. fragilissima								2668.4							1143.6
R. imbricata	33.3	33.3		33.3	33.3	40.0	80.0	191.7	166.7	73.3	72.2	100.0	133.3	40.0	85.7
R. imbricata v. *shrubsolei*	11.1		15.0			20.0	30.0	8.3	33.3	13.3	11.1	6.3			28.6
R. setigera	22.2		30.0			40.0						6.3		13.3	7.1
R. stolterfothii	2538.5				1334.2				1334.2					6404.1	3430.8
Skeletonema costatum	17769.6	15231.1	9138.7	4269.4	2668.4	208133.2	68844.1	268171.6	17344.4	9606.1	19568.1	196125.5		1003308.8	92630.7
Stauroneis anceps v. *americana*	2538.5														
Striatella unipunctata							10.0								
Synedra sp. 1		50.0			53.3	10.0	20.0	25.0	41.7	6.7	11.1	18.8		13.3	35.7
Thalassionema nitzschioides				2134.7		1601.0		4002.6	4002.6	2134.7	2668.4	3001.9		9606.1	1143.6
Thalassiosira sp. 1			2284.7										33.3	2134.7	
Thalassiothrix frauenfeldii	233.3	166.7	405.0	160.0	100.0	360.0	350.0	1108.3	75.0	360.0	66.7	1081.3		1766.7	378.6
T. mediterranea v. *pacifica*	33.3	16.7		53.3	8.3	40.0	10.0	133.3	16.7	33.3		112.5	6.7	140.0	7.1
Triceratium balearicum		3807.8													
Tropidoneis lepidoptera		3807.8		1067.3			3202.0		1334.2						
Tropidoneis sp. 1					1334.2										
Unidentified centric diatom sp. 4													60.0		7.1

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table H-15 for synonomous name.

TABLE M-22
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
14 JUNE 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Unidentified centric diatoms <20μ	7615.6	53308.9	9138.7	12808.2	24015.4	30419.5	24015.4	29352.1	5336.8	28818.4	9784.0	8005.1	11740.8	27751.1	14866.7
Unidentified pennate diatoms <20μ	43154.9	171350.2	52547.4	30953.1	65375.2	46429.7	70445.1	30686.3	40025.6	17077.6	30241.6	17010.9	20279.6	36289.9	46887.2
Unidentified pennate diatoms >20μ	7615.6	34270.0	15992.7	1067.3	20012.8	8005.1	11207.2	4002.6	1334.2	6404.1	2663.4	3001.9	6404.1	8538.8	6861.6
Unidentified pennate diatoms >200μ		16.7	15.0			10.0		16.7			5.6	6.3		20.0	35.7
Unidentified sigmoid diatoms >200μ						10.0	30.0					6.3			
TOTAL BACILLARIOPHYTA	160,637.7	453,401.6	133,696.1	75,120.7	168,338.4	392,419.8	255,952.8	484,992.7	112,896.7	117,100.8	82,130.5	356,915.2	62,585.8	1,383,176.3	229,517.4
PYRRHOPHYTA (dinoflagellates)															
Amphidinium sp. 1									2668.4			1000.6	1067.3		
Amphidinium sp. 2						1601.0									
Amphidinium spp.								1334.2						2134.7	
Ceratium buceros f. *molle*											5.6				
C. furca v. *eugrammum*	33.3	50.0		13.3	8.3			50.0	8.3	93.3		37.5	6.7	140.0	21.4
Ceratium fusus	22.2	16.7	30.0												
C. fusus v. *seta*											5.6				
Ceratium sp. 3							20.0		8.3						
Dinophysis exigua				1067.3											
Exuviaella baltica	2538.5			6404.1	6670.9		1601.0	6671.0	2668.4	4269.4	4447.3	4002.5	2134.7	8538.8	4574.4
Gymnodinium aurantium	10154.1	3807.8			2668.4	3202.0	8005.1	2668.4	1334.2				1067.3		1143.6
G. galosianum						4803.1									
G. simplex (?)	10154.1				14676.1			2668.4	1334.2				5336.7		
Gymnodinium sp. 4	5077.1	3807.8													
Gymnodinium spp.	12692.6	15231.1		8538.8	8005.1	14409.2	11207.2	13341.9	17344.4	2134.7	3557.8	5003.2	1067.3	10673.5	5718.0
Gyrodinium sp. 1	5077.1									2134.7		1000.6	1067.3	1067.3	1143.6
Peridinium hirobis	2538.5			1067.3	2668.4		1601.0	1334.2				1000.6			1143.6
P. trochoideum	7615.6			1067.3			3202.0			4269.4		3001.9	1067.3	54434.8	3430.8
Peridinium spp.		7615.5	2284.7	3202.0	1334.2			1334.2						6404.1	3430.8
Prorocentrum minimum									2668.4	1067.3		1000.6	1067.3	6404.1	4574.4
P. redfieldi †								1334.2	1334.2						
Pyrophacus horologium														6404.1	
unidentified dinoflagellates	22846.7	19038.9	4569.3	17077.6	5336.7	12808.2	20813.3	26683.8	18678.6	14942.9	12452.4	15009.6	11740.8	53367.5	19441.0
TOTAL PYRRHOPHYTA	78,749.8	49,567.8	6,884.0	38,437.7	41,368.1	36,823.5	46,449.6	57,420.3	48,047.4	28,911.7	20,468.7	31,057.1	25,622.7	149,568.9	44,621.6
CHLOROPHYTA (green algae)															
Chlamydomonas sp.	2538.5	22846.7		2134.7				1334.2			1778.9	1000.6	2134.7	3202.0	
Chlorophyte sp. 1	78694.2	79963.4	11423.4	52300.1	64041.0	70445.1	56035.9	60038.4	33354.7	75781.8	29352.1	37023.7	25616.4	61906.3	33164.1
														12808.2	

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE H-22
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
14 JUNE 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
CHLOROPHYTA (continued)															
Chlorophyte spp.	66.7							16.7							
Filamentous chlorophytes	81,299.4	102,810.1	11,423.4	54,434.8	64,041.0	70,445.1	56,035.9	61,389.3	33,354.7	75,781.8	31,131.0	38,024.3	27,751.1	77,916.5	33,164.1
TOTAL CHLOROPHYTA															
CYANOPHYTA (blue-green algae)	33.3		105.0											20.0	
Anabaena spp.						50.0									
Lyngbya spp.	100.0	1566.7	4320.0	33.3		800.0	560.0	250.0	33.3	73.3	11.1	1006.3	26.7	20.0	57.1
Oscillatoria spp.	133.3	1,566.7	4,425.0	33.3	0.0	850.0	560.0	250.0	33.3	73.3	11.1	1,006.3	26.7	40.0	57.1
TOTAL CYANOPHYTA															
EUGLENOPHYTA (euglenoids)		3807.8													
Euglena sp. 1						1601.0	1601.0	2668.4		2134.7		2001.3			1143.6
Euglena spp.														1067.3	
Trachelomonas spp.	0.0	3,807.8	0.0	0.0	0.0	1,601.0	1,601.0	2,668.4	0.0	2,134.7	0.0	2,001.3	0.0	1,067.3	1,143.6
TOTAL EUGLENOPHYTA															
CRYPTOPHYTA (cryptophytes)	78694.2	102810.1	13708.1	27751.1	149429.0	40025.6	70445.1	44028.2	53367.5	17077.6	28462.7	27017.3	44823.7	28818.4	59466.6
Cryptophyte spp.	78,694.2	102,810.1	13,708.1	27,751.1	149,429.0	40,025.6	70,445.1	44,028.2	53,267.5	17,077.6	28,462.7	27,017.3	44,828.7	28,818.4	59,466.6
TOTAL CRYPTOPHYTA															
CHRYSOPHYCEAE (yellow-brown algae)					1334.2									1067.3	
Apedinella radians†	5077.1														
Calycomonas ovalis				1067.3		1601.0	1601.0	2668.4	2668.4		1778.9	1000.6	1067.3		5718.0
Chrysophyte sp. 2				5336.7		1601.0	4803.1								
Chrysophyte sp. 3	5,077.1	0.0	0.0	6,404.0	1,334.2	3,202.0	6,404.1	2,668.4	2,668.4	0.0	1,778.9	1,000.6	1,067.3	1,067.3	5,718.0
TOTAL CHRYSOPHYCEAE															
PRASINOPHYCEAE (prasinophytes)															
Tetraselmis sp. 1	5077.1	7615.5		2134.7	17344.4		1601.0				889.5				
Prasinophyte sp. 1	10154.1	22846.7		20279.6	112071.7	12808.2	27217.4	8005.1	10673.5	1067.3	13341.9	4002.5	26683.7	2134.7	34307.7
Unidentified prasinophytes	33000.8	38077.8		3202.0	9339.3		3202.0	1334.2			889.5			4269.4	1143.6
TOTAL PRASINOPHYCEAE	48,232.0	68,540.0	0.0	25,616.3	138,755.4	12,808.2	32,020.4	9,339.3	10,673.5	1,067.3	15,120.9	4,002.5	26,683.7	6,404.1	35,451.3
UNIDENTIFIED PHYTOFLAGELLATES															
Phytoflagellate sp. 4											889.5				
Phytoflagellate sp. 7†						3202.0					889.5		2134.7	1067.3	1143.6
Phytoflagellate sp. 8	15231.1	99002.4													
Unidentified phytoflagellates >10μ			4569.4	5336.7	1334.2	1601.0	1601.0	5336.8	2668.4	2134.7	2668.4	2001.3	12808.2	5336.7	6861.5
Unidentified phytoflagellates <10μ	502627.4	734902.2	164496.3	209200.6	406927.1	268972.1	236951.6	316202.4	286850.2	255096.6	207243.8	209133.9	262568.0	464297.2	253876.8
TOTAL UNIDENTIFIED PHYTOFLAGELLATES	517,858.5	833,904.6	169,065.7	214,537.3	408,261.3	273,775.1	238,552.6	321,539.2	289,518.6	257,231.3	211,691.2	211,135.2	277,510.9	470,701.2	261,881.9

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table H-15 for synonomous name.

TABLE M-22
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
14 JUNE 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
OTHER															
Unidentified coccoid 3				2134.7		1601.0		1334.2		1067.3	889.5	2001.3	2134.7	2134.7	2287.2
TOTAL OTHER	0.0	0.0	0.0	2,134.7	0.0	1,601.0	0.0	1,334.2	0.0	1,067.3	889.5	2,001.3	2,134.7	2,134.7	2,287.2
TOTAL PHYTOPLANKTON	970,682.0	1,616,408.7	339,202.3	444,469.9	972,027.4	833,551.3	708,021.5	985,630.0	550,560.1	500,445.8	391,684.5	674,161.1	468,211.6	2,120,894.7	673,308.8

[a] Values are mean of three replicates.
[b] S = Surface; B = Bottom.
† See Table M-15 for synonomous name.

TABLE M-23

PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
12 JULY 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (diatoms)															
Amphora sp. 2														667.1	
Amphora sp. 3	23.8	1066.7	183.3				1067.3								
Amphora spp.									2001.3	889.5					
Asterionella japonica															
Biddulphia alternans			3807.8		800.5										1134.2
B. aurita					5603.6	2134.7		1601.0					1778.9		2668.4
Campylosira cymbelliformis†									4.2	5.6	126.7	77.8	105.6		
Cerataulina bergonii												1778.9			
Chaetoceros anastomosans						2134.7			4002.6		28818.4	1778.9		2668	9339.3
Chaetoceros spp.	476.2	3700.0	1466.7	62.5	3295.0	1320.0	1293.3	430.0	941.7	411.1	380.0	72.2	2116.6	62.5	791.7
Climacosphenia moniligera	1087.9	7615.5													
Coscinodiscus lineatus		33.3			5.0										
C. radiatus				1000.6						889.5					
Coscinodiscus spp.	1087.9	3807.8													
Cyclotella spp.	2175.9	3807.8	83771.2			1067.3	2134.7	533.7							1334.2
Cymbella spp.				1000.6	800.5		1067.3	533.7			1067.3		889.5		4002.6
Diploneis sp. 1†									25.0		46.7	27.8			16.7
Eucampia cornuta					1601.0	1067.3							889.5	667.1	
Eunotogramma marinum†															
Fragilaria ? sp.		7615.6									66.7		11.1		8.3
Guinardia flaccida												5.6			
Gyrosigma balticum v. *balticum*	23.8	5616.7	783.3			20.0									
G. terryanum					5.0										
Gyrosigma spp.	9.5														
Hemiaulus hauckii				8005.1	1601.0	2134.7		2668.4	1334.2		5336.7	889.5	4447.3		2668.4
Isthmia enervis†							6.7						5.6	8.3	
Leptocylindrus danicus									1334.2						
Licmophora abbreviata	2175.9		3807.8	1000.6	1601.0	1067.3			667.1				1778.9		
N. sulcata		3807.8			1601.0								3557.8		5336.7
Navicula distans†															1334.2
N. membranacea												5.6			
N. wawrikae	23.8	50.0	16.7	6.3	30.0	6.7	13.3	6.7	70.8	38.9	200.0	22.2	188.9	16.7	116.7
Nitzschia acicularis															
v. *closterioides*	1087.9								2001.3		1067.3		2668.4		
N. closterium	75067.7	133272.4	95194.6	7004.5	20012.8	61906.3	51232.8	13875.5	66709.3	48920.2	107802.3	49809.6	130750.4	10673.5	52033.3
N. constricta	2175.9		3807.8										889.5		
N. delicatissima	5439.7	15231.1	3807.8	18011.5	4803.0	35222.5	19212.3	12274.5	25349.6	26683.7	113139.1	96061.5	97840.4	4669.6	57370.0
N. longissima	1087.9		7615.6				1067.3		3335.5				1778.9		2668.4
N. paradoxa	19.0	583.3			120.0		253.3		83.3				50.0		858.3
N. pungens v. *atlantica*										889.5					
N. sigma														4.2	
N. sigmoidea	9.5	2700.0	33.3								6.7				
Nitzschia sp. 1															158.3

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-23
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
12 JULY 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Nitzschia sp. 2	23.8	50.0	183.3		190.0	20.0	13.3	13.3	112.5	5.6	46.7	5.6	44.4		216.7
Pleurosigma elongatum	9.5	450.0	266.7			20.0	13.3								
Pleurosigma sp. 1†	47.6	450.0	100.0		10.0		6.7						5.6		
Rhaphoneis surirella	1087.9	7615.5		3001.9	5603.6	2134.7			2668.4						6670.9
Rhizosolenia alata			16.7	12.5		13.3	13.3	13.3	41.7	11.1		11.1	[illegible]		8.3
R. bergonii											6.7				
R. calcar avis	4.8				5.0		6.7		29.2		20.0	5.6	11.1		8.3
R. castracanei										11.1					
R. fragilissima									1334.2				889.5		
R. imbricata						6.7	13.3	3.3			6.7		38.9		
R. imbricata v. *shrubsolei*									8.3						
R. setigera						13.3			4.2	5.6		5.6	33.3		
R. stolterfothii											1067.3				
Skeletonema costatum	1087.9		11423.3						2001.3		7471.4	2668.4	6226.2		2668.4
Stauroneis anceps v. *americana*				1000.6											
Stauroneis sp. 1													889.5		
Striatella unipunctata		33.3	66.7		65.0	6.7	6.7								
Synedra undulata							6.7				13.3		5.6		8.3
Synedra sp. 1				12.5	90.0	6.7		6.7	12.5	11.1	33.3		11.1	4.2	66.7
Thalassionema nitzschioides	1087.9			6003.9		1067.3	1067.3	1067.3	1334.2	2668.4	6404.1	1778.9	4447.3	1334.2	25349.6
Thalassiothrix fravenfeldii	47.6	83.3	50.0	43.8	30.0	66.7	60.0	36.7	212.5	111.1	426.7	111.1	394.5	62.5	233.3
T. mediterranea v. *pacifica*	19.1	16.7		18.8	5.0	46.7	13.3	6.7	79.2	16.7	160.0	27.8	122.2		25.0
Unidentified centric diatoms <20μ	11967.3	34270.0	26654.5	6003.8	3202.1	5336.7	10673.5	5870.4	12007.7	10673.5	24549.0	8005.1	19568.1	3335.5	21347.0
Unidentified pennate diatoms <20μ	39165.8	228467.0	171350.2	31019.9	67243.0	55502.2	45896.0	18144.9	46029.5	28462.7	32020.5	12452.4	51588.6	15343.2	46696.6
Unidentified pennate diatoms >20μ	7615.6	53309.0	38077.8	7004.5	9606.2	5336.7	4269.4	2134.7	6003.8	1778.9	8538.8	889.5	4447.3	1334.2	13341.9
Unidentified pennate diatoms >200μ	23.8				50.0		6.7						5.6		
Unidentified sigmoid diatoms >200μ					5.0	6.7	13.3	16.7							50.0
TOTAL BACILLARIOPHYTA	154,160.9	514,452.8	452,485.1	90,213.9	127,984.3	177,665.9	139,427.8	59,237.5	179,739.3	122,483.8	338,822.4	176,490.7	338,487.2	40,851.2	258,730.7
PYRRHOPHYTA (dinoflagellates)															
Amphidinium sp. 1								533.7						667.1	
Amphidinium sp. 2					800.5										
Amphidinium spp.	3263.8														
Ceratium buceros f. *molle*									8.3						
C. furca v. *eugrammum*			33.3	75.0	45.0	60.0	26.7	30.0		11.1	13.3	33.3	44.4	8.3	
C. fusus	9.5														
C. fusus v. *seta*								3.3							

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-23
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
12 JULY 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
PYRRHOPHYTA (continued)															
Ceratium teres										5.6			5.6		
Ceratium sp. 3				18.8	40.0	6.7			4.2				11.1		
Dissodinium lunula		16.7													
Exuviaella baltica				7004.5	3202.0			2668.4		889.5		3557.8		1334.2	
Gymnodinium aurantium	3263.8		3807.8	4002.6	12808.2	7471.4	4269.4	533.7	1334.2	4447.3		1778.9	4447.3		1334.2
G. simplex (?)	4351.7	7615.5											1778.9		
Gymnodinium spp.	7615.5	7615.6	3807.8	11007.0	2401.5	1067.3	7471.4	2134.7	1334.2	3557.8	1067.3	2668.4	5336.7	4669.7	9339.3
Gyrodinium sp. 1					800.5								889.5		1334.2
Peridinium depressum													11.1		
P. hirobis				2001.3	4002.5		1067.3	533.7	1334.2	839.5			1778.9	667.1	
P. inconspicuum f. *armatum*		3807.8	3807.8												
P. trochoideum	1087.9			3001.9	1601.0		1067.3	2134.7		3557.8		7115.7		2001.3	1334.2
Peridinium spp.	1087.9		3807.8		800.5		1067.3			889.5		1778.9			
Prorocentrum minimum								1067.3				889.5			
Pyrophacus horologium						1067.3				889.5					
Unidentified dinoflagellates	11967.3	15231.1	38077.8	11007.1	11207.2	10673.5	10673.5	9072.5	4669.7	16999.7	3202.0	10673.5	12452.4	8672.2	9339.3
TOTAL PYRRHOPHYTA	32,647.4	34,286.7	53,342.3	38,113.2	37,708.9	20,346.2	25,642.9	18,712.0	8,634.8	32,037.3	4,282.6	28,496.0	26,755.9	18,019.9	22,681.2
CHLOROPHYTA (green algae)															
Chlamydomonas sp.	8703.5	7615.6		1000.6			1067.3							667.1	
Scenedesmus quadricauda	1087.9										5336.7				
Chlorophyte sp. 1	10879.4	7615.6	3807.8	7004.5	8805.7	9606.1	7471.4	5870.4	17344.4	4447.3	19212.3	3557.8	16010.2	8005.1	13341.9
Chlorophyte spp.				1000.6			1067.3			2668.4			1778.9	667.1	
Filamentous chlorophytes	23.8		166.7												116.7
TOTAL CHLOROPHYTA	20,694.6	15,231.2	3,974.5	9,005.7	8,805.7	9,606.1	9,606.0	5,870.4	17,344.4	7,115.7	24,549.0	3,557.8	17,789.1	9,339.3	13,458.6
CYANOPHYTA (blue-green algae)															
Anabaena spp.	23.8	33.3					13.3								
Lyngbya sp. 1		666.7													
Lyngbya spp.			1966.7												
Oscillatoria sp. 1		1066.7													
Oscillatoria spp.	685.7	583.3	24300.0	100.0	100.0	820.0	793.3	243.3	62.5	177.8	400.0	11.1	355.5	25.0	33.3
Spirulina spp.		3307.8													
TOTAL CYANOPHYTA	709.5	6,157.8	26,266.7	100.0	100.0	820.0	806.6	243.3	62.5	177.8	400.0	11.1	355.5	25.0	33.3
EUGLENOPHYTA (euglenoids)															
Euglena spp.	1087.9			1000.6			1067.3						889.5		
TOTAL EUGLENOPHYTA	1,087.9			1,000.6			1,067.3						889.5		

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE H-23
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
12 JULY 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
CRYPTOPHYTA (cryptophytes)															
Cryptophyte spp.	56572.8	87579.0	3807.8	36023.1	94460.4	39491.9	62973.6	13341.9	50032.0	25794.3	37357.2	26683.7	60483.2	36023.1	129416.2
TOTAL CRYPTOPHYTA	56,572.8	87,579.0	3,807.8	36,023.1	94,460.4	39,491.9	62,973.6	13,341.9	50,032.0	25,794.3	37,357.2	26,683.7	60,483.2	36,023.1	129,416.2
CHRYSOPHYCEAE (yellow-brown algae)															
Apedinella radians													889.5	667.1	
Chrysophyte sp. 2				2001.3	800.5			1067.3							2668.4
TOTAL CHRYSOPHYCEAE				2,001.3	800.5			1,067.3					889.5	667.1	2,668.4
PRASINOPHYCEAE (prasinophytes)															
Tetraselmis sp. 1	17407.0	41685.6	7615.6		112071.7	19212.3	21347.0	2134.7	79384.1	1778.9	14942.9	10673.5	52478.0	4002.6	80051.2
Prasinophyte sp. 1	3263.8	11423.3		6003.8	33621.5	17077.6	22414.3	1601.0	14008.9	7115.7	10673.5	3557.8	12452.4	3335.5	29352.1
Unidentified prasinophytes	1087.9	7615.5	3807.8	1000.6											
TOTAL PRASINOPHYCEAE	21,758.7	60,924.4	11,423.4	7,004.4	145,693.2	36,289.9	43,761.3	3,735.7	93,393.0	8,894.6	25,616.4	14,231.3	64,930.4	7,338.1	109,403.3
UNIDENTIFIED PHYTOFLAGELLATES															
Phytoflagellate sp. 7†								533.7						667.1	1334.2
Phytoflagellate sp. 8	51133.1	201812.5	11423.3			1067.3	3202.0		1334.2				889.5		
Unidentified phytoflagellates >10μ				3001.9	4002.6	5336.7	1067.3	3202.0	3335.5	5336.8	7471.4	5336.7		4002.6	10673.5
Unidentified phytoflagellates <10μ	370986.9	495011.8	277968.2	199127.4	232949.1	245490.5	235884.3	115807.5	195458.4	171665.4	233749.6	191233.5	240153.7	199461.0	205464.9
TOTAL UNIDENTIFIED PHYTOFLAGELLATES	422,120.0	696,824.3	289,391.5	202,129.3	236,951.7	251,894.5	240,153.6	119,543.2	200,128.1	177,022.2	241,221.0	196,570.2	241,043.2	204,130.7	217,472.6
OTHERS															
Unidentified coccoid 3				2001.3	2401.5				1334.2	889.5	1067.3				8005.1
TOTAL OTHERS				2,001.3	2,401.5				1,334.2	889.5	1,067.3				8,005.1
TOTAL PHYTOPLANKTON	709,751.8	1,415,456.2	840,691.3	387,597.8	654,906.2	536,114.5	523,439.1	221,751.3	550,718.3	374,395.2	673,315.9	446,040.8	751,623.5	316,394.4	761,869.4

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table H-15 for synonomous name.

TABLE M-24
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
23 AUGUST 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (diatoms)															
Amphora sp.3	8.3	25.0	16.7												
Biddulphia aurita					3202.0	1334.2									
Biddulphia spp.														951.9	
Cerataulina bergonii	283.3	50.0	333.3	1355.0	1046.7	2216.7	1637.5	1588.9	1900.0	437.5	940.0	1820.0	1983.4	670.8	460.0
Cerataulina sp.1	216.7	125.0	158.3	445.0	1146.7	616.7	1375.0	133.4	1640.0	81.3	780.0	500.0	716.7	91.7	113.3
Chaetoceros elbonii	8.3		83.3	35.0	33.3	100.0	50.0	38.9	150.0	31.3	80.0	90.0	183.4	4.2	33.3
C. lacinicsus												3202.1			
C. laevis								2668.4							
C. lorenzianus						4002.6									
Chaetoceros spp.	1903.9					2668.4	2001.3	5336.7		4283.8		11207.2	2668.4		15231.1
Climacosphenia moniligera	16.7	25.0	8.3	5.0	13.3	25.0	12.5		90.0	6.3			50.0		6.7
Cocconeis spp.	1903.9	5711.7		800.5											
Corethron hystrix						1334.2									
Coscinodiscus radiatus		25.0				8.3									6.7
Coscinodiscus spp.		5711.7													
Cyclotella spp.									1601.0						
Cymbella spp.	3807.8	22,846.7	49,501.2			2668.4				1427.9				951.9	
Diploneis sp.1					1067.3	2668.4	2001.3								
Eucampia cornuta	58.3	75.0	50.0	255.0	6.7	1058.3	837.5	838.9	880.0	525.0	320.0	760.0	933.4	287.5	420.0
Eunotogramma marinum			1903.9												
Gomphonema spp.					1067.3										
Guinardia flaccida	91.7		66.7	75.0	420.0		187.5	44.5	240.0	143.8	30.0	100.0	283.3	120.8	100.0
Gyrosigma balticum v. *balticum*	125.0	1450.0	191.7			175.0				12.5					
G. terryanum					6.7							20.0			
Leptocylindrus danicus				1601.0	1067.3	4002.6	18011.5	6226.2					2668.4	951.9	
Licmophora abbreviata	5711.7		3807.8	800.5	10673.5	2668.4			1601.0		4569.3	1601.0			
Navicula distans	1903.9					1334.2			1601.0						
N. membranacea	8.3		50.0	20.0	20.0	33.3	112.5	27.8			10.0		50.0	4.2	
N. wawrikae	16.7					16.7	37.5	333.3		31.3	30.0	10.0	66.7	16.7	20.0
Nitzschia acicularis v. *closteriodes*						1334.2									
N. closterium	30462.3	51405.1	15231.1	8005.1	12808.2	5336.8	6003.8	4447.3	3202.0	58544.6	29700.7	6404.1	10673.5	8567.5	12184.9
N. constricta			3807.8	800.5											
N. delicatissima		17135.0	3807.8	17611.3	8538.8	32020.5	18011.5	25794.3	12808.2	34270.1	20562.0	19212.3	48030.7	14279.2	10661.3
N. longissima		11423.3			4269.4										1523.1
N. paradoxa					1106.7				899.0	37.5					
N. sigmoidea		825.0	8.3			8.3									
N. spathulata	5711.7														
Nitzschia sp.1	16.7		16.7	10.0	393.3	216.7	50.0		760.0		20.0	20.0			
Nitzschia sp.2	750.0	4400.0	1191.7		200.0	16.7	37.5		130.0	12.5		20.0	33.4		26.7
Pleurosigma elongatum	33.3	725.0	8.3		13.3						10.0				
Pleurosigma sp.1†	8.3	200.0	125.0		13.3						10.0				6.7

[a] Values are mean of three replicates, except 4B which is the mean of two replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-24
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
23 August 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Rhaphoneis surirella					3202.0	5336.7	2001.3	889.5				8005.1		8567.5	4569.3
Rhizosolenia alata			8.3			50.0	12.5	5.6							
R. alata f. indica								11.1							
B. bergonii	8.3								10.0		10.0				
R. calcar avis			8.3		6.7	25.0		5.6				50.0			6.7
R. cylindrus							12.5								
R. fragilissima	3807.8	34270.0	5711.7	14409.2	20279.6	2668.4	16010.2	11562.9	11207.2	8567.5	11423.3	6404.1	10673.5	3807.8	10661.8
R. imbricata	133.3		300.0	305.0	1213.3	283.3	362.5	22.2	290.0	12.5	50.0	240.0	216.7	29.2	66.7
R. imbricata v. shrubsolei	216.7	125.0		110.0	26.7	8.3	75.0	138.9	600.0	87.5	400.0	70.0	16.7	158.3	46.7
R. setigera	1391.7	875.0	1483.3	160.0	546.7	4766.7	5925.0	1983.4	2630.0	1368.8	1080.0	1120.0	1933.4	883.3	1313.3
R. stolterfothii	13327.2	17135.0	7615.6	1601.0	17077.6	20012.8	36023.1	12452.4	14409.2	9995.4	11423.3	19212.3		9519.5	
Skeletonema costatum	5711.7	17135.0			1067.3				3202.0					951.9	
Stephanopyxis palmeriana					20.0						170.0	40.0			
Streptotheca thamensis	25.0	75.0	16.7		13.3	108.3	462.5	177.8			10.0	250.0	33.4	83.3	13.3
Striatella unipunctata										6.3	10.0				
Synedra undulata													16.7		
Synedra sp. 1					20.0				10.0						
Thalassionema nitzschioides						2668.4									
Thalassiosira sp. 1										2855.9					
Thalassiothrix frauenfeldii				15.0	6.7	8.3	137.5	55.6		62.5	20.0	10.0	16.7	95.8	13.3
T. mediterranea v. pacifica			8.3	5.0	13.4	16.7		27.8	10.0		30.0	20.0		12.5	
Tropidoneis lepidoptera	5711.7		3807.8							2855.9		1601.0		4759.7	4569.3
Unidentified centric diatom sp. 4					100.0										
Unidentified centric diatoms <20μ	7615.6	39981.7	32366.2	7204.6	8538.8	9339.3	8005.1	12452.4	1601.0	57116.7	15992.7	3202.0	16010.3	15231.2	24369.8
Unidentified centric diatoms >20μ				800.5											
Unidentified pennate diatoms <20μ	72347.9	171350.2	51405.1	16010.3	70445.1	52033.3	36023.0	34688.9	35222.5	39981.7	38839.4	52833.8	66709.4	9519.4	38077.8
Unidentified pennate diatoms >20μ	5711.7	34270.0	13327.2	800.5	12808.2	4002.6		4447.3	11207.1	4283.8	11423.3	4803.1	8005.1	951.9	1523.1
Unidentified pennate diatoms >200μ					33.3	16.7		5.6							
Unidentified sigmoid diatoms >200μ				15.0	6.7	75.0	12.5		20.0		10.0	20.0			
TOTAL BACILLARIOPHYTA	169,055.4	437,375.4	196,426.4	73,255.0	182,539.2	167,284.4	155,429.6	126,105.6	107,912.2	227,039.9	147,954.0	142,848.1	171,973.2	81,469.6	126,025.4

[a] Values are mean of three replicates, except 4B which is the mean of two replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-24
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
23 August 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
PYRRHOPHYTA (dinoflagellates)															
Amphidinium sp. 1						1334.2		2668.4							
Amphidinium sp. 2								889.5						951.9	
Amphidinium spp.															
Ceratium buceros f. *zolle*					6.7										
C. furca V. *eugrammum*										31.3				4.2	
C. trichoceros											20.0			8.3	
Ceratium sp. 3							12.5	16.7							
Eruviaella baltica				800.5		2668.4							2668.4		
Gymnodinium aurantium					2134.7			889.5		4283.8	2284.7			4759.7	6092.4
G. simplex (?)	9519.4									2855.9				2855.8	
Gymnodinium sp. 2											2284.7				
Gymnodinium spp.	5711.7	11423.3			1067.3			2668.4	3202.1	5711.7		1601.0		3807.8	7615.6
Gyrodinium sp. 1					1067.3				1601.0						
Peridinium depressum						8.3									
P. hirobis					2134.7	4002.6	2001.3		1601.0						
P. inconspicuum f. *armatum*	3807.8	5711.7													
P. trochoideum			3807.8												
Peridinium spp.			1903.9				2001.3								
Prorocentrum spp.						1334.2									
Unidentified dinoflagellates	9519.5		1903.9	5603.6	2134.7	4002.6	6003.8	7115.7	4803.1	17135.0	15992.7	8005.1	16010.3	8567.5	7615.6
TOTAL PYRRHOPHYTA	28,559.4	17,135.0	7,615.6	6,404.1	8,545.4	13,350.3	10,018.9	14,248.2	11,207.2	30,017.7	20,582.1	9,606.1	18,678.7	20,955.2	21,323.6
CHLOROPHYTA (green algae)															
Chlamydomonas sp.										7139.6	2284.7			285[illegible].8	
Chlorophyte sp. 1	20942.8	85675.1	15231.1	16[illegible].6	22414.3	20012.8	36023.1	21347.0	23818.5	24274.6	32839.4	36823.6	21347.0	26559.4	70063.2
Chlorophyte spp.				800.5	5336.7			889.5	3202.0				2668.4		
Filamentous chlorophytes			108.3												
TOTAL CHLOROPHYTA	20,942.8	85,675.1	15,339.4	11,207.1	27,751.0	20,012.8	36,023.1	22,236.5	32,020.5	31,414.2	41,124.1	36,823.6	24,015.4	31,414.2	70,063.2
CYANOPHYTA (blue-green algae)															
Lyngbya spp.			108.3												
Oscillatoria sp. 1	8.3		150.0												
Oscillatoria spp.	225.0	875.0	1975.0	30.0	1991.7	1991.7	87.5	5.6	40.0	37.5		160.0	50.0		
Spirulina spp.			3807.8			1334.2									
TOTAL CYANOPHYTA	233.3	875.0	6,041.1	30.0	1,991.7	3,325.9	87.5	5.6	40.0	37.5		160.0	50.0		
EUGLENOPHYTA (euglenoids)															
Euglena spp.										1427.9					
TOTAL EUGLENOPHYTA										1,427.9					

[a] Values are mean of three replicates, except 48 which is the mean of two replicates.

[b] S = Surface; B = Bottom.

[*] See Table M-15 for synonomous name.

TABLE M-24
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
23 August 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
CRYPTOPHYTA (crytophytes)															
Cryptophyte spp.	78059.5	79963.4	15231.1	18411.8	75781.8	89390.5	84053.8	21347.0	104066.6	34270.0	100525.5	38424.6	98729.9	5711.7	54832.1
TOTAL CRYPTOPHYTA	78,059.5	79,963.4	15,231.1	18,411.8	75,781.8	89,390.5	84,053.8	21,347.0	104,066.6	34,270.0	100,525.5	38,424.6	98,729.9	5,711.7	54,832.1
CHRYSOPHYCEAE (yellow-brown algae)															
Calycomonas ovalis				800.5											
Chrysophyte sp. 2				2401.5	1067.3	1334.2									
TOTAL CHRYSOPHYCEAE				3,202.0	1,067.3	1,334.2									
PRASINOPHYCEAE (presinophytes)															
Tetraselmis sp. 1	19033.9	17135.0	1903.9	2401.5	18144.9	30686.3	8005.1	889.5	1601.0		11423.3	1601.0	2668.4	951.9	10661.8
Prasinophyte sp. 1				800.5	8538.8	8005.1		889.5	1601.0				5336.8		1523.1
Unidentified prasinophytes	11423.3	11423.3							1601.0					951.9	3046.2
TOTAL PRASINOPHYCEAE	30,462.2	28,558.3	1,903.9	3,202.0	26,683.7	38,691.4	8,005.1	1,779.0	4,803.0		11,423.3	1,601.0	8,005.2	1,903.8	15,231.1
UNIDENTIFIED PHYTOGLAGELLATES															
Phytoflagellate sp. 3	1903.9									2855.9					
Phytoflagellate sp. 7†				800.5	1067.3										
Phytoflagellate sp. 8											2284.7				
Unidentified phytoflagellates >10μ				11207.2	5336.7	13341.9	20012.8	6226.2	9606.2	4283.8	4569.3	6404.1	10673.5	6663.6	3046.2
Unidentified phytoflagellates <10μ	628284.2	1005254.7	137080.2	179314.8	203863.8	270840.0	348222.9	178781.1	254562.9	669693.9	498058.0	317002.9	314868.2	256073.4	316807.6
TOTAL UNIDENTIFIED PHYTOGLAGELLATES	630,188.1	1,005,254.7	137,080.2	191,322.5	210,267.8	284,181.9	368,235.7	185,007.3	264,169.1	676,833.6	504,912.0	323,407.0	325,541.7	262,737.0	319,853.8
OTHERS															
Unidentified coccoid 3					14942.9	1334.2		889.5	6404.1				2668.4		1523.1
TOTAL OTHERS					14,942.9	1,334.2		889.5	6,404.1				2,668.4		1,523.1
TOTAL PHYTOPLANKTON	957,499.7	1,654,836.9	379,637.7	307,034.5	547,579.1	618,905.6	661,853.7	371,618.7	530,622.7	1,001,040.8	826,521.0	552,870.4	649,662.5	404,191.5	608,852.3

[a] Values are mean of three replicates, except 4B which is the mean of two replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-25

PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
13 SEPTEMBER 1977

	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
Species	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (diatoms)															
Amphiprora spp.							5711.7								
Asterionella japonica	38077.8			1778.9	21347.0				2668.4			5336.7		42694.0	
Bellerochea malleus v.?												166.7			
Biddulphia aurita		9138.7	3807.8		1778.9							2668.4			
Biddulphia spp.	3807.8						5711.7					2668.4			
Campylosira cymbelliformis		13708.0	19038.9	1778.9				3005.1							16010.2
Cerataulina bergonii	266.7	200.0	116.7	1100.0	955.5	416.7	400.0	1316.7	650.0	312.5	387.5	816.7	1633.3	833.3	1566.7
Cerataulina sp. 1	50.0	80.0		177.8	322.2	216.7	275.0	33.3	350.0	150.0	12.5	83.3	300.0	33.3	433.3
Chaetoceros compressus					24904.8								2668.4		
C. eibenii	50.0	220.0	166.7	222.2	188.9	550.0	225.0	200.0	150.0	50.0	150.0	366.7	483.3	266.7	1150.0
C. gracilis	11423.3	4569.3	3807.8	16010.2	5336.7	30462.2	34270.1	16010.2		11423.3	2855.8	24015.3		21347.0	
C. laciniosus					1778.9										
C. laevis					5336.7										
C. lorenzianus								10673.5							
Chaetoceros spp.	3807.8	4569.3	22846.7	10673.5	10673.5	22846.7	45693.4	13341.9	[illegible]	8557.5	2855.8	5336.7	16010.2	13341.9	10673.5
Climacodium frauenfeldianum	33.3													100.0	
Climacosphenia moniligera														16.7	
Coscinodiscus lineatus			3807.8		1778.9										
C. wailesii					11.1										
Coscinodiscus spp.				3557.8											
Cyclotella sp. 2												8005.1			10673.5
Cyclotella spp.			3807.8		1778.9			5336.7	2668.4						
Cymatosira belgica				1778.9											
Cymbella spp.		4569.3	26654.5	3557.8		7615.6	5711.7	2668.4				2668.4	2668.4	2668.4	2668.4
Dactyliosolen mediterraneus?													366.7		
Diploneis didyma v. *didyma*											2855.8				
Diploneis sp. 1	7615.6	4569.3	3807.8		1778.9	3807.8			2668.4				5336.7		2668.4
Eucampia cornuta	66.7	320.0	233.3	633.3	455.5	400.0	575.0	850.0	233.3	387.5	112.5	433.3	500.0	500.0	1033.3
Grammatophora marina				1778.9					2668.4						
Guinardia flaccida	433.3	420.0	450.0	811.1	1111.1	1000.0	1500.0	1200.0	2100.0	800.0	300.0	1200.0	1350.0	900.0	1766.7
Gyrosigma balticum v. *balticum*	133.3	360.0	183.3	11.1		50.0									
Gyrosigma terryanum												33.3			
Gyrosigma spp.			116.7												
Hemiaulus hauckii				5336.7									2668.4		
Leptocylindrus danicus	3807.8		7615.6	3557.8	7115.7			5336.7							5336.7
Licmophora abbreviata												2668.4		2668.4	
Navicula distans	3807.8		3807.8											2668.4	
N. lyra v. *lyra*					11.1										
N. membranacea			50.0	66.7	77.8	133.3	100.0	116.7	66.7	37.5		133.3	166.7	216.7	50.0
N. wavrikae	566.7	760.0	833.3	1233.3	1777.8	900.0	775.0	1700.0	433.3	575.5	350.0	1050.0	716.7	1200.0	3667.7
Navicula sp. 6									2668.4						
Nitzschia acicularis v. *closterioides*	3807.8	4569.3				7615.6									

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-6
Continued

PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
13 SEPTEMBER 1977

	STATION AND DEPTH[b]															
	11		12	0		1		2		3		4		5		
Species	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B	
BACILLARIOPHYTA (continued)																
Nitzschia closterium	60924.5	10277.[illegible]	[illegible]	16673.5	59136.1	38077.[illegible]	69540.1	[illegible]	21347.0	22846.7	25702.5	16010.[illegible]	[illegible]	[illegible]	[illegible]	
N. delicatissima	125656.8	13251.[illegible]	[illegible]	160966.5	122745.2	209428.1	354123.9	242822.1	45362.3	91386.8	25702.5	221475.[illegible]	42634.[illegible]	[illegible]	[illegible]	
N. paradoxa	170.[illegible]			111.1	55.[illegible]9				450.0		412.5	250.[illegible]	1016.[illegible]			
N. pungens v. *atlantica*		913.[illegible]								2855.8	2855.8					
N. sigma					27.1											
N. sigmoidea		2.[illegible]							[illegible]							
N. spathulata											2855.8					
Nitzschia sp. 2		[illegible]		11.1				16.7			25.0					
Playiocrasma spp.					5360.[illegible]	[illegible]	[illegible]									
Pleurosigma elongatum		[illegible]	93.[illegible]													
Pleurosigma sp. 1[†]	33.3	[illegible]	[illegible]		11.[illegible]	16.[illegible]		16.7								
Rhaphoneis surirella			3007.8	5336.7	1778.9	3807.8	17135.0			5711.1	8567.5	8005.1	18678.[illegible]	[illegible]	[illegible]	
Rhizosolenia alata				55.6				[illegible]	33.3	[illegible]		16.[illegible]	16.[illegible]		[illegible]	
R. alata f. *indica*				22.2	66.7	16.7	25.0	[illegible]	16.7		25.0	100.[illegible]	33.3	16.[illegible]	[illegible]	
R. bergonii					11.1											
R. calcar avis	16.7		16.7	66.7	88.9	16.7	75.[illegible]	16.7	[illegible]	12.5	25.0					
R. fragilissima	[illegible]		3807.[illegible]	7115.6	10673.5		26559.[illegible]	5336.7	2668.4			[illegible]		[illegible]	[illegible]	
R. imbricata	283.3	[illegible]	300.[illegible]	1177.8	744.5	[illegible]	[illegible]	[illegible]	650.0	275.0	137.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
R. imbricata v. *shrubsolei*	666.7	760.[illegible]	433.3	1770.0	1155.6	1650.0	1700.0	2466.7	2483.3	1112.5	687.5	1766.7	2476.[illegible]	[illegible]	[illegible]	
R. robusta						33.3										
R. setigera	100.0	620.0	316.7	111.1	711.1	416.7	325.0	100.0	166.7	75.0	50.0	66.7	233.3	16.7	133.[illegible]	
R. stolterfothii	49501.1	31935.4	19038.9	37357.2	26683.7	15231.1	31405.1	42694.0	24015.3	45693.4	19990.8	34688.9	20351.2	45362.4	63385.[illegible]	
Skeletonema costatum	19038.9	9133.7	57116.7	37357.2	65819.9	76155.6	51405.1	56704.2		57116.7	19990.8	33367.5	37357.2	42694.0	2667.[illegible]	
Stauroneis anceps v. *americana*		9133.7	3807.8		1778.9			2668.4				2668.4				
Streptotheca thamensis		80.0		77.8		83.3	100.0	200.0	150.0		100.0	116.7	150.0		1666.7	
Stristella unipunctata							75.0									
Synedra sp. 1													16.7		[illegible]	
Thalassionema nitzschioides	19038.9	4569.2		8894.6	8894.6	7615.6	5771.7	[illegible]	13347.9	17135.0	2855.8	16010.2			[illegible]	
Thalassiosira sp. 1	68540.1	45693.4	15231.1	44472.9	51588.6	72347.9	217043.7	152.[illegible]	18678.6	65684.2	22846.7	114740.6	64041.0	163107.6	23352.[illegible]	
Thalassiothrix frauenfeldii	516.7	260.0	600.0	300.0	777.8	300.0	400.0	516.7	200.0	325.0	50.0	433.3	216.7	533.3	66.[illegible]	
Thalassiothrix mediterranea v. *pacifica*	200.0	140.[illegible]	283.3	400.[illegible]	622.[illegible]	483.3	450.0	450.[illegible]	116.7	112.5	125.0	350.0	116.7	133.[illegible]	75.[illegible]	
Tropidoneis lepidoptera			3807.8			15231.1				2855.8						
Unidentified centric diatom sp. 4			50.0	22.2				116.7				400.0	200.0	133.[illegible]	333.[illegible]	
Unidentified centric diatoms <20μ	102810.1	191912.3	114233.5	26683.7	14231.3	140807.9	132773.6	37357.2	21347.0	65684.3	34270.0	26683.7	29352.1	29352.1	26683.7	
Unidentified pennate diatoms <20μ	129464.6	109664.2	87579.0	46251.8	80051.2	125656.8	119945.2	48030.7	58704.2	34270.0	22846.7	69377.7	50699.1	45362.4	90724.[illegible]	
Unidentified pennate diatoms >20μ	7615.6	18277.3	22846.7	12452.4	17789.1	3807.8	17135.0	10673.5	10673.5	5711.7	8567.5		2668.4	5336.7	10673.5	
Unidentified pennate diatoms >200μ		20.0		11.1	22.2			66.7	50.0	12.5		16.7		50.0	66.7	

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

[†] See Table M-15 for synonomous name.

TABLE M-25
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
13 SEPTEMBER 1977

	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
Species	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Unidentified sigmoid diatoms >200μ					111.1				16.7			16.7	16.7		
TOTAL BACILLARIOPHYTA	666,070.8	630,879.3	579,258.6	413,914.6	541,784.4	791,669.9	1,223,587.1	754,809.8	240,532.0	441,242.9	208,469.8	649,076.5	424,614.9	655,015.2	399,314.3
PYRRHOPHYTA (dinoflagellates)															
Amphidinium sp. 1															2668.4
Ceratium furca v. *euyrannum*			16.7	33.3						37.5					
C. fusus v. *seta*								16.7							
Ceratium sp. 3				33.3									16.7		
Exuviaella baltica			7615.5					2668.4							
Gymnodinium aurantium	7615.5	9138.7	7615.6	5336.7	3557.8	19038.9	5711.7	16010.2		5711.7	8567.5	19678.6	8005.1	2668.4	
G. simplex ?		4569.3					5711.7					2668.4			
Gymnodinium sp. 2		4569.3	3807.8												
Gymnodinium spp.	11423.3	13708.0		1778.9		11423.3	28558.3	13341.8	10673.5	8567.5	2855.8				2668.4
Gyrodinium sp. 1								2668.4			5711.7				
Peridinium depressum									16.7				16.7		16.7
P. hirobis				3557.8	1778.9		5711.7					2668.4			
P. inconspicuum f. *armatum*	3807.8					3807.8									
P. trochoideum						3807.8	5711.7	8005.1	2668.4		2855.8			8005.1	
Peridinium spp.						3807.8						2668.4	2668.4		
Prorocentrum minimum				3557.8				5336.7					2668.4	13341.8	2668.4
Unidentified dinoflagellates	3807.8	13708.0	19038.9	17789.1	17789.1	15231.1	28558.3	21347.0	13341.9	31414.2	11423.3	40025.6	13341.9	26683.8	29352.1
TOTAL PYRRHOPHYTA	26,654.4	45,693.3	38,094.5	32,086.9	23,125.8	57,116.7	79,963.4	69,394.3	26,700.5	45,730.9	31,414.1	66,709.4	26,717.2	50699.1	37,374.0
CHLOROPHYTA (green algae)															
Chlamydonomas sp.		9138.7		1778.9	1778.9	3807.8		2668.4		2855.8					
Scenedesmus quadricauda					3557.8										
Chlorophyte sp. 1	19038.9	36554.7	15231.1	19568.0	14231.3	30462.2	39981.7	13341.9	18678.6	8567.5	28558.3	5336.7	37357.2	21347.0	42694.0
Chlorophyte spp.															2668.4
Filamentous chlorophytes	166.7			66.7											
TOTAL CHLOROPHYTA	19,205.6	45,693.4	15,231.1	21,413.6	19,568.0	34,270.0	39,931.7	16,010.3	18,678.6	11,423.3	23,558.3	5,336.7	37,357.2	21,347.0	45,362.4
CYANOPHYTA (blue-green algae)															
Oscillatoria sp. 1						333.3									
Oscillatoria spp.	150.0	140.0	583.3	44.5								100.0			
TOTAL CYANOPHYTA	150.0	140.0	583.3	44.5		333.3						100.0			
EUGLENOPHYTA (euglenoids)															
Euglena spp.				1778.9								2668.4			
Trachelomonas spp.						3807.8						2668.4			
TOTAL EUGLENOPHYTA				1,778.9		3,807.8						5,336.8			

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-25
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
13 SEPTEMBER 1977

	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
SPECIES	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
CRYPTOPHYTA (Cryptophytes)															
Cryptophyte spp.	26654.4	36554.7	11423.3	42694.0	32020.5	38077.8	34270.0	56035.9	64041.0	19990.8	34270.0	45362.4	29352.1	24015.3	48030.1
TOTAL CRYPTOPHYTA	26,654.4	36,554.7	11,423.3	42,694.0	32,020.5	38,077.8	34,270.0	56,035.9	64,041.0	19,990.8	34,270.0	45,362.4	29,352.1	24,015.3	48,030.1
CHRYSOPHYCEAE (yellow-brown algae)															
Apedinella radians								2668.4							
Calycomonas ovalis										5711.7	2855.8				
Meringosphaera mediterranea											5711.7				
Chrysophyte sp.2				1778.9								2668.4		2668.4	
TOTAL CHRYSOPHYCEAE				1,778.9				2,668.4		5,711.7	3,567.5	2,668.4		2,668.4	
HAPTOPHYCEAE (haptophytes including coccolithophores)															
Haptophyte sp.1								2668.4							
TOTAL HAPTOPHYCEAE								2,668.4							
PRASINOPHYCEAE (prasinophytes)															
Tetraselmis sp.1	15231.1	13708.0	11423.3	3557.8	14231.3	38077.8	39981.7	18678.6	16010.2		11423.3		2668.4	5336.7	8005.1
Prasinophyte sp.1	22846.7	13708.0		10673.5	19568.1	26654.5	22846.7	24015.4	10673.5	11423.3		34688.9	2668.4	5336.7	21347.0
Unidentified prasinophytes	7615.6	4569.3				11423.3	34270.0			2855.8	5711.7				
TOTAL PRASINOPHYCEAE	45,693.4	31,985.3	11,423.3	14,231.3	33,799.4	76,155.6	97,098.4	42,694.0	26,683.7	14,279.1	17,135.0	34,688.9	5,336.8	10,673.4	29,352.1
UNIDENTIFIED PHYTOFLAGELLATES															
Phytoflagellate sp.4	3807.8					7615.5	5711.7			2855.8					
Phytoflagellate sp.7				1778.9	1778.9			8005.1	2668.4						
Unidentified phytoflagellates > 10μ				5336.7	5336.7	3807.8		8005.1				8005.1	10673.5	5336.7	5336.7
Unidentifed phytoflagellates < 10μ	445510.6	539182.1	163734.6	259721.8	249048.3	430279.5	645419.2	490980.9	280179.3	339844.7	345556.3	357562.2	301526.3	298857.9	362393.9
TOTAL UNIDENTIFIED PHYTOFLAGELLATES	449,318.4	539,182.1	163,734.6	266,837.4	256,163.9	441,702.8	651,130.9	506,991.1	282,847.7	342,700.5	345,556.3	365,567.3	312,199.8	304,194.6	368,235.6
OTHERS															
Unidentified coccoid 3		9138.7	11423.3				11423.3								2668.4
TOTAL OTHERS		9,138.7	11,423.3				11,423.3								2,668.4
TOTAL PHYTOPLANKTON	1,233,747.0	1,339,266.8	831,172.0	794,780.1	906,462.0	1,443,133.9	2,137,454.8	1,451,272.2	659,483.5	881,079.2	673,971.0	1,174,846.4	835,578.0	1,068,613.0	930,337.5

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-26

PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
11 OCTOBER 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (diatoms)															
Amphora sp. 3	16.7		41.7												
Asterionella japonica	3807.8		9519.5	22846.7	220851.4	4002.6					10673.5	61372.6		4468.3	26683.7
Biddulphia aurita		11423.3	9519.5		22846.7		12007.7								
Biddulphia spp.					7615.6										
Camoylosira cymbelliformis†							52033.3					8005.1			
Cerataulina bergonii		16.7			966.7		255.0			93.3					16.7
Cerataulina sp. 1		16.7		16.7				16.7							
Chaetoceros eibenii					300.0	150.0	325.0	133.3	83.3		133.3	150.0	550.0	250.0	300.0
C. gracilis				3807.8											
C. lorenzianus						4002.6									
Chaetoceros spp.		3807.8		3807 8	30462.3				5336.7	24369.8	16010.2	2668.4		6702.4	5336.7
Climacosphenia moniligera											33.3				
Cocconeis spp.		7615.5													
Corethron hystrix				3807.8											
Coscinodiscus lineatus			9519.5			4002.6									2668.4
C. radiatus										6.7					
C. wailesii			41.7												
Coscinodiscus spp.					7615.6							2668.4			
Cyclotella sp. 2	3807.8					12007.7									
Cyclotella ? sp. 3										6092.5					
Cyclotella spp.							16010.3	2668.4						2234.1	
Cymatosira belgica															2668.4
Cymbella spp.	3807.8		47597.3	3807.8	7615.6					1523.1					5336.7
Dactyliosolen mediterraneus ?									16.7		50.0				
Diploneis smithii v *smithii*						4002.6									
Diploneis sp. 1 *						4002.6		2668.4		3046.2	2668.4	2668.4		6702.4	5336.7
Eunotogramma marinum†	7615.6				30462.3	4002.6	8005.1								
Guinardia flaccida			41.7												
Gyrosigma balticum v *balticum*	66.7		1166.7			25.0	25.0			6.7					16.7
G. terrysmum						75.0	25.0								
Gyrosigma spp.		66.7	500.0		33.3										
Hemiaulus hauckii										1523.1					
Hemidiscus sp. 1			41.7	66.7	100.0	200.0	150.0	33.3				16.7		33.3	
Leptocylindrus danicus				7615.6											
Licrophora abbreviata	3807.8	3807.8													
Melosira sulcata						12007.7	32020.5	10673.5			2668.4	2668.4			
Navicula distans†														2234.1	
N. membranacea	16.7			16.7	66.7	200.0	75.0								16.7
N. wawrikae	133.3	133.3	1250.0	216.7	233.3	550.0	225.0	216.7	233.3	126.7	300.0	150.0	350.0	166.7	350.0
Navicula sp. 6							4002.6						4002.6		
Nitzschia closterium	22846.7	34270.0	76155.7	30462.2	205620.3	20012.8	20012.8	8005.1	24015.4	28939.2	13341.9	18678.6	12007.7	11170.7	18678.6
N. constricta			9519.5							1523.1					
N. delicatissima	76155.6	19038.9	66636.2	30462.2	114233.5	52033.3	24015.4	40025.6	5336.7	19800.4	80051.2	13341.9	20012.8	26809.6	32020.5

[a] Values are mean of three replicates, except 4B which is the mean of two replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE H-26
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
11 OCTOBER 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Nitzschia longissima		3807.8								1523.1					
N. paradoxa			416.7	66.7	566.7	800.0	1050.0	83.3	400.0					150.0	1466.7
N. pungens v. *atlantica*		3807.8		7615.6	28846.7			10673.5		3046.2	8005.1	2668.4			
N. sigmoidea	16.7	66.7			33.3										16.7
N. spathulata							4002.6			1523.1					2668.4
Nitzschia sp. 1	100.0	16.7	166.7		133.3	25.0	50.0	83.3	183.3	73.3	33.3		50.0	100.0	366.7
Nitzschia sp. 2		16.7				75.0	125.0				16.7				50.0
Plagiogramma spp. †	3807.8					4002.6									
Pleurosigma elongatum	16.7				33.3										
Pleurosigma sp. 1 †			1083.3	16.7			75.0	16.7	66.7			50.0	50.0	16.7	183.3
Rhaphoneis surirella	3807.8	3807.8	38077.8	3807.8	22846.7		8005.1			10661.8	2668.4		4002.6		
Rhizosolenia alata			41.7												
R. alata f. *indica*		116.7			66.7	50.0	50.0	33.3	66.7		50.0			16.7	
R. calcar avis		50.0	458.3	33.3	100.0	50.0	175.0			33.3	16.7	50.0	25.0		116.7
R. delicatula					15231.1										
R. imbricata	50.0	16.7	1375.0	16.7	100.0	575.0	1350.0	333.3	150.0	46.7		83.3	400.0	216.7	300.0
R. imbricata v. *shrubsolei*	250.0	216.7	2000.0	333.3	566.7	325.0	425.0	50.0		146.7		116.7	25.0		33.3
R. robusta				16.7			25.0								
R. setigera	14983.3	13016.7	10250.0	2316.7	19433.3	20725.0	16375.0	7766.7	7416.7	3846.7	5716.7	700.0	2000.0	1733.3	4966.7
R. stolterfothii															2668.4
Skeletonema costatum	30462.3	72347.9	152311.3	68540.1	456934.0	36023.1	32020.5	32020.5		60924.5	80051.2	48030.7	140089.7	31277.9	40025.6
Stephanopyxis palmeriana							200.0								
Streptotheca thamensis				33.3	100.0	75.0				26.7		150.0		100.0	66.7
Synedra sp. 1						25.0	25.0	16.7		6.7					
Thalassionema nitzschioides	7615.5	26654.5	76155.7	68540.1	137080.2	36023.1	108069.2	5336.7	13341.9	18277.4	8005.1	10673.5			32020.5
Thalassiosira sp. 1	7615.6	22846.7	19038.9	7615.6	30462.3	24015.4	8005.1			1523.1	10673.5		28017.9		16010.2
Thalassiothrix frauenfeldii	1983.3	1850.0	2625.0	1633.3	3466.7	3000.0	2500.0	2433.3	1833.3	1433.3	1950.0	2233.3	2125.0	1750.0	3800.0
T. mediterranea v. *pacifica*		66.7	41.7	116.7		225.0	100.0	100.0	116.7	80.0	183.3	200.0	125.0	50.0	200.0
Tropidoneis lepidoptera	11423.3	19038.9	19038.9	22846.7	91386.8	28018.0	24015.4	16010.3	48030.7	30462.2	32020.5	42694.0	48030.7	55853.4	69377.7
Unidentified centric diatom sp. 4	50.0	16.7									116.7				100.0
Unidentified centric diatoms < 20μ	72347.8	121849.0	199908.6	41885.6	239391.5	60038.4	48030.7	29352.1	32020.5	19800.5	34688.9	21347.0	48030.8	33512.1	29352.1
Unidentified pennate diatoms < 20μ	171350.2	190389.1	342700.5	87579.0	365547.2	176112.7	232148.6	154765.7	96061.5	30462.3	40025.6	96061.5	76048.7	89365.5	104066.6
Unidentified pennate diatoms > 20μ	7615.6	11423.3	19038.9	11423.3	53309.0	16010.2	16010.3	13341.9	5336.7	6092.4		8005.1	16010.3	13404.8	8005.1
Unidentified pennate diatoms > 200μ	50.0	33.3	250.0	16.7	33.3		50.0	16.7	33.3	6.7					83.3
Unidentified sigmoid diatoms > 200μ						25.0	25.0		33.3					16.7	
TOTAL BACILLARIOPHYTA	455,628.4	571,653.1	1,116,529.7	431,388.6	2,158,692.1	527,495.6	670,065.2	336,875.0	240,113.4	277,967.5	350,151.9	345,452.0	401,953.8	288,335.4	415,374.5

[a] Values are mean of three replicates, except for 4B which is the mean of two replicates.

[b] S = Surface; B = Bottom.

† See Table H-15 for synonomous name.

TABLE M-26
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
11 OCTOBER 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
PYRRHOPHYTA (dinoflagellates)															
Amphidinium sp. 1								2668.4			2668.4				
Amphidinium spp.	3807.8														
Ceratium buceros f. *molle*							50.0	33.3				33.3		50.0	16.7
C. furca v. *eugrammum*	33.3	50.0	125.0	383.3		25.0		100.0			16.7	33.3	25.0	66.7	
C. fusus v. *seta*			41.7								16.7				
C. pulchellum								16.7							
C. trichoceros										6.7					
Ceratium sp. 3						25.0						16.7		16.7	
Dinophysis caudata f. *acutiformis*					4002.6										
Dissodinium lunula			41.7												
Exuviaella baltica					7615.6										
Gymnodinium aurantium	19038.9	19038.9	9519.5	7615.6		24015.4	24015.4					8005.1			5336.7
G. simplex (?)		7615.6								1523.1					
Gymnodinium spp.	30462.2	7615.5	9519.5		15231.1	20012.8		5336.7	2668.4	4569.3	2668.4		4002.6		
Gyrodinium sp. 1					7615.6	4002.6				1523.1	2668.4	2668.4		2234.1	
Peridinium depressum								16.7			16.7	16.7	50.0	33.3	
P. trochoideum			9519.5		7615.6		4002.6		2668.4	7615.6					
Peridinium spp.	7615.5	3807.8	9519.5					2668.4							
Pyrophacus horologium						4002.6	4002.6								
Unidentified dinoflagellates	11423.3	11423.3	47597.3	3807.8	7615.6	12007.7	20012.8	24015.3	18678.6	6092.5	5336.7	16010.2	8005.1	29043.8	10673.5
TOTAL PYRRHOPHYTA	72,381.0	49,551.1	85,883.7	11,806.7	45,693.5	64,091.1	56,086.0	34,855.5	24,015.4	21,330.3	13,392.0	26,783.7	12,082.7	31,444.6	16,026.9
CHLOROPHYTA (green algae)															
Chlamydomonas sp.	3807.8						4002.6			4569.3	2668.4				
Chlorophyte sp. 1	60924.5	57116.7	66636.2	38077.8	22846.7	44028.2	68043.5	58704.2	80051.2	28939.2	90724.7	48030.7	44028.2	42448.6	88056.4
Chlorophyte sp. 2	666.7	1083.3	833.3	933.3	766.7	1900.0	1875.0	466.7	1350.0	726.7	1766.7	1200.0		1683.3	2516.7
Chlorophyte spp.											2668.4			2234.1	
TOTAL CHLOROPHYTA	65,399.0	58,200.0	67,469.5	39,011.1	23,613.4	45,928.2	73,921.1	59,170.9	81,401.2	34,235.2	97,828.2	49,230.7	44,028.2	46,366.0	90,573.1
CYANOPHYTA (blue-green algae)															
Anabaena spp.	200.0	316.7	41.7			225.0	350.0	100.0			16.7		50.0	66.7	200.0
Lyngbya spp.			1500.0												
Oscillatoria spp.	583.3	1883.3	17583.3	83.3	800.0	50.0	750.0	283.0	250.0	100.0	100.0	733.3	25.0	166.7	133.3
TOTAL CYANOPHYTA	783.3	2,200.0	19,125.0	83.3	800.0	275.0	1,100.0	383.0	250.0	100.0	116.7	733.0	75.0	233.4	333.3
EUGLENOPHYTA (euglenoids)															
Euglena spp.					7615.6						5336.7				
TOTAL EUGLENOPHYTA					7,615.6						5,336.7				

[a] Values are mean of three replicates, except 4B which is the mean of two replicates.

[b] S = Surface; B = Bottom

† See Table M-15 for synonomous name.

TABLE H-26
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
11 OCTOBER 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
PYRRHOPHYTA (dinoflagellates)															
Amphidinium sp. 1								2668.4			2668.4				
Amphidinium spp.	3807.8														
Ceratium buceros f. *molle*							50.0	33.3				33.3		50.0	16.7
C. furca v. *eugrammum*	33.3	50.0	125.0	383.3		25.0		100.0			16.7	33.3	25.0	66.7	
C. fusus v. *seta*			41.7								16.7				
C. pulchellum								16.7							
C. trichoceros										6.7					
Ceratium sp. 3						25.0						16.7		16.7	
Dinophysis caudata f. *acutiformis*					4002.6										
Dissodinium lunula			41.7												
Exuviaella baltica					7615.6										
Gymnodinium aurantium	19038.9	19038.9	9519.5	7615.6		24015.4	24015.4					8005.1			5336.7
G. simplex (?)		7615.6								1523.1					
Gymnodinium spp.	30462.2	7615.5	9519.5		15231.1	20012.8		5336.7	2668.4	4569.3	2668.4		4002.6		
Gyrodinium sp. 1					7615.6	4002.6				1523.1	2668.4	2668.4		2234.1	
Peridinium depressum								16.7			16.7	16.7	50.0	33.3	
P. trochoideum			9519.5		7615.6		4002.6		2668.4	7615.6					
Peridinium spp.	7615.5	3807.8	9519.5					2668.4							
Pyrophacus horologium						4002.6	4002.6								
Unidentified dinoflagellates	11423.3	11423.3	47597.3	3807.8	7615.6	12007.7	20012.8	24015.3	13670.6	6092.5	5336.7	16010.2	8005.1	29043.8	10673.5
TOTAL PYRRHOPHYTA	72,381.0	49,551.1	85,883.7	11,806.7	45,693.5	64,091.1	56,086.0	34,855.5	24,015.4	21,330.3	13,392.0	26,783.7	12,082.7	31,444.6	16,026.4
CHLOROPHYTA (green algae)															
Chlamydomonas sp.	3807.8						4002.6			4569.3	2668.4				
Chlorophyte sp. 1	60924.5	57116.7	66636.2	38077.8	22846.7	44028.2	68043.5	58704.2	80051.2	28939.2	90724.7	48030.7	44028.2	42448.6	88056.-
Chlorophyte sp. 2	666.7	1083.3	833.3	933.3	766.7	1900.0	1875.0	466.7	1350.0	726.7	1765.7	1200.0		1683.3	2516.7
Chlorophyte spp.											2668.4			2234.1	
TOTAL CHLOROPHYTA	65,399.0	58,200.0	67,469.5	39,011.1	23,613.4	45,928.2	73,921.1	59,170.9	81,401.2	34,235.2	97,828.2	49,230.7	44,028.2	46,366.0	90,573.1
CYANOPHYTA (blue-green algae)															
Anabaena spp.	200.0	316.7	41.7			225.0	350.0	100.0			16.7		50.0	66.7	200.0
Lyngbya spp.			1500.0												
Oscillatoria spp.	583.3	1883.3	17583.3	83.3	800.0	50.0	750.0	283.0	250.0	100.0	100.0	733.3	25.0	166.7	133.3
TOTAL CYANOPHYTA	783.3	2,200.0	19,125.0	83.3	800.0	275.0	1,100.0	383.0	250.0	100.0	116.7	733.0	75.0	233.4	333.3
EUGLENOPHYTA (euglenoids)															
Euglena spp.					7615.6						5336.7				
TOTAL EUGLENOPHYTA					7,615.6						5,336.7				

[a] Values are mean of three replicates, except 4B which is the mean of two replicates.

[b] S = Surface; B = Bottom

† See Table H-15 for synonomous name.

TABLE II-26
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
11 OCTOBER 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
CRYPTOPHYTA (cryptophytes)															
Cryptophyte spp.	140888.0	72347.9	57116.7	41885.6	137080.2	128082.0	132084.5	104066.6	117408.5	71586.3	112071.7	56035.9	84053.8	53619.3	66709.4
TOTAL CRYPTOPHYTA	140,888.0	72,347.9	57,116.7	41,885.6	137,080.2	128,082.0	132,084.5	104,066.6	117,408.5	71,586.3	112,071.7	56,035.9	84,053.8	53,619.3	66,709.4
CHRYSOPHYCEAE (yellow-brown algae)															
Apedinella radians †						4002.6									
Chrysophyte sp. 2								2668.4	5336.7						
TOTAL CHRYSOPHYCEAE						4,002.6		2,668.4	5,336.7						
PRASINOPHYCEAE (prasinophytes)															
Tetraselmis sp. 1		3807.3			7615.6	4002.6			8005.1				4002.6		
Prasinophyte sp. 1	19038.9	30462.2		7615.5	68540.1	28018.0	20012.8	13341.9	10673.5	3046.2	10673.5	5336.7	8005.1	4468.3	13341.8
Unidentified prasinophytes	7615.6	11423.3		7615.5	15231.1										
TOTAL PRASINOPHYTES	26,654.5	45,693.3		15,231.0	91,386.8	32,020.6	20,012.8	13,341.9	18,678.6	3,046.2	10,673.5	5,336.7	12,007.7	4,468.3	13,341.8
UNIDENTIFIED PHYTOFLAGELLATES															
Phytoflagellate sp. 3				3807.8											
Phytoflagellate sp. 4	7615.6	11423.3													
Phytoflagellate sp. 7*						8005.1	12007.7				2668.4				
Unidentified phytoflagellates > 10μ	7615.6	3807.8				20012.8	12007.7	5336.7	2668.4	3046.2	8005.1	10673.5	12007.7	6702.4	2668.4
Unidentified phytoflagellates < 10μ	662554.3	677785.4	399817.2	514050.7	708247.6	984630.2	756484.2	541680.0	472302.3	408194.4	547037.8	525669.7	464297.2	377569.2	651083.4
TOTAL UNIDENTIFIED PHYTOFLAGELLATES	677,785.5	693,016.5	399,817.2	517,858.5	708,247.6	1,012,648.1	780,499.6	547,016.7	474,970.7	411,240.6	557,711.3	536,343.2	476,304.9	384,271.6	653,751.8
OTHERS															
Unidentified auxospores			9519.5												
Unidentified coccoid 3					7615.6		4002.6				2668.4		4002.6		
TOTAL OTHERS			9,519.5		7,615.6		4,002.6				2,668.4		4,002.6		
TOTAL PHYTOPLANKTON	1,439,519.7	1,492,661.9	1,755,461.3	1,057,264.8	3,180,744.8	1,814,543.2	1,739,771.8	1,098,378.3	962,174.5	818,586.1	1,149,950.4	1,019,915.5	1,034,508.7	808,738.6	1,256,110.8

[a] Values are mean of three replicates, except 4B which is the mean of two replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-27

PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
2 NOVEMBER 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (diatoms)															
Amphiprora paludosa															13341.9
Amphora spp.		9519.5											3894.6		
Asterionella japonica	28558.4	19038.9	57116.7	60038.4	60038.4	19038.9	68540.1			280179.3					
Bacteriastrum delicatulum								10341.9			13341.9		62262.1		
Biddulphia alternans					20012.8		22846.7	13341.9	26683.7	40025.6		5336.7			
B. aurita	47597.3	123752.9	38077.3	13341.9	33354.7	57116.7	68540.1	40025.6	80051.2	40025.6	66709.3	10673.5	44472.9	120076.8	80051.2
B. longicruris	28558.4	38558.4	57116.7	20012.8	6670.9		22846.7	106734.5	93393.1	53367.5		21347.0	26683.7		106735.0
B. mobiliensis					13341.9			13341.9	26683.7	13341.9			17789.1		40025.6
B. tuomeyi †												5336.7			
Biddulphia spp.		9519.5				19038.9						5336.7			
Campylosira cymbelliformis		47597.3	19038.9	226811.8	66709.4	38077.8	91356.0	280179.3	240153.7	93393.1		10673.5	329099.5	360230.5	293521.0
Cerataulina bergonii		1041.7	1500.0	958.3	833.3	666.7				538.3	416.7	566.7	1444.4		
Cerataulina sp.1		41.7								166.7	83.3		55.6		
Chaetoceros affinis v. *willie*												69377.7			
C. curvisetus										53367.5	93393.1				
C. didymus v. *protuberans*													17789.2		
C. eibenii														80.0	
C. laevis										40025.6					
C. lorenzianus									53367.5	40025.6				106735.0	53367.5
C. peruvianus				6670.9											
Chaetoceros spp.	19038.9	38077.8		26683.7	66709.3	38077.8	45693.4	133418.7	40025.6	160102.4	106786.2	48030.7	80051.2	40025.6	26683.7
Chaetoceros resting spore	9519.5											5336.7			
Climacodium frauenfeldianum										166.7					
Climacosphenia moniligera		41.7			41.7										
Cocconeis pediculus v. *pediculus*							22846.7								
Coscinodiscus centralis	41.7	83.3								83.3	250.0	66.7	1388.9	333.3	1166.7
C. lineatus	19038.9	28558.4	19038.9	33354.7	33354.7	19038.9	22846.7	13341.9	80051.2		26683.7	21347.0	44472.9	26683.7	80051.2
C. marginatus	41.7			125.0	41.7				250.0						
C. radiatus	166.7	166.7	166.7	83.3	1416.7	250.0	100.0	26683.7	5000.0	1500.0	500.0	166.7		1000.0	916.7
C. wailesii						83.3						33.3			83.3
Coscinodiscus spp.	9519.5		38077.8		6670.9	38077.8		40025.6	13341.9	66709.3	13341.9			40025.6	
Cyclotella sp.2				46696.6							53367.5				26683.7
Cyclotella spp.	19038.9	28558.4			26683.7	19038.9	45693.4	40025.6	40025.6	53367.5	53367.5	21347.0	3894.6		26683.7
Cymatosira belgica	9519.5				60038.4			13341.9	80051.2	80051.2	40025.6		80051.2		53367.5
Cymbella spp.	19038.9	9519.5	76155.6		86722.2	19038.9	45693.4	13341.9	13341.9		40025.6		17789.1	13341.9	
Diploneis interrupta										13341.9			26683.7	13341.9	
Diploneis sp.1 †	66636.2	38077.8	19038.9	33354.7	6670.9	76155.6	91386.8	80051.2	146760.6	80051.2	173444.3	37357.2	115629.5	53367.5	106734.9
Eucampia cornuta			166.7			166.7			416.7			233.3	111.1		
Eunotogramma marinum											13341.9				
Fragilaria ? sp.						133272.4	159926.9								
Grammatophora marina					6670.9		45693.4		13341.9						
Guinardia flaccida	41.7	83.3			166.7		700.0		416.7	166.7	500.0	33.3	55.6		250.0
Gyrosigma balticum v. *balticum*	166.7	166.7	583.3			83.3	100.0		83.3		83.3	33.3	55.6	83.3	166.7

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-27
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
2 NOVEMBER 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Gyrosigma terryanum				41.7											
Hemiaulus hauckii											26683.7				
Hemidiscus cuneiformis V. *venetricosa*									83.3			33.3			
Leptocylindrus danicus							22846.7			40025.6					
Lithodesmium undulatum	500.0	250.0	333.3	167.7	875.0			416.7	1250.0	666.7	583.3	233.3	777.8	500.0	1250.0
Melosira sulcata	19038.9	19038.9	95194.6	40025.6	20012.8			106735.0	133418.7	106735.0	53367.5	42694.0		40025.6	226811.[illegible]
Navicula distans		9519.5			6670.9			13341.9	13341.9	13341.9	13341.9	5336.7		13341.9	
N. halophila V. *halophila*		9519.5				19038.9						10673.5			
N. lyra V. *lyra*	83.3					83.3			250.0					333.3	83.3
N. membranacea		83.3				416.7		250.0				100.0	55.6	333.3	
N. wawrikae	41.7	83.3		83.3	125.[illegible]	83.3	200.0		83.3	166.7	166.7	33.3	277.8		83.3
Navicula sp.6		9519.5			6670.9	19038.9	22846.7				13341.9			13341.9	
Nitzschia acicularis V. *closterioides*												5336.7			
N. closterium	123752.9	104714.0	190389.1	33354.7	73380.3	92389.2	137080.2	40025.6	26683.7	53367.5	66709.3	26683.7	44472.9	13341.9	13341.9
N. constricta	47597.3	47597.3		13341.9	13341.9	76155.6	91386.8	26683.7	13341.9		26683.7	21347.0	26683.7	26683.7	26683.7
N. delicatissima	28558.4	9519.5		53367.5	86722.1	76155.7	274160.4	186736.2			26683.7	16010.2	35578.3	53367.5	13341.9
N. fasciculata														13341.9	
N. filiformis		9519.5	19038.9												
N. longissima	9519.5												8894.6		
N. paradoxa	1208.3	2208.3	4166.7	2750.0	4791.7	4166.7	600.0	6833.3	8416.7	3833.3	3416.7	2300.0	2666.7	9750.0	12666.7
N. pungens V. *atlantica*	9519.5		19038.9		13341.9										
N. sigma	83.3	166.7	83.3	83.3		166.7		166.7	250.0			100.0	166.7		
N. sigmoidea							300.0			83.3	333.3		111.1	333.3	583.3
N. spathulata		9519.5													
Nitzchia sp.1	83.3			166.7	125.0	83.3		166.7	333.3			33.3	444.5		416.7
Nitzchia sp.2	41.7	166.7	165.7	41.7	375.0		100.0					233.3			
Plagiogramma spp. †	76155.7				20012.8		22846.7								
Pleurosigma elongatum		125.0	333.3				100.0	83.3				33.3			
Pleurosigma sp.1 †	333.3	291.7	165.7	83.3	250.0	500.0	700.0	916.7	1666.7	500.0	833.3	200.0	777.8	416.7	916.7
Pleurosigma sp.2	41.7														166.7
Rhaphoneis surirella	85675.1	114233.5	57115.7	140089.6	153431.5	133272.4	137080.2	93393.1	173444.3	240153.7	160102.5	26683.7	329099.5	133418.7	160102.4
Rhizosolenia alata															83.3
R. alata f. *indica*													55.6		
R. bergonii								166.7		166.7					83.3
R. calcar avis			83.3		208.3			83.3				100.0	55.6		
R. fragilissima				13341.9									8894.6		
R. imbricata	41.7								166.7						
R. imbricata V. *shrubsolei*							100.0								
R. robusta				41.7								33.3		83.3	
R. setigera	2000.0	4333.3	2166.7	3291.7	6708.3	7083.3	3800.0	3000.0	1583.3	1083.3	2833.3	200.0	1944.5	1416.7	1583.3
Skeletonema costatum	1009062.6	1332724.1	1199451.7	2648361.6	2321485.7	2037153.9	2718757.2	667093.6	346888.7	466965.5	120076.8	656420.1	249048.3	547016.7	253495.6
Stauroneis anceps V. *americana*	19038.9														
Streptotheca thamensis	333.3	291.7	250.0	625.0	250.0		400.0	2000.0	1250.0	916.7	1583.3	400.0	1055.6	2333.3	1750.0
Striatella unipunctata	41.7	41.7		41.7											

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-27
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
2 NOVEMBER 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Synedra sp.1									83.3	250.0	83.3				
Thalassionema nitzschioides	380778.3	656842.6	247505.9	733803.0	613726.1	261739.4	913867.9	1160742.9	1360871.0	920589.2	787170.5	282347.7	738250.3	1414238.5	827196.1
Thalassiosira sp.1	142791.9	123752.9	133272.4	126747.8	153431.5	95194.5	137080.2	80051.2	80051.2	26683.7	13341.9	42694.0		40025.6	120076.8
Thalassiosira spp. †										13341.9					
Thalassiothrix delicatula		41.7													
T. frauenfeldii	2041.7	3583.3	2166.7	1958.3	3916.7	6083.3	4800.0	3083.3	2333.3	1416.7	250.0	2333.3	1722.2	2500.0	3250.0
T. mediterranea v. *pacifica*			83.3	83.3	291.7			166.7	333.3	83.3	166.7	100.0			
Unidentified centric diatom sp. 4	83.3	83.3	83.3				100.0		416.7	250.0	166.7	566.7	277.8	416.7	500.0
Unidentified centric diatoms < 20 [1]	732998.3	847231.7	628284.2	186736.2	393585.2	932906.9	1576422.2	200128.1	266837.4	173444.3	506991.2	3[illegible]98.9	329099.5	306863.0	346888.7
Unidentified centric diatoms > 20									13341.9	13341.9	53367.5	5336.7	8894.6	13341.9	26683.7
Unidentified pennate diatoms < 20 [2]	942426.3	771076.1	856751.2	346888.7	780439.5	875790.1	1485035.4	653751.7	827196.1	560358.6	747144.8	357562.1	515885.7	480307.4	693777.3
Unidentified pennate diatoms > 20 [3]	76155.7	161830.8	114233.5	46696.5	66709.3	133272.4	182773.6	26683.7	146760.6	66709.3	13341.9	26683.7	106735.0	106734.9	146760.6
Unidentified pennate diatoms > 200 [4]	166.7	291.7	333.3	166.7	291.7	166.7	500.0	83.3	500.0	333.3	416.7	66.7	333.4	166.7	500.0
Unidentified signoid diatoms > 200					166.7				333.3	83.3			222.2	166.7	166.7
TOTAL BACILLARIOPHYTA	3,986,717.2	4,630,604.1	3,896,771.7	4,860,562.2	5,237,546.7	5,446,173.8	3,488,725.3	4,076,012.4	4,374,950.1	3,814,933.3	3,414,843.9	2,158,942.2	3,296,156.4	4,009,469.5	3,799,074.3
PYRRHOPHYTA (dinoflagellates)															
Ceratium furca v. *eugrammum*						166.7		250.0		83.3		33.3		166.7	83.3
C. fusus v. *seta*					41.7	83.3				83.3					
C. teres												33.3			
C. trichoceros															166.7
C. tripos										83.3					
Gymnodinium aurantium				6670.9						13341.9					
Gymnodinium sp.2												5336.7			
Gymnodinium spp.	9519.5	9519.5				19038.0						5336.7			13341.9
Peridinium depressum	41.7			83.3	41.7			83.3		83.3		33.3			166.7
P. hirobis				6670.9											
P. inconspicuum f. *armatum*		9519.5													
P. trochoideum								26683.7							
Peridinium spp.												5336.7			
Prorocentrum minimum				6670.9						13341.9					
Unidentified dinoflagellates	9519.5	9519.5			6670.9		45693.4	13341.9		40025.6	26683.7	42694.0	8894.6		13341.9
TOTAL PYRRHOPHYTA	19,080.7	28,558.5		20,096.0	6,754.3	19,288.9	45,693.4	40,358.9		67,042.6	26,683.7	56,804.0	8,894.6	166.7	27,100.5
CHLOROPHYTA (green algae)															
Chlorophyte sp.1				13341.9	80051.2			120076.8	40025.6	106735.0	40025.6		35578.3	80051.2	53367.5
Chlorophyte sp.2					41.7							66.7			
TOTAL CHLOROPHYTA				13,341.9	80,092.9			120,076.8	40,025.6	106,735.0	40,025.6	66.7	35,578.3	80,051.2	53,367.5

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-27
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
2 NOVEMBER 1977

	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
SPECIES	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
CYANOPHYTA (blue-green algae)															
Anabaena spp.	250.0			333.3	83.3				1000.0	333.3		133.3	111.1	500.0	
Oscillatoria spp.	583.3	708.3	1500.0	416.7	208.3	1166.7	500.0	750.0	250.0	1750.0	1250.0	866.7	222.2	333.3	1416.7
TOTAL CYANOPHYTA	833.3	708.3	1,500.0	750.0	291.6	1,166.7	500.0	750.0	1,250.0	2,083.3	1,250.0	1,000.0	333.3	833.3	1,416.7
EUGLENOPHYTA (euglenoids)															
Trachelomonas spp.									13341.9						
TOTAL EUGLENOPHYTA									13,341.9						
CRYPTOPHYTA (cryptophytes)															
Cryptophyte spp.	76155.6	47597.3	38077.8	226811.8	126747.8	57116.7	68540.1	226811.8	213469.9	186786.2	213469.9	64041.0	160102.5	186786.2	[illegible]
TOTAL CRYPTOPHYTA	76,155.6	47,597.3	38,077.8	226,811.8	126,747.8	57,116.7	68,540.1	226,811.8	213,469.9	186,786.2	213,469.9	64,041.0	160,102.5	186,786.2	[illegible]
CHRYSOPHYCEAE (yellow-brown algae and silicoflagellates)															
Apedinella radians *					6670.9			13341.9	[illegible]	[illegible]					
Chrysophyte sp.2				6670.9											
DICTYOCHALES (silicoflagellates)															
Dictyocha sp.	9519.5				6670.9				13341.9	40025.6	13341.9		26683.7		[illegible]
TOTAL CHRYSOPHYCEAE	9,519.5			6,670.9	13,341.8			13,341.9	40,025.6	53,367.5	13,341.9		26,633.7		[illegible]
PRASINOPHYCEAE (prasinophytes)															
Tetraselmis sp.1										13341.9		5336.7			
Prasinophyte sp.1	9519.5	9519.5	19038.9	73380.3	13341.9			40025.6	13341.9	26683.7	13341.9	42694.0	35578.3		26683.7
TOTAL PRASINOPHYCEAE	9,519.5	9,519.5	19,038.9	73,380.3	13,341.9			40,025.6	13,341.9	40,025.6	13,341.9	48,030.7	35,578.3		26,683.7
UNIDENTIFIED PHYTOFLAGELLATES															
Unidentified phytoflagellates > 10μ				20012.8				13341.9	13341.9	26683.7			8894.6		
Unidentified phytoflagellates < 10μ	342700.5	209428.1	342700.5	780499.5	1020653.2	723478.8	913867.9	1374212.8	1494289.7	1334187.2	1374212.8	288184.4	853879.8	880563.6	733503.0
TOTAL UNIDENTIFIED PHYTOFLAGELLATES	342,700,5	209,428.1	342,700.5	800,512.3	1,020,653.2	723,478.8	913,867.9	1,387,554.7	1,507,631.6	1,360,870.9	1,374,212.8	288,184.4	862,774.4	880,563.6	733,503.0
OTHERS															
Unidentified auxospores								26683.7	26683.7	40025.6	53367.5		35578.3	13341.9	40025.6
Unidentified coccoid 3	161830.8	180869.7	133272.4	46696.5	153431.5	228467.0	205620.3	93393.1	266837.4	186786.2	173444.3	112071.7	186786.2	53367.5	386914.3
TOTAL OTHERS	161,830.8	180,869.7	133,272.4	46,696.5	153,431.5	228,467.0	205,620.3	120,076.8	293,521.1	226,811.8	226,811.8	112,071.7	222,364.5	66,709.4	426,939.9
TOTAL PHYTOPLANKTON	4,606,357.1	5,107,285.5	4,431,361.3	6,048,821.9	6,652,201.7	6,475,691.9	9,722,947.0	6,025,003.9	6,497,557.7	5,858,656.2	5,323,981.5	2,731,140.7	4,648,466.0	5,224,579.9	5,151,778.7

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

* See Table M-15 for synonomous name.

TABLE M-28

PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
1 DECEMBER 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (diatoms)															
Amphiprora paludosa									177.9						
Amphora spp.					1903.9			1631.9							
Asterionella japonica	15038.9		11423.3	2855.8	49501.2	2401.5	48231.9	1631.9	3202.1	15231.1	2855.9			11423.4	8159.5
Bacteriastrum delicatulum											2855.8				
Bellerochea malleus v. ?				18.8											
Biddulphia alternans	1903.9	25385.2			1903.9	533.7	2538.5			7615.6		1231.6	593.0		3263.8
B. aurita	3807.8	76155.7	2855.8	15707.1	9519.5	800.5	17759.6	8159.5	1067.4		2855.8	2463.1	2371.9		1631.9
B. longicruris					1903.9		27923.8		355.8	3046.2			593.0		3263.8
B. rhombus		50770.5													
Biddulphia spp.	3807.8	76155.7					5077.1	1631.9						5711.7	1631.9
Campylosira cymbelliformis *	7615.6	50770.4		1427.9	3807.8	800.5	7615.6		355.8			615.8			
Cerataulina bergonii	41.7			187.5		3.3	133.3				6.3	3.8	22.2		21.4
Chaetoceros eibenii													11.1		
C. laciniosus														2855.9	
C. lorenzianus													2371.9		
Chaetoceros spp.				7139.6	19038.9	533.7	10154.1	1631.9	177.9	4569.3	2855.9	3694.7	1778.9	1427.9	
Chaetoceros resting spore							2538.5								
Cocconeis fluviatilis v. *fluviatilis*	1903.9		2855.8	1427.9			2538.5	1631.9					593.0		1631.9
Corethron hystrix				1427.9	1903.9		2538.5		177.9	1523.1	1427.9				
Coscinodiscus centralis		111.1				3.3								6.3	
C. eccentricus v. *fasciculata*		50770.5													
C. lineatus		25385.2	2855.8	1427.9	1903.9		2538.5	1631.9	177.9				593.0		
C. marginatus			12.5												
C. radiatus	16.7	111.1			16.7						18.8		11.1		
Coscinodiscus spp.					1903.9										
Cyclotella spp.		25385.2			1903.9				177.9				593.0		
Cymatosira belgica													5336.7		
Cymbella spp.			17135.0	8567.5	1903.9		5077.0				2855.8				1631.9
Dactyliosolen mediterraneus ?												7.7	3.7		
Diploneis smithii v. *smithii*				1427.9				1631.9				615.8	1185.9		
Diploneis sp.1 *	9519.4	25385.2		5711.7		266.8	2538.5	1631.9	533.7		1427.9	1231.5	2371.9		1631.9
Eunotogramma marinum *	5711.7	50770.4	2855.8		1903.9	533.7					1427.9			1427.9	
Gomphonema spp.								1631.9							
Gyrosigma balticum v. *balticum*	33.3	7555.6	125.0						1.1					12.5	
Gyrosigma terryanum													3.7		
Gyrosigma spp.		111.1													
Hemiaulus hauckii												615.8			
H. membranaceus				1427.9					1523.1						
Leptocylindrus danicus							5077.1								
Lithodesmium undulatum				6.3		1.7	22.2			20.0	6.3	15.4	40.8	6.3	
Melosira sulcata		76155.7	17135.0							7615.6			2964.9		
Navicula distans †				1427.9		266.8			177.9		1427.9	615.8	593.0	1427.9	

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE H-20
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
1 DECEMBER 1977

SPECIES	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
BACILLARIOPHYTA (continued)															
Unidentified pennate diatoms > 20μ	32366.1	50770.5	11423.3	15707.1	13327.2	1334.2	50770.5	13055.2	1778.9	3046.2	5711.7	615[illegible].3	4743.8	7139.6	8159.5
Unidentified pennate diatoms > 200μ		555.6	25.0			1.7		21.4	1.1	13.3		7.7	3.7	12.5	14.3
Unidentified sigmoid diatoms > 200μ		111.1													
TOTAL	626.	2,974.	477.	591.	630.	73.	1,011.	268.	44.	101.	163.	106.	104.	235.	175.
BACILLARIOPHYTA	218.0	744.9	131.1	845.0	871.6	486.9	754.0	553.9	997.7	492.0	142.9	363.6	551.0	285.3	721.[illegible]
PYRRHOPHYTA (dinoflagellates)															
Ceratium buceros f. *mollie*									1.1		6.3			12.5	
C. extensum													3.7		
C. furca V. *eugrammum*						1.7		7.1		6.7	6.3	7.[illegible]		12.5	
C. fusus V. *seta*					9.2										
C. longinum										13.3				6.3	
C. setaceum				6.3						6.7	6.3				
C. teros	3.3							7.1	1.1			34.[illegible]	40.7	12.5	7.1
C. trichoceros											6.3				
Ceratium sp.3													3.7		
Exuviaella spp.							2538.5								
Gymnodinium aurantium	7615.6	25385.2				800.5	15231.2	3263.8		1523.1	4283.8			1427.9	9791.4
G. simplex (?)						266.8			177.9			615.8			
Gymnodinium sp.2	1903.9						7615.6								
Gymnodinium sp.4							5077.0								1631.9
Gymnodinium spp.			11423.3	4283.8	7615.6	800.5	5077.0	8159.5		1523.1		1847.3		5711.7	1631.9
Gyrodinium sp.1												615.[illegible]	593.0		
Peridinium inconspicuum f. *armatum*		25385.2	2855.8				7615.6								
P. trochoideum												615.8			
Peridinium spp.				1427.9	1903.9	266.8	5077.1							1427.9	
Prorocentrum minimum													1778.9		
P. redfieldi †						266.8									
Unidentified dinoflagellates	3807.8	25385.2		2855.9	5711.7	1067.3	17769.7	3263.8	1067.4	1523.1	9995.4	1847.[illegible]	5336.8	2855.8	3263.8
TOTAL PYRRHOPHYTA	13,335.6	76,155.6	14,279.1	8,573.9	15,239.5	3,470.4	66,001.7	14,701.3	1,247.5	4,596.0	14,304.4	5,584.[illegible]	7,756.9	11,467.1	16,326.1
CHLOROPHYTA (green algae)															
Chlamydomonas sp.	3807.8		2855.8				7615.6	3263.8		4569.3			2371.9	2855.8	1631.9
Chlorophyte sp.1	22846.7	50770.4	8567.5	27130.4	22846.7	3468.9	22846.7	3263.8	3379.9	3046.2		3078.9	593.0	5711.7	3263.8
Chlorophyte sp.2				31.3	75.0	13.3	44.4	50.0	10.0		56.3	65.4	37.0	43.8	7.1
Chlorophyte spp.												615.9			
Colonial chlorophytes				1427.9											

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table H-15 for synonomous name.

TABLE M-28
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
1 DECEMBER 1977

	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
SPECIES	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
TOTAL CHLOROPHYTA	26,654.5	[illegible]	11,423.3	23,589.6	22,921.7	3,492.2	30,506.7	6,557.6	3,389.9	7,615.5	56.3	3,760.1	3,001.9	[illegible]	4,302.3
CYANOPHYTA (blue-green algae)															
Anabaena spp.											50.0				
Lyngbya spp.		111.1	62.5												
Oscillatoria spp.	103.3	4444.4	562.5	50.0	303.3	8.3	66.7	64.3	18.9	233.3	6.3	596.2	51.8	393.8	164.3
TOTAL CYANOPHYTA	103.3	4,555.5	625.0	50.0	303.3	8.3	66.7	64.3	18.9	233.3	56.3	596.2	51.8	393.8	[illegible]
EUGLENOPHYTA (euglenoids)															
Euglena sp.1	1903.9														
TOTAL EUGLENOPHYTA	[illegible]														
CRYPTOPHYTA (cryptophytes)															
Cryptophyte spp.	72347.9	406163.5	19990.8	65684.2	78059.5	6937.8	114233.5	32638.1	6937.8	9138.7	31414.2	38794.0	43287.0	31414.2	32638.2
TOTAL CRYPTOPHYTA	72,347.9	406,163.5	19,990.8	65,684.2	78,059.5	69,937.8	114,233.5	32,638.1	6,937.8	9,138.7	31,414.2	38,794.0	43,287.0	31,414.2	32,638.2
CHRYSOPHYCEAE (yellow-brown algae and silicoflagellates)															
Apedinella radians *	1903.9				1903.9	266.8	7615.6	3263.8						2855.9	
Chrysophyte sp.2									355.8				593.0		
TOTAL CHRYSOPHYCEAE	1,903.9				1,903.9	266.8	7,615.6	3,263.8	355.8				593.0	2,855.9	
HAPTOPHYCEAE (haptophyes including coccolithophores)															
Haptophyte sp.1								4895.7		15231.1	25702.5	15394.5	[illegible]	52033.0	[illegible]
Haptophyte sp.2								4895.7		6092.4	2855.9	615.8	4743.8		1631.9
TOTAL HAPTOPHYCEAE								9,791.4		21,323.5	28,558.4	16,010.3	40,322.1	52,833.0	[illegible]
PRASINOPHYCEAE (prasinophytes)															
Tetraselmis sp.1						266.8	5077.1								
Prasinophyte sp.1	13327.2			11423.4	5711.7	3735.7	30462.3	6527.6	177.9		2855.9	6157.8	2964.8	7139.6	8159.5
Unidentified prasinophytes	3807.8						5077.1			1523.1			593.0	2855.8	
TOTAL PRASINOPHYCEAE	17,135.0			11,423.4	5,711.7	4,002.5	40,616.5	6,527.6	177.9	1,523.1	2,855.9	6,157.8	3,557.8	9,995.4	[illegible]
UNIDENTIFIED PHYTOFLAGELLATES															
Phytoflagellate sp.7 *		25385.2					2538.5	1631.9				615.8			
Phytoflagellate sp.8	1903.9														
Phytoflagellate sp.9	1903.9											4310.4	1778.9	4283.8	1631.9
Unidentified phytoflagellates > 10μ						266.8					1427.9	3694.6	5929.7		
Unidentified phytoflagellates < 10μ	234178.7	660015.7	71395.9	185629.4	140,888.0	44561.8	195466.2	112601.6	27395.3	44170.3	91386.8	134855.5	109106.8	134224.4	132184.5
TOTAL UNIDENTIFIED PHYTOFLAGELLATES	237,986.5	685,400.9	71,395.9	185,629.4	140,888.0	44,828.6	198,004.7	114,233.5	27,395.3	44,170.3	92,814.7	143,476.3	116,815.4	138,508.2	133,816.4

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

* See Table M-15 for synonomous name.

TABLE M-23
(continued)
PHYTOPLANKTON ABUNDANCE AND COMPOSITION IN CELLS PER LITER[a]
ST. LUCIE PLANT
1 DECEMBER 1977

	STATION AND DEPTH[b]														
	11		12	0		1		2		3		4		5	
SPECIES	S	B	S	S	B	S	B	S	B	S	B	S	B	S	B
OTHERS															
Unidentified auxospores											1427.9				
Unidentified coccoid 3	5711.7	126926.1	14279.2	4283.8	9519.4	533.7	7615.6		1067.3	1523.1	1427.9	615.8	1185.9	2855.9	1631.9
TOTAL OTHERS	5,711.7	126,926.1	14,279.2	4,283.8	9,519.4	533.7	7,615.6		1,067.3	1,523.1	2,855.8	615.8	1,185.9	2,855.9	1,631.9
TOTAL PHYTOPLANKTON	1,003,305.3	4,324,716.9	609,124.4	896,080.3	905,423.6	137,017.2	1,476,415.0	456,351.5	85,588.1	191,615.5	336,058.9	321,358.4	321,122.7	494,220.1	443,532.2

[a] Values are mean of three replicates.

[b] S = Surface; B = Bottom.

† See Table M-15 for synonomous name.

TABLE M-29

DIFFERENCES BETWEEN MONTHLY MEAN PHYTOPLANKTON DENSITY (TUKEY'S TEST)
OFFSHORE SURFACE STATIONS (0-5)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

MONTH (MEAN)	FEB (983559.8)	MAR (697009.0)	APR (696171.3)	MAY (728164.3)	JUN (926521.0)	JUL (380380.5)	AUG (542609.0)	SEP (1135615.0)	OCT (1102899.0)	NOV (5393928.0)	DEC (416089.0)
JAN (1083089.0)	99,529.2	386,080.0	386,917.7	354,924.7	156,568.0	702,708.5	540,480.0	52,526.0	19,810.0	4,310,839.0*	667,000.0
FEB (983559.8)		286,550.8	287,388.5	255,395.5	57,038.8	603,179.3	440,950.8	152,055.2	119,339.2	4,410,368.2*	567,470.8
MAR (697009.0)			837.7	31,155.3	229,512.0	316,628.5	154,400.0	438,606.0	405,890.0	4,696,919.0*	280,920.0
APR (696171.3)				31,993.0	230,349.7	315,790.8	153,562.3	439,443.7	406,727.7	4,697,756.7*	280,082.3
MAY (728164.3)					198,356.7	347,783.8	185,555.3	407,450.7	374,734.7	4,665,763.7*	312,075.3
JUN (926521.0)						546,140.5	383,912.0	209,094.0	176,378.0	4,467,407.0*	510,432.0
JUL (380380.5)							162,228.5	755,234.5	722,518.5	5,013,547.5*	35,708.5
AUG (542609.0)								593,006.0	560,290.0	4,851,319.0*	126,520.0
SEP (1135615.0)									32,716.0	4,258,313.0*	719,526.0
OCT (1102899.0)										4,291,029.0*	686,810.0
NOV (5393928.0)											4,977,839.0*

*Significant at $\alpha = .05$, HSD = 1,132,642.0.

TABLE M-30

DIFFERENCES BETWEEN STATION MEAN PHYTOPLANKTON DENSITY (TUKEY'S TEST)
OFFSHORE STATIONS (0-5)
ST. LUCIE PLANT
MARCH 1976 - DECEMBER 1977[a]

STATION (MEAN)	SURFACE STATIONS 1 (2001935.0)	2 (1466372.0)	3 (1173001.0)	4 (1234948.0)	5 (1367132.0)
0 (1580100.0)	421,835.0	113,728.0	407,099.0	345,152.0	212,968.0
1 (2001935.0)		535,563.0	828,934.0*	766,987.0*	634,803.0
2 (1466372.0)			293,371.0	231,424.0	99,240.0
3 (1173001.0)				61,947.0	194,131.0
4 (1234948.0)					132,184.0

*Significant at $\alpha = .05$, HSD = 705,435.4.

[a]January and February 1977 not included in analysis.

TABLE M-30
(continued)
DIFFERENCES BETWEEN STATION MEAN PHYTOPLANKTON DENSITY (TUKEY'S TEST)
OFFSHORE STATIONS (0-5)
ST. LUCIE PLANT
MARCH 1976 - DECEMBER 1977

STATION (MEAN)	BOTTOM STATIONS 1 (2684762.0)	2 (1701149.0)	3 (1530588.0)	4 (1660808.0)	5 (2061866.0)
0 (2464076.0)	220,686.0	762,927.0	933,488.0*	803,268.0	402,210.0
1 (2684762.0)		983,613.0*	1,154,174.0*	1,023,954.0*	622,896.0
2 (1701149.0)			170,561.0	40,341.0	360,717.0
3 (1530588.0)				130,220.0	531,278.0
4 (1660808.0)					401,058.0

*Significant at $\alpha = .05$, HSD = 870,313.4.

TABLE M-31

DIFFERENCES BETWEEN MONTHLY MEAN PHYTOPLANKTON DENSITY (TUKEY'S TEST)
OFFSHORE BOTTOM STATIONS (0-5)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

MONTH (MEAN)	FEB (861004.0)	MAR (1518897.0)	APR (795190.8)	MAY (1020938.6)	JUN (627297.6)	JUL (652641.5)	AUG (637512.5)	SEP (1023876.6)	OCT (1553871.0)	NOV (6332754.0)	DEC (594685.3)
JAN (1309140.0)	448,136.0	209,757.0	513,949.2	288,201.4	681,842.4	656,498.5	671,627.0	285,274.6	244,731.0	5,023,614.0*	714,454.7
FEB (861004.0)		657,893.0	65,813.2	159,934.6	233,706.4	208,362.5	223,491.5	162,872.6	692,867.0	5,471,750.0*	266,318.7
MAR (1518897.0)			723,706.2	497,958.4	891,599.4	866,255.5	881,384.5	495,031.6	34,974.0	4,813,857.0*	924,211.7
APR (795190.8)				225,749.4	167,893.2	142,549.3	157,678.3	228,685.8	758,680.2	5,537,563.2*	200,505.5
MAY (1020938.6)					393,641.0	368,297.1	383,426.1	2,938.0	532,932.4	5,311,815.4*	426,253.3
JUN (627297.6)						25,343.9	10,214.9	396,579.0	926,573.4	5,705,456.4*	32,612.3
JUL (652641.5)							15,129.0	371,235.1	901,229.5	5,680,112.5*	57,956.2
AUG (637512.5)								386,364.1	916,358.5	5,695,241.5*	42,827.2
SEP (1023876.6)									529,994.4	5,308,877.4*	429,191.3
OCT (1553871.0)										4,778,883.0*	959,185.7
NOV (6332754.0)											5,738,068.7*

*Significant at $\alpha = .05$, HSD = 1,267,817.0.

TABLE M-32

DIFFERENCES BETWEEN STATION MEAN PHYTOPLANKTON DENSITY (TUKEY'S TEST)
OFFSHORE BOTTOM STATIONS (0-5)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

STATION (MEAN)	1 (2003965.0)	2 (1170373.0)	3 (1021667.3)	4 (1273168.0)	5 (1271244.0)
0 (1723482.0)	280,483.0	553,109.0	701,814.7	450,314.0	452,238.0
1 (2003965.0)		833,592.0*	982,297.7*	730,797.0	732,721.0
2 (1170373.0)			148,705.7	102,795.0	100,871.0
3 (1021667.3)				251,500.7	249,576.7
4 (1273168.0)					1,924.0

*Significant at $\alpha = .05$, HSD = 775,838.0

TABLE M-33

DIFFERENCES BETWEEN MONTHLY MEAN PHYTOPLANKTON DENSITY (TUKEY'S TEST)
CANAL STATIONS (11, 12)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

MONTH (MEAN)	FEB (1182804.0)	MAR (611647.5)	APR (1267551.0)	MAY (876319.0)	JUN (816368.5)	JUL (951643.0)	AUG (842901.0)	SEP (1058833.0)	OCT (1610794.0)	NOV (4644081.0)	DEC (1636562.0)
JAN (2581902.0)	1,399,098.0	1,970,254.5	1,314,351.0	1,705,583.0	1,765,533.5	1,630,259.0	1,739,001.0	1,523,069.0	971,108.0	2,062,179.0*	945,350.0
FEB (1182804.0)		571,156.5	84,747.0	306,485.0	366,435.5	231,161.0	339,903.0	123,971.0	427,990.0	3,461,277.0*	453,758.0
MAR (611647.5)			655,903.5	264,671.5	204,721.0	339,995.5	231,253.5	447,185.5	999,146.5	4,032,433.5*	1,024,914.5
APR (1267551.0)				391,232.0	451,182.5	315,908.0	424,650.0	208,718.0	343,243.0	3,376.530.0*	369,011.0
MAY (876319.0)					59,950.5	75,324.0	33,418.0	182,514.0	734,475.0	3,767,762.0*	760,243.0
JUN (816368.5)						135,274.5	26,532.5	242,464.5	794,425.5	3,827,712.5*	820,193.5
JUL (951643.0)							108,742.0	107,190.0	659,151.0	3,692,438.0*	684,919.0
AUG (842901.0)								215,932.0	767,893.0	3,801,180.0*	793,661.0
SEP (1058833.0)									551,961.0	3,585,248.0*	577,729.0
OCT (1610794.0)										3,033,287.0*	25,768.0
NOV (4644081.0)											3,007.519.0*

*Significant at $\alpha = .05$, HSD = 2,024,809.0.

TABLE M-34

ACTIVE CHLOROPHYLL-α AND PHAEOPIGMENTS[a]
ST. LUCIE PLANT
1977

Date	Station	Pigment and Depth[b]					
		Chlorophyll-α (mg/m^3)			Phaeopigment (mg/m^3)		
		S	B	A	S	B	A
JAN 25	0	1.44	1.30	1.37	0.19	0.19	0.19
	1	1.57	1.12	1.35	0.07	0.14	0.11
	2	0.88	0.87	0.87	0.05	0.05	0.05
	3	1.04	0.68	0.86	0.06	0.09	0.08
	4	0.89	0.98	0.93	0.10	0.20	0.15
	5	0.82	0.77	0.79	0.07	0.01	0.04
	11	1.62	2.97	2.30	0.28	0.89	0.59
	12	3.39	2.43	2.91	0.20	1.54	0.87
FEB 15	0	1.59	3.12	2.36	0.07	0.59	0.33
	1	2.34	1.88	2.11	0.05	0.16	0.10
	2	1.24	1.03	1.13	0.04	0.12	0.08
	3	0.88	0.93	0.90	0.07	0.02	0.04
	4	0.99	1.01	1.00	0.03	0.05	0.04
	5	1.64	1.67	1.65	0.05	0.25	0.15
	11	2.56	3.15	2.85	0.19	0.25	0.22
	12	3.22	2.09	2.66	0.60	0.54	0.57

[a] Phaeopigment ≡ phaeophytin-*a* plus phaeophorbide-*a*.

[b] S = Surface; B = Bottom; A = Average. S and B values represent mean of duplicate determinations.

TABLE M-34
(continued)
ACTIVE CHLOROPHYLL-*a* AND PHAEOPIGMENTS[a]
ST. LUCIE PLANT
1977

Date	Station	Pigment and Depth[b]					
		Chlorophyll-*a* (mg/m^3)			Phaeopigment (mg/m^3)		
		S	B	A	S	B	A
MAR 11	0	0.71	0.79	0.75	0.07	0.10	0.09
	1	0.81	0.75[c]	0.79	0.06	0.06[c]	0.06
	2	0.61	1.11	0.86	0.04	0.02	0.03
	3	0.69	0.71	0.70	0.01	0.03	0.02
	4	0.66	1.99	1.32	0.01	0.07	0.04
	5	1.70	1.03	1.37	ND[d]	<0.005	<0.005
	11	0.83	0.84	0.83	0.17	0.05	0.11
	12	0.57	-[e]	0.57	0.11	-	0.11
APR 19	0	0.65	0.66	0.66	0.02	0.02	0.02
	1	0.83	0.81	0.82	ND	<0.005	<0.005
	2	0.50	0.44	0.47	0.01	0.01	0.01
	3	0.24	0.26	0.25	0.02	0.02	0.02
	4	0.41	0.44	0.42	ND	ND	ND
	5	0.51	0.37	0.44	ND	0.03	0.01
	11	0.79	0.91	0.85	ND	ND	ND
	12	1.06	-	1.06	0.04	-	0.04

[a] Phaeopigment ≡ phaeophytin-*a* plus phaeophorbide-*a*.

[b] S = Surface; B = Bottom; A = Average. S and B values represent mean of duplicate determinations.

[c] Value represents single determination.

[d] ND = Not detected.

[e] Single depth sample in discharge considered representative of water column due to turbulent mixing in immediate discharge.

TABLE M-34
(continued)
ACTIVE CHLOROPHYLL-a AND PHAEOPIGMENTS[a]
ST. LUCIE PLANT
1977

Date	Station	Pigment and Depth[b] Chlorophyll-*a* (mg/m³) S	B	A	Phaeopigment (mg/m³) S	B	A
MAY 10	0	0.65	0.82	0.74	0.09	0.05	0.07
	1	1.21	0.98	1.09	<0.005	0.03	0.01
	2	0.63	0.67	0.65	ND[c]	0.07	0.04
	3	0.52	0.54	0.53	<0.005	0.04	0.02
	4	0.55	0.73	0.64	0.07	0.01	0.04
	5	0.56	0.65	0.60	0.07	0.04	0.05
	11	0.64	0.78	0.71	ND	0.08	0.04
	12	0.65	-[d]	0.65	0.06	-	0.06
JUNE 14	0	0.26	0.54	0.40	0.04	0.01	0.03
	1	0.36	0.28	0.32	0.10	0.10	0.10
	2	0.50	0.26	0.38	0.04	0.10	0.07
	3	0.19	0.27	0.23	0.07	0.04	0.06
	4	0.52	0.29	0.40	0.03	0.09	0.06
	5	0.96	0.35	0.66	0.02	0.04	0.03
	11	0.98[e]	0.67[e]	0.82	ND[e]	0.02[e]	0.01
	12	0.23	-	0.23	0.07	-	0.07

[a] Phaeopigment ≡ phaeophytin-*a* plus phaeophorbide-*a*.

[b] S = Surface; B = Bottom; A = Average. S and B values represent mean of duplicate determination.

[c] ND = Not detected.

[d] Single depth sample in discharge considered representative of water column due to turbulent mixing in immediate discharge.

[e] Value represents single determination.

TABLE M-34
(continued)
ACTIVE CHLOROPHYLL-*a* AND PHAEOPIGMENTS[a]
ST. LUCIE PLANT
1977

Date	Station	Pigment and Depth[b] Chlorophyll-*a* (mg/m³) S	B	A	Phaeopigment (mg/m³) S	B	A
JULY 12	0	0.26	0.47	0.36	0.04	0.05	0.04
	1	0.41	0.45	0.43	0.05	0.02	0.04
	2	0.30	0.51	0.40	<0.005	0.02	0.01
	3	0.40	0.31	0.36	0.03	0.01	0.02
	4	0.21	0.58	0.40	0.03	0.03	0.03
	5	0.18	0.53	0.36	0.05	0.15	0.10
	11	0.46	1.31[c]	0.88	0.06	ND[d]	0.03
	12	0.18	-[e]	0.18	0.08	-	0.08
AUG 23	0	0.67	0.75	0.71	0.02	0.13	0.07
	1	0.93	0.76	0.85	0.09	0.08	0.09
	2	0.67	1.18	0.93	0.07	0.14	0.11
	3	1.25	1.43	1.34	0.02	0.03	0.02
	4	1.07	1.20[c]	1.14	<0.005	0.07[c]	0.04
	5	0.71	1.09	0.90	0.06	0.18	0.12
	11	1.02	1.14	1.08	0.08	0.14	0.11
	12	1.62	-	1.62	0.20	-	0.20

[a] Phaeopigment ≡ phaeophytin-*a* plus phaeophorbide-*a*.

[b] S = Surface; B = Bottom; A = Average. S and B values represent mean of duplicate determination.

[c] Value represents single determination.

[d] ND = Not detected.

[e] Single depth sample in discharge considered representative of water column due to turbulent mixing in immediate discharge.

TABLE M-34
(continued)
ACTIVE CHLOROPHYLL-*a* AND PHAEOPIGMENTS[a]
ST. LUCIE PLANT
1977

Date	Station	Pigment and Depth[b]					
		Chlorophyll-*a* (mg/m^3)			Phaeopigment (mg/m^3)		
		S	B	A	S	B	A
SEPT 13	0	1.34	1.52	1.43	<0.005	0.02	0.01
	1	2.16	2.07	2.11	0.01	0.12	0.06
	2	1.72	1.22	1.47	ND[c]	0.07	0.03
	3	1.43	0.91	1.17	0.03	0.02	0.02
	4	1.80	1.28	1.54	ND	ND	ND
	5	1.65	1.38	1.51	ND	0.07	0.03
	11	1.92	2.20	2.06	ND	ND	ND
	12	0.40	-[d]	0.40	0.16	-	0.16
OCT 11	0	1.26	2.94	2.10	0.05	0.37	0.21
	1	1.69	1.55	1.62	0.05	0.11	0.08
	2	1.45	1.05	1.25	ND	0.12	0.06
	3	1.10	1.15	1.12	0.06	0.06	0.06
	4	1.03	1.29	1.16	0.17	0.09	0.13
	5	1.25	1.34	1.29	0.09	0.12	0.10
	11	1.60	1.65	1.62	0.03	0.04	0.03
	12	1.07	-	1.07	0.35	-	0.35

[a] Phaeopigment ≡ phaeophytin-*a* plus phaeophorbide-*a*.

[b] S = Surface; B = Bottom; A = Average. S and B values represent mean of duplicate determinations.

[c] ND = Not detected.

[d] Single depth sample in discharge considered representative of water column due to turbulent mixing in immediate discharge.

TABLE M-34
(continued)
ACTIVE CHLOROPHYLL-*a* AND PHAEOPIGMENTS[a]
ST. LUCIE PLANT
1977

Date	Station	Pigment and Depth[b]					
		Chlorophyll-*a* (mg/m³)			Phaeopigment (mg/m³)		
		S	B	A	S	B	A
NOV 2	0	6.47	11.29	8.88	ND[c]	1.13	0.56
	1	6.86	9.02	7.94	0.45	ND	0.23
	2	6.34	7.17	6.76	ND	0.57	0.28
	3	4.82	4.89	4.85	0.10	0.05	0.08
	4	4.49	6.78	5.63	ND	0.39	0.20
	5	4.26	6.82	5.54	0.15	0.24	0.20
	11	5.74	6.79	6.26	0.36	0.09	0.22
	12	4.89	-[d]	4.89	0.40	-	0.40
DEC 1	0	1.30	1.41	1.35	0.09	0.06	0.08
	1	1.18	1.89	1.53	0.24	0.22	0.23
	2	0.82	0.73	0.78	0.08	0.24	0.16
	3	0.65	0.65	0.65	0.05	0.11	0.08
	4	0.43	0.58	0.50	0.14	0.09	0.11
	5	0.95	0.79	0.87	0.10	0.10	0.10
	11	1.56	7.50	4.53	0.15	0.04	0.09
	12	0.56	-	0.56	0.14	-	0.14

[a] Phaeopigment ≡ phaeophytin-*a* plus phaeophorbide-*a*.

[b] S = Surface; B = Bottom; A = Average. S and B values represent mean of duplicate determinations.

[c] ND = Not detected.

[d] Single depth sample in discharge considered representative of water column due to turbulent mixing in immediate discharge.

TABLE M- 35

DIFFERENCES BETWEEN MONTHLY MEAN CHLOROPHYLL-a (TUKEY'S TEST)
OFFSHORE SURFACE STATIONS (0-5)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Month (Mean)	Feb (1.45)	Mar (0.86)	Apr (0.52)	May (0.69)	Jun (0.47)	Jul (0.29)	Aug (0.88)	Sep (1.68)	Oct (1.30)	Nov (5.54)	Dec (0.89
Jan (1.11)	0.34	0.25	0.59	0.42	0.64	0.82*	0.23	0.57	0.19	4.43*	0.22
Feb (1.45)		0.59	0.93*	0.76	0.98*	1.16*	0.57	0.23	0.15	4.09*	0.56
Mar (0.86)			0.34	0.17	0.39	0.57	0.02	0.82*	0.44	4.68*	0.03
Apr (0.52)				0.17	0.05	0.23	0.36	1.16*	0.78	5.02*	0.37
May (0.69)					0.22	0.40	0.19	0.99*	0.61	4.85*	0.20
Jun (0.47)						0.18	0.41	1.21*	0.83*	5.07*	0.42
Jul (0.29)							0.59	1.39*	1.01*	5.25*	0.60
Aug (0.88)								0.80*	0.42	4.66*	0.01
Sep (1.68)									0.38	3.86*	0.79*
Oct (1.30)										4.24*	0.41
Nov (5.54)											4.65*

* Significant at α = .05, HSD = 0.79.

TABLE M-36

DIFFERENCES BETWEEN MONTHLY MEAN CHLOROPHYLL-*a* (TUKEY'S TEST)
OFFSHORE BOTTOM STATIONS (0-5)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Month (Mean)	Feb (1.61)	Mar (1.06)	Apr (0.50)	May (0.73)	Jun (0.33)	Jul (0.48)	Aug (1.07)	Sep (1.40)	Oct (1.55)	Nov (7.56)	Dec (1.01)
Jan (0.95)	0.66	0.11	0.45	0.22	0.62	0.47	0.12	0.45	0.60	6.71*	0.06
Feb (1.61)		0.55	1.11	0.88	1.28	1.13	0.54	0.21	0.06	6.05*	0.60
Mar (1.06)			0.56	0.33	0.73	0.58	0.01	0.34	0.49	6.60*	0.05
Apr (0.50)				0.23	0.17	0.02	0.57	0.90	1.05	7.16*	0.51
May (0.73)					0.40	0.25	0.34	0.67	0.82	6.93*	0.28
Jun (0.33)						0.15	0.74	1.07	1.22	7.33*	0.68
Jul (0.48)							0.59	0.92	1.07	7.18*	0.53
Aug (1.07)								0.33	0.48	6.59*	0.06
Sep (1.40)									0.15	6.26*	0.39
Oct (1.55)										6.11*	0.54
Nov (7.66)											6.65*

* Significant at $\alpha = .05$, HSD = 1.36.

TABLE M-37

DIFFERENCES BETWEEN STATION MEAN CHLOROPHYLL-a (TUKEY'S TEST)
OFFSHORE STATIONS (0-5)
ST. LUCIE PLANT
JANUARY - DECEMBER 1977

SURFACE					
Station (Mean)	1 (1.70)	2 (1.31)	3 (1.10)	4 (1.09)	5 (1.27)
0 (1.38)	0.32	0.07	0.28	0.29	0.11
1 (1.70)		0.39	0.60*	0.61*	0.43
2 (1.31)			0.21	0.22	0.04
3 (1.10)				0.01	0.17
4 (1.09)					0.18

*Significant at α = .05; HSD = 0.48.

BOTTOM					
Station (Mean)	1 (1.80)	2 (1.35)	3 (1.06)	4 (1.43)	5 (1.40)
0 (2.13)	0.33	0.78	1.07*	0.70	0.73
1 (1.80)		0.45	0.74	0.37	0.40
2 (1.35)			0.29	0.08	0.05
3 (1.06)				0.37	0.34
4 (1.43)					0.03

*Significant at α = .05; HSD = 0.83.

TABLE M-38

DIFFERENCES BETWEEN STATION MEAN CHLOROPHYLL-*a* (TUKEY'S TEST)
OFFSHORE STATIONS (0-5)
ST. LUCIE PLANT
MARCH 1976 - DECEMBER 1977[a]

SURFACE					
Station (Mean)	1 (2.45)	2 (1.88)	3 (1.35)	4 (1.73)	5 (1.71)
0 (2.02)	0.43	0.14	0.67*	0.29	0.31
1 (2.45)		0.57	1.10*	0.72*	0.74*
2 (1.88)			0.53	0.15	0.17
3 (1.35)				0.38	0.36
4 (1.73)					0.02

*Significant at α = .05; HSD = 0.67.

BOTTOM					
Station (Mean)	1 (2.41)	2 (1.77)	3 (1.54)	4 (1.84)	5 (2.10)
0 (2.73)	0.32	0.96*	1.19*	0.89*	0.63
1 (2.41)		0.64	0.87*	0.57	0.31
2 (1.77)			0.23	0.07	0.33
3 (1.54)				0.30	0.56
4 (1.84)					0.26

*Significant at α = .05; HSD = 0.71.

[a]January and February 1977 not included in analysis.

TABLE M-39

DIFFERENCES BETWEEN MONTHLY MEAN CHLOROPHYLL-*a* (TUKEY'S TEST)
CANAL STATIONS (11,12)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Month (Mean)	Feb (3.08)	Mar (0.70)	Apr (0.96)	May (0.68)	Jun (0.53)	Jul (0.53)	Aug (1.35)	Sep (1.23)	Oct (1.35)	Nov (5.58)	Dec (2.55)
Jan (2.84)	0.24	2.14	1.88	2.16	2.31	2.31	1.49	1.61	1.49	2.74	0.29
Feb (3.04)		2.34	2.08	2.36	2.51	2.51	1.69	1.81	1.69	2.54	0.49
Mar (0.70)			0.26	0.02	0.17	0.17	0.65	0.53	0.65	4.88*	1.85
Apr (0.96)				0.28	0.43	0.43	0.39	0.27	0.39	4.62*	1.59
May (0.68)					0.15	0.15	0.67	0.55	0.67	4.90*	1.87
Jun (0.53)						0.00	0.82	0.70	0.82	5.05*	2.02
Jul (0.53)							0.82	0.70	0.82	5.05*	2.02
Aug (1.35)								0.12	0.00	4.23*	1.20
Sep (1.23)									0.12	4.35*	1.32
Oct (1.35)										4.23*	1.20
Nov (5.58)											3.03

*Significant at α = .05, HSD = 3.78.

TABLE M-40

DIFFERENCES IN STATION MEAN
PHAEOPIGMENT (TUKEY'S TEST)
OFFSHORE SURFACE STATIONS (0-5)
ST. LUCIE PLANT
MARCH 1976-DECEMBER 1977[a]

Station (Mean)	1 (0.18)	2 (0.04)	3 (0.05)	4 (0.04)	5 (0.04)
0 (0.05)	0.13*	0.01	0.00	0.01	0.01
1 (0.18)		0.14*	0.13*	0.14*	0.14*
2 (0.04)			0.01	0.00	0.00
3 (0.05)				0.01	0.01
4 (0.04)					0.00

* Significant at $\alpha = .05$, HSD = 0.12.
[a] January and February 1977 not included in analysis.

TABLE M-41

DIFFERENCES IN STATION MEAN
PHAEOPIGMENT (TUKEY'S TEST)
OFFSHORE BOTTOM STATIONS (0-5)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Station (Mean)	1 (0.09)	2 (0.13)	3 (0.04)	4 (0.09)	5 (0.10)
0 (0.23)	0.14	0.10	0.19*	0.14	0.13
1 (0.09)		0.04	0.05	0.00	0.01
2 (0.13)			0.09	0.04	0.03
3 (0.04)				0.05	0.06
4 (0.09)					0.01

* Significant at α = .05, HSD = 0.16.

TABLE M- 42

DIFFERENCES IN MONTHLY MEAN PHAEOPIGMENT (TUKEY'S TEST)
OFFSHORE SURFACE STATIONS (0-5)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Month (Mean)	Feb (0.05)	Mar (0.03)	Apr (0.01)	May (0.04)	Jun (0.05)	Jul (0.03)	Aug (0.04)	Sep (0.01)	Oct (0.07)	Nov (0.12)	Dec (0.12)
Jan (0.09)	0.04	0.06	0.08	0.05	0.04	0.06	0.05	0.08	0.02	0.03	0.03
Feb (0.05)		0.02	0.04	0.01	0.00	0.02	0.01	0.04	0.02	0.07	0.07
Mar (0.03)			0.02	0.01	0.01	0.00	0.01	0.02	0.04	0.09	0.09
Apr (0.01)				0.03	0.04	0.02	0.03	0.00	0.06	0.11	0.11
May (0.04)					0.01	0.01	0.00	0.03	0.03	0.08	0.08
Jun (0.05)						0.02	0.01	0.04	0.02	0.07	0.07
Jul (0.03)							0.01	0.02	0.04	0.09	0.09
Aug (0.04)								0.03	0.03	0.08	0.08
Sep (0.01)									0.06	0.11	0.11
Oct (0.07)										0.05	0.05
Nov (0.12)											0.00

* Significant at α = .05, HSD = 0.12.

TABLE M-43

DIFFERENCES BETWEEN MONTHLY MEAN PHAEOPIGMENT (TUKEY'S TEST)
OFFSHORE BOTTOM STATIONS (0-5)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Month (Mean)	Feb (0.20)	Mar (0.05)	Apr (0.02)	May (0.04)	Jun (0.06)	Jul (0.05)	Aug (0.11)	Sep (0.05)	Oct (0.15)	Nov (0.40)	Dec (0.14)
Jan (0.11)	0.09	0.06	0.09	0.07	0.05	0.06	0.00	0.06	0.04	0.29*	0.03
Feb (0.20)		0.15	0.18	0.16	0.14	0.15	0.09	0.15	0.05	0.20	0.06
Mar (0.05)			0.03	0.01	0.01	0.00	0.06	0.00	0.10	0.35*	0.09
Apr (0.02)				0.02	0.04	0.03	0.09	0.03	0.13	0.38*	0.12
May (0.04)					0.02	0.01	0.07	0.01	0.11	0.36*	0.10
Jun (0.06)						0.01	0.05	0.01	0.09	0.34*	0.08
Jul (0.05)							0.06	0.00	0.10	0.35*	0.09
Aug (0.11)								0.06	0.04	0.29*	0.03
Sep (0.05)									0.10	0.35*	0.09
Oct (0.15)										0.25	0.01
Nov (0.40)											0.26

* Significant at α = .05, HSD = 0.27.

TABLE M-44

RESULTS OF TRICHROMATIC CHLOROPHYLL AND TOTAL CAROTENOID DETERMINATIONS
ST. LUCIE PLANT
1977

		Pigment and Depth[a]											
		Chlorophyll-a (mg/m^3)			Chlorophyll-b (mg/m^3)			Chlorophyll-c (mg/m^3)			Carotenoids ($\frac{m\text{-}SPU}{m^3}$)		
Date	Station	S	B	A	S	B	A	S	B	A	S	B	A
JAN 25	0	1.58	1.43	1.51	0.07	0.16	0.11	0.67	0.77	0.72	1.65	1.36	1.51
	1	1.64	1.22	1.43	0.11	0.13	0.12	0.85	0.60	0.72	1.68	1.17	1.42
	2	0.92	0.90	0.91	0.13	0.12	0.12	0.60	0.53	0.57	0.94	0.81	0.88
	3	1.09	0.75	0.92	0.12	0.12	0.12	0.57	0.39	0.48	1.10	0.75	0.92
	4	0.96	1.10	1.03	0.13	0.20	0.17	0.64	1.06	0.85	0.97	1.07	1.02
	5	0.87	0.78	0.82	0.09	0.12	0.10	0.45	0.44	0.44	0.95	0.77	0.86
	11	1.81	3.56	2.69	0.13	0.09	0.11	0.97	1.30	1.13	2.16	4.19	3.18
	12	3.57	2.93	3.25	0.14	0.16	0.15	1.66	1.22	1.44	3.63	3.22	3.43
FEB 15	0	1.65	3.51	2.58	0.12	0.33	0.22	0.83	2.20	1.51	1.71	4.13	2.92
	1	2.41	1.99	2.20	0.14	0.20	0.17	1.41	1.06	1.23	2.46	2.13	2.29
	2	1.27	1.12	1.20	0.08	0.07	0.08	0.63	0.56	0.59	1.44	1.12	1.28
	3	0.92	0.94	0.93	0.10	0.13	0.11	0.62	0.59	0.60	1.10	1.03	1.07
	4	1.00	1.02	1.01	0.08	0.13	0.11	0.56	0.71	0.63	1.03	1.07	1.05
	5	1.70	1.84	1.77	0.11	0.17	0.14	0.80	0.82	0.81	1.81	1.78	1.79
	11	2.72	3.34	3.03	0.10	0.26	0.18	1.13	1.66	1.40	2.66	3.60	3.13
	12	3.62	2.45	3.03	0.39	0.18	0.28	1.61	0.97	1.29	3.86	2.52	3.19

[a] S = Surface; B = Bottom; A = Average. S and B values represent mean of duplicate determinations.

TABLE M-44
(continued)
RESULTS OF TRICHROMATIC CHLOROPHYLL AND TOTAL CAROTENOID DETERMINATIONS
ST. LUCIE PLANT
1977

		Pigment and Depth[a]											
		Chlorophyll-*a* (mg/m³)			Chlorophyll-*b* (mg/m³)			Chlorophyll-*c* (mg/m³)			Carotenoids (m-SPU/m³)		
Date	Station	S	B	A	S	B	A	S	B	A	S	B	A
MAR 11	0	0.76	0.86	0.81	0.06	0.05	0.06	0.50	0.53	0.52	0.80	0.81	0.80
	1	0.86	0.81[b]	0.84	0.03	<0.005[b]	0.02	0.48	0.41[b]	0.45	0.79	0.69[b]	0.74
	2	0.64	1.14	0.89	0.07	0.05	0.06	0.37	0.70	0.53	0.63	1.17	0.90
	3	0.69	0.74	0.71	0.12	0.07	0.09	0.47	0.33	0.40	0.78	0.72	0.75
	4	0.66	2.05	1.35	0.03	ND[c]	0.01	0.36	1.02	0.69	0.59	1.80	1.19
	5	1.60	1.05	1.32	0.04	0.08	0.06	0.80	0.59	0.70	1.41	0.93	1.17
	11	0.94	0.88	0.91	0.07	0.06	0.06	0.45	0.45	0.45	0.93	0.79	0.86
	12	0.65	-[d]	0.65	0.06	-	0.06	0.26	-	0.26	0.57	-	0.57
APR 19	0	0.64	0.69	0.66	0.02	ND	0.01	0.32	0.28	0.30	0.75	0.77	0.76
	1	0.81	0.82	0.81	ND	ND	ND	0.32	0.28	0.30	0.86	0.78	0.82
	2	0.51	0.44	0.48	ND	ND	ND	0.25	0.14	0.19	0.48	0.44	0.46
	3	0.26	0.28	0.27	ND	ND	ND	0.05	0.10	0.07	0.31	0.24	0.28
	4	0.39	0.42	0.41	ND	ND	ND	0.17	0.18	0.17	0.38	0.45	0.42
	5	0.50	0.37	0.43	ND	ND	ND	0.18	0.18	0.18	0.45	0.33	0.39
	11	0.78	0.92	0.85	ND	ND	ND	0.34	0.40	0.37	0.89	1.02	0.95
	12	1.10	-[d]	1.10	ND	-	ND	0.45	-	0.45	1.09	-	1.09

[a] S = Surface; B = Bottom; A = Average.
[b] Value represents single determination.
[c] Not detected.
[d] Single depth sample in discharge considered representative of water column due to turbulent mixing in immediate discharge.

TABLE M-44
(continued)
RESULTS OF TRICHROMATIC CHLOROPHYLL AND TOTAL CAROTENOID DETERMINATIONS
ST. LUCIE PLANT
1977

		Pigment and Depth[a]											
		Chlorophyll-*a* ($^{mg}/_{m^3}$)			Chlorophyll-*b* ($^{mg}/_{m^3}$)			Chlorophyll-*c* ($^{mg}/_{m^3}$)			Carotenoids ($\frac{m\text{-}SPU}{m^3}$)		
Date	Station	S	B	A	S	B	A	S	B	A	S	B	A
MAY 10	0	0.71	0.84	0.78	0.05	0.05	0.05	0.24	0.34	0.29	0.69	0.78	0.74
	1	1.22	1.01	1.11	0.05	0.06	0.06	0.45	0.32	0.38	1.09	0.80	0.95
	2	0.64	0.72	0.68	0.05	0.07	0.06	0.23	0.26	0.25	0.70	0.69	0.70
	3	0.53	0.58	0.55	0.05	0.06	0.05	0.23	0.22	0.23	0.57	0.55	0.56
	4	0.60	0.74	0.67	0.07	0.04	0.06	0.30	0.23	0.26	0.53	0.66	0.59
	5	0.59	0.68	0.64	0.08	0.06	0.07	0.31	0.27	0.29	0.60	0.59	0.59
	11	0.61	0.84	0.72	0.11	0.07	0.09	0.46	0.33	0.40	0.82	0.88	0.85
	12	0.69	-[b]	0.69	0.07	-	0.07	0.36	-	0.36	0.69	-	0.69
JUNE 14	0	0.29	0.56	0.43	0.05	0.05	0.05	0.12	0.23	0.18	0.44	0.80	0.62
	1	0.42	0.35	0.38	0.04	0.05	0.04	0.19	0.17	0.18	0.49	0.33	0.41
	2	0.52	0.32	0.42	0.03	0.05	0.04	0.27	0.20	0.23	0.58	0.31	0.45
	3	0.23	0.30	0.26	0.04	0.04	0.04	0.20	0.17	0.18	0.25	0.39	0.32
	4	0.55	0.35	0.45	0.04	0.06	0.05	0.33	0.20	0.27	0.67	0.42	0.55
	5	0.97	0.38	0.68	0.05	0.06	0.05	0.68	0.15	0.42	1.13	0.30	0.72
	11	0.98[c]	0.69[c]	0.83	0.12[c]	0.09[c]	0.11	0.38[c]	0.27[c]	0.33	1.21[c]	0.81[c]	1.01
	12	0.27	-	0.27	0.05	-	0.05	0.11	-	0.11	0.19	-	0.19

[a] S = Surface; B = Bottom; A = Average. S and B values represent mean of duplicate determinations.

[b] Single depth sample in discharge considered representative of water column due to turbulent mixing in immediate discharge.

[c] Value represents single determination.

TABLE M-44
(continued)
RESULTS OF TRICHROMATIC CHLOROPHYLL AND TOTAL CAROTENOID DETERMINATIONS
ST. LUCIE PLANT
1977

		Pigment and Depth[a]											
		Chlorophyll-a ($^{mg}/_{m^3}$)			Chlorophyll-b ($^{mg}/_{m^3}$)			Chlorophyll-c ($^{mg}/_{m^3}$)			Carotenoids ($\frac{m\text{-}SPU}{m^3}$)		
Date	Station	S	B	A	S	B	A	S	B	A	S	B	A
JULY 12	0	0.29	0.49	0.39	0.03	0.10	0.07	0.10	0.24	0.17	0.27	0.58	0.43
	1	0.44	0.46	0.45	0.03	0.03	0.03	0.18	0.20	0.19	0.47	0.50	0.48
	2	0.30	0.52	0.41	0.02	0.05	0.04	0.15	0.26	0.21	0.29	0.59	0.44
	3	0.39	0.33	0.36	0.04	0.03	0.03	0.16	0.19	0.17	0.42	0.30	0.36
	4	0.23	0.61	0.42	0.03	0.05	0.04	0.14	0.24	0.19	0.19	0.68	0.43
	5	0.21	0.63	0.42	0.02	0.07	0.05	0.11	0.22	0.16	0.22	0.70	0.46
	11	0.49	1.31[b]	0.90	0.06	0.18[b]	0.12	0.17	0.42[b]	0.30	0.44	1.24[b]	0.84
	12	0.23	-[c]	0.23	0.04	-	0.04	0.10	-	0.10	0.09	-	0.09
AUG 23	0	0.68	0.83	0.75	0.14	0.16	0.15	0.60	0.60	0.60	0.71	0.96	0.84
	1	0.99	0.81	0.90	0.17	0.16	0.17	0.58	0.64	0.61	1.09	0.83	0.96
	2	0.71	1.27	0.99	0.13	0.25	0.19	0.35	0.92	0.64	0.78	1.31	1.05
	3	1.28	1.44	1.36	0.19	0.22	0.20	0.58	0.76	0.67	1.36	1.51	1.43
	4	1.08	1.25[b]	1.17	0.17	0.19[b]	0.18	0.55	0.92[b]	0.74	1.10	1.34[b]	1.22
	5	0.75	1.20	0.97	0.14	0.23	0.18	0.47	0.65	0.56	0.80	1.23	1.01
	11	1.08	1.23	1.16	0.18	0.17	0.18	0.52	0.59	0.55	1.08	1.19	1.14
	12	1.75	-[c]	1.75	0.20	-	0.20	0.76	-	0.76	1.49	-	1.49

[a] S = Surface; B = Bottom; A = Average. S and B values represent mean of duplicate determinations.

[b] Value represents single determination.

[c] Single depth sample in discharge considered representative of water column due to turbulent mixing in immediate discharge.

TABLE M-44
(continued)
RESULTS OF TRICHROMATIC CHLOROPHYLL AND TOTAL CAROTENOID DETERMINATIONS
ST. LUCIE PLANT
1977

		Pigment and Depth[a]											
		Chlorophyll-a (mg/m3)			Chlorophyll-b (mg/m3)			Chlorophyll-c (mg/m3)			Carotenoids (m-SPU/m3)		
Date	Station	S	B	A	S	B	A	S	B	A	S	B	A
SEPT 13	0	1.35	1.56	1.45	0.07	0.07	0.07	0.78	0.82	0.80	1.27	1.54	1.41
	1	2.16	2.16	2.16	0.10	0.11	0.11	1.06	1.07	1.06	1.99	2.07	2.03
	2	1.71	1.28	1.50	0.08	0.10	0.09	0.95	0.71	0.83	1.57	1.20	1.38
	3	1.46	0.92	1.19	0.05	0.09	0.07	0.78	0.47	0.63	1.35	0.86	1.11
	4	1.74	1.30	1.52	0.09	0.07	0.08	0.92	0.69	0.80	1.60	1.21	1.41
	5	1.59	1.43	1.51	0.06	0.13	0.10	0.81	0.83	0.82	1.52	1.32	1.42
	11	1.93	2.21	2.07	0.08	0.08	0.08	1.00	1.07	1.03	1.79	2.03	1.91
	12	0.50	-[b]	0.50	0.08	-	0.08	0.27	-	0.27	0.40	-	0.40
OCT 11	0	1.30	3.22	2.26	0.12	0.15	0.14	0.67	1.51	1.09	1.40	3.46	2.43
	1	1.74	1.64	1.69	0.16	0.13	0.15	0.87	0.74	0.80	1.96	1.93	1.95
	2	1.45	1.14	1.29	0.14	0.11	0.12	0.71	0.57	0.64	1.61	1.23	1.42
	3	1.15	1.20	1.17	0.09	0.14	0.12	0.61	0.76	0.69	1.23	1.27	1.25
	4	1.15	1.35	1.25	0.12	0.12	0.12	0.73	0.69	0.71	1.31	1.51	1.41
	5	1.31	1.43	1.37	0.13	0.12	0.13	0.76	0.73	0.75	1.41	1.54	1.48
	11	1.63	1.67	1.65	0.12	0.15	0.14	0.79	0.79	0.79	1.77	1.83	1.80
	12	1.27	-[b]	1.27	0.28	-	0.28	0.72	-	0.72	1.25	-	1.25

[a] S = Surface; B = Bottom; A = Average. S and B values represent mean of duplicate determinations.

[b] Single depth sample in discharge considered representative of water column due to turbulent mixing in immediate discharge.

TABLE H-44
(continued)
RESULTS OF TRICHROMATIC CHLOROPHYLL AND TOTAL CAROTENOID DETERMINATIONS
ST. LUCIE PLANT
1977

		Pigment and Depth[a]											
		Chlorophyll-a (mg/m^3)			Chlorophyll-b (mg/m^3)			Chlorophyll-c (mg/m^3)			Carotenoids ($\frac{m\text{-}SPU}{m^3}$)		
Date	Station	S	B	A	S	B	A	S	B	A	S	B	A
NOV 2	0	6.44	12.19	9.32	0.08	0.15	0.11	2.90	4.83	3.86	5.73	11.63	8.68
	1	7.26	9.00	8.13	0.14	0.16	0.15	3.43	3.78	3.60	6.85	8.50	7.68
	2	6.29	7.63	6.96	0.36	0.39	0.37	2.89	3.77	3.33	5.85	7.59	6.72
	3	4.94	5.00	4.97	0.21	0.21	0.21	2.46	2.38	2.42	4.67	4.48	4.58
	4	4.27	7.13	5.70	0.11	0.21	0.16	2.04	3.47	2.76	3.74	6.81	5.27
	5	4.43	7.09	5.76	0.09	0.23	0.16	2.01	3.35	2.68	4.05	6.47	5.26
	11	6.06	6.95	6.51	0.18	0.10	0.14	3.01	3.24	3.13	5.41	6.67	6.04
	12	5.21	-[b]	5.21	0.17	-	0.17	2.43	-	2.43	4.85	-	4.85
DEC 1	0	1.37	1.46	1.42	0.12	0.12	0.12	0.62	0.81	0.71	1.32	1.31	1.32
	1	1.34	2.05	1.69	0.12	0.12	0.12	0.79	0.93	0.86	1.08	1.93	1.51
	2	0.87	0.89	0.88	0.13	0.09	0.11	0.52	0.49	0.51	0.84	0.84	0.84
	3	0.68	0.72	0.70	0.06	0.09	0.08	0.33	0.34	0.34	0.69	0.59	0.64
	4	0.51	0.63	0.57	0.07	0.12	0.10	0.24	0.37	0.31	0.49	0.53	0.51
	5	1.01	0.86	0.94	0.14	0.12	0.13	0.63	0.43	0.53	0.94	0.64	0.79
	11	1.68	7.69	4.68	0.10	ND[c]	0.05	0.86	3.39	2.12	1.64	7.91	4.77
	12	0.65	-[b]	0.65	0.07	-	0.07	0.45	-	0.45	0.36	-	0.36

[a] S = Surface; B = Bottom; A = Average. S and B values represent mean of duplicate determinations.

[b] Single depth sample in discharge considered representative of water column due to turbulent mixing in immediate discharge.

[c] ND = Not Detected.

TABLE M-45

DIFFERENCES IN MONTHLY MEAN CAROTENOID (TUKEY'S TEST)
OFFSHORE SURFACE STATIONS (0-5)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Month (Mean)	Feb (1.59)	Mar (0.83)	Apr (0.54)	May (0.70)	Jun (0.59)	Jul (0.31)	Aug (0.97)	Sep (1.55)	Oct (1.49)	Nov (5.15)	Dec (0.89)
Jan (1.22)	0.37	0.39	0.68	0.52	0.63	0.91*	0.25	0.33	0.27	3.93*	0.33
Feb (1.59)		0.76	1.05*	0.89*	1.00*	1.28*	0.62	0.04	0.10	3.56*	0.70
Mar (0.83)			0.29	0.13	0.24	0.52	0.14	0.72	0.66	4.32*	0.06
Apr (0.54)				0.16	0.05	0.23	0.43	1.01*	0.95*	4.61*	0.35
May (0.70)					0.11	0.39	0.27	0.85*	0.79*	4.45*	0.19
Jun (0.59)						0.28	0.38	0.96*	0.90*	4.56*	0.30
Jul (0.31)							0.66	1.24*	1.18*	4.84*	0.58
Aug (0.97)								0.58	0.52	4.18*	0.08
Sep (1.55)									0.06	3.60*	0.66
Oct (1.49)										3.66*	0.60
Nov (5.15)											4.26*

* Significant at α = .05, HSD = 0.78.

TABLE M-46

DIFFERENCES IN MONTHLY MEAN CAROTENOID (TUKEY'S TEST)
OFFSHORE BOTTOM STATIONS (0-5)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Month (Mean)	Feb (1.88)	Mar (1.02)	Apr (0.50)	May (0.68)	Jun (0.43)	Jul (0.43)	Aug (1.20)	Sep (1.37)	Oct (1.82)	Nov (7.58)	Dec (0.97)
Jan (0.99)	0.89	0.03	0.49	0.31	0.56	0.56	0.21	0.38	0.83	6.59*	0.02
Feb (1.88)		0.86	1.38	1.20	1.45	1.45	0.68	0.51	0.06	5.70*	0.91
Mar (1.02)			0.52	0.34	0.59	0.59	0.18	0.35	0.80	6.56*	0.05
Apr (0.50)				0.18	0.07	0.07	0.70	0.87	1.32	7.08*	0.47
May (0.68)					0.25	0.25	0.52	0.69	1.14	6.90*	0.29
Jun (0.43)						0.00	0.77	0.94	1.39	7.15	0.54
Jul (0.43)							0.77	0.94	1.39	7.15*	0.54
Aug (1.20)								0.17	0.62	6.38*	0.23
Sep (1.37)									0.45	6.21*	0.40
Oct (1.82)										5.76*	0.85
Nov (7.58)											6.61*

* Significant at α = .05, HSD = 1.50.

TABLE M-47

DIFFERENCES IN STATION MEAN CAROTENOID (TUKEY'S TEST)
OFFSHORE STATIONS (0-5)
ST. LUCIE PLANT
JANUARY - DECEMBER 1977

SURFACE					
Station (Mean)	1 (1.73)	2 (1.31)	3 (1.15)	4 (1.05)	5 (1.27)
0 (1.40)	0.33	0.09	0.25	0.35	0.13
1 (1.73)		0.42	0.58*	0.68*	0.46
2 (1.31)			0.16	0.26	0.04
3 (1.15)				0.10	0.12
4 (1.05)					0.22

*Significant at α = .05; HSD = 0.48.

BOTTOM					
Station (Mean)	1 (1.81)	2 (1.44)	3 (1.06)	4 (1.46)	5 (1.38)
0 (2.34)	0.53	0.90	1.28*	0.88	0.96*
1 (1.81)		0.37	0.75	0.35	0.43
2 (1.44)			0.38	0.02	0.06
3 (1.06)				0.40	0.32
4 (1.46)					0.05

*Significant at α = .05; HSD = 0.92.

TABLE M-48

DIFFERENCES IN STATION MEAN CAROTENOID (TUKEY'S TEST)
OFFSHORE STATIONS (0-5)
ST. LUCIE PLANT
MARCH 1976 - DECEMBER 1977[a]

SURFACE					
Station (Mean)	1 (2.66)	2 (1.91)	3 (1.50)	4 (1.73)	5 (1.77)
0 (2.05)	0.61	0.14	0.55	0.32	0.28
1 (2.66)		0.75	1.16*	0.93*	0.89*
2 (1.91)			0.41	0.18	0.14
3 (1.50)				0.23	0.27
4 (1.73)					0.04

*Significant at α = .05; HSD = 0.65.

BOTTOM					
Station (Mean)	1 (2.56)	2 (1.98)	3 (1.81)	4 (1.99)	5 (2.51)
0 (3.45)	0.89	1.47*	1.64*	1.46*	0.94
1 (2.56)		0.58	0.75	0.57	0.05
2 (1.98)			0.17	0.01	0.53
3 (1.81)				0.18	0.70
4 (1.99)					0.52

*Significant at α = .05; HSD = 1.07.

[a]January and February 1977 not included in analysis.

TABLE M-49

DIFFERENCES IN MONTHLY MEAN CHLOROPHYLL-*c* (TUKEY'S TEST)
OFFSHORE SURFACE STATIONS (0-5)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Month (Mean)	Feb (0.81)	Mar (0.50)	Apr (0.22)	May (0.29)	Jun (0.30)	Jul (0.14)	Aug (0.52)	Sep (0.88)	Oct (0.73)	Nov (2.62)	Dec (0.52)
Jan (0.63)	0.18	0.13	0.41*	0.34	0.33	0.49*	0.11	0.25	0.10	1.99*	0.11
Feb (0.81)		0.31	0.59*	0.52*	0.51*	0.67*	0.29	0.07	0.08	1.81*	0.29
Mar (0.50)			0.28	0.21	0.20	0.36	0.02	0.38	0.23	2.12*	0.02
Apr (0.22)				0.07	0.08	0.08	0.30	0.66*	0.51*	2.40*	0.30
May (0.29)					0.01	0.15	0.23	0.59*	0.44*	2.33*	0.23
Jun (0.30)						0.16	0.22	0.58*	0.43*	2.32*	0.22
Jul (0.14)							0.38	0.74*	0.59*	2.48*	0.38
Aug (0.52)								0.36	0.21	2.10*	0.00
Sep (0.88)									0.15	1.74*	0.36
Oct (0.73)										1.89*	0.21
Nov (2.62)											2.10*

* Significant at α = .05, HSD = 0.39.

TABLE M-50

DIFFERENCES IN MONTHLY MEAN CHLOROPHYLL-*c* (TUKEY'S TEST)
OFFSHORE BOTTOM STATIONS (0-5)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Month (Mean)	Feb (0.99)	Mar (0.60)	Apr (0.19)	May (0.27)	Jun (0.19)	Jul (0.23)	Aug (0.75)	Sep (0.77)	Oct (0.83)	Nov (3.60)	Dec (0.56)
Jan (0.63)	0.36	0.03	0.44	0.36	0.44	0.40	0.12	0.14	0.20	2.97*	0.07
Feb (0.99)		0.39	0.80*	0.72*	0.80*	0.76*	0.24	0.22	0.16	2.61*	0.43
Mar (0.60)			0.41	0.33	0.41	0.37	0.15	0.17	0.23	3.00*	0.04
Apr (0.19)				0.08	0.00	0.04	0.56	0.58	0.64*	3.41*	0.37
May (0.27)					0.08	0.04	0.48	0.50	0.56	3.33*	0.29
Jun (0.19)						0.04	0.56	0.58	0.64*	3.41*	0.37
Jul (0.23)							0.52	0.54	0.60*	3.37*	0.33
Aug (0.75)								0.02	0.08	2.85*	0.19
Sep (0.77)									0.06	2.83*	0.21
Oct (0.83)										2.77*	0.27
Nov (3.60)											3.04*

* Significant at α = .05, HSD = 0.59.

TABLE M-51

DIFFERENCES IN STATION MEAN CHLOROPHYLL-*a* (TUKEY'S TEST)
OFFSHORE STATIONS (0-5)
ST. LUCIE PLANT
JANUARY - DECEMBER 1977

SURFACE					
Station (Mean)	1 (0.88)	2 (0.66)	3 (0.59)	4 (0.58)	5 (0.67)
0 (0.70)	0.18	0.04	0.11	0.12	0.03
1 (0.88)		0.22	0.29*	0.30*	0.21
2 (0.66)			0.07	0.08	0.01
3 (0.59)				0.01	0.08
4 (0.58)					0.09

*Significant at $\alpha = .05$; HSD = 0.24.

BOTTOM					
Station (Mean)	1 (0.85)	2 (0.76)	3 (0.56)	4 (0.82)	5 (0.72)
0 (1.10)	0.25	0.34	0.54*	0.28	0.38
1 (0.85)		0.09	0.29	0.03	0.13
2 (0.76)			0.20	0.06	0.04
3 (0.56)				0.26	0.16
4 (0.82)					0.10

*Significant at $\alpha = .05$; HSD = 0.42.

TABLE M-52

DIFFERENCES IN STATION MEAN CHLOROPHYLL-*c* (TUKEY'S TEST)
OFFSHORE STATIONS (0-5)
ST. LUCIE PLANT
MARCH 1976 - DECEMBER 1977[a]

SURFACE

Station (Mean)	1 (1.21)	2 (0.96)	3 (0.75)	4 (0.89)	5 (0.82)
0 (1.00)	0.21	0.04	0.25	0.11	0.18
1 (1.21)		0.25	0.46*	0.32*	0.39*
2 (0.96)			0.21	0.07	0.14
3 (0.75)				0.14	0.07
4 (0.89)					0.07

*Significant at α = .05; HSD = 0.30

BOTTOM

Station (Mean)	1 (1.18)	2 (0.96)	3 (0.86)	4 (0.98)	5 (1.13)
0 (1.54)	0.36	0.58*	0.68*	0.56*	0.41
1 (1.18)		0.22	0.32	0.20	0.05
2 (0.96)			0.10	0.02	0.17
3 (0.86)				0.12	0.27
4 (0.98)					0.15

*Significant at α = .05; HSD = 0.42

[a]January and February not included in analysis.

TABLE M-53

DIFFERENCES IN STATION MEAN CHLOROPHYLL-*b*
(TUKEY'S TEST)
OFFSHORE BOTTOM STATIONS (0-5)
ST. LUCIE PLANT
MARCH 1976-DECEMBER 1977[a]

Station (Mean)	1 (0.12)	2 (0.12)	3 (0.12)	4 (0.11)	5 (0.12)
0 (0.21)	0.09	0.09	0.09	0.10*	0.09
1 (0.12)		0.00	0.00	0.01	0.00
2 (0.12)			0.00	0.01	0.00
3 (0.12)				0.01	0.00
4 (0.11)					0.01

* Significant at α = .05, HSD = 0.10.
[a] January and February 1977 not included in analysis.

TABLE M-54

DIFFERENCES IN MONTHLY MEAN CHLOROPHYLL-*b* (TUKEY'S TEST)
OFFSHORE SURFACE STATIONS (0-5)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Month (Mean)	Feb (0.11)	Mar (0.06)	Apr (0.01)	May (0.06)	Jun (0.04)	Jul (0.03)	Aug (0.16)	Sep (0.08)	Oct (0.13)	Nov (0.17)	Dec (0.11)
Jan (0.11)	0.00	0.05	0.10*	0.05	0.07*	0.08*	0.05	0.03	0.02	0.06	0.00
Feb (0.11)		0.05	0.10*	0.05	0.07*	0.08*	0.05	0.03	0.02	0.06	0.00
Mar (0.06)			0.05	0.00	0.02	0.03	0.10*	0.02	0.07*	0.11*	0.05
Apr (0.01)				0.05	0.03	0.02	0.15*	0.07*	0.12*	0.16*	0.10*
May (0.06)					0.02	0.03	0.10*	0.02	0.07*	0.11*	0.05
Jun (0.04)						0.01	0.12*	0.04	0.09*	0.13*	0.07*
Jul (0.03)							0.13*	0.05	0.10*	0.14*	0.08*
Aug (0.16)								0.08*	0.03	0.01	0.05
Sep (0.08)									0.05	0.09*	0.03
Oct (0.13)										0.04	0.02
Nov (0.17)											0.06

* Significant at α = .05, HSD = 0.07.

TABLE M- 55

DIFFERENCES IN MONTHLY MEAN CHLOROPHYLL-*b* (TUKEY'S TEST)
OFFSHORE BOTTOM STATIONS (0-5)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Month (Mean)	Feb (0.17)	Mar (0.04)	Apr (0.01)	May (0.06)	Jun (0.05)	Jul (0.06)	Aug (0.20)	Sep (0.10)	Oct (0.13)	Nov (0.23)	Dec (0.11)
Jan (0.14)	0.03	0.10*	0.13*	0.08*	0.09*	0.08*	0.06	0.04	0.01	0.09*	0.03
Feb (0.17)		0.13*	0.16*	0.11*	0.12*	0.11*	0.03	0.07	0.04	0.06	0.06
Mar (0.04)			0.03	0.02	0.01	0.02	0.16*	0.06	0.09*	0.19*	0.07
Apr (0.01)				0.05	0.04	0.05	0.19*	0.09*	0.12*	0.22*	0.10*
May (0.06)					0.01	0.00	0.14*	0.04	0.07	0.17*	0.05
Jun (0.05)						0.01	0.15*	0.05	0.08*	0.18*	0.06
Jul (0.06)							0.14*	0.04	0.07	0.17*	0.05
Aug (0.20)								0.10*	0.07	0.03	0.09*
Sep (0.10)									0.03	0.13*	0.01
Oct (0.13)										0.10*	0.02
Nov (0.23)											0.12*

* Significant at α = .05, HSD = 0.08.

TABLE M-56

GROSS PRIMARY PRODUCTIVITY (P)[a], EXTINCTION COEFFICIENT PER METER (k) AND SURFACE RADIATION (g-cal/cm^2/day)
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Date	Station and parameter												Surface radiation
	0		1		2		3		4		5		
	P	k	P	k	P	k	P	k	P	k	P	k	
25 Jan	0.45	0.20	0.28	0.32	0.44	0.13	0.26	0.22	0.41	0.15	b	b	319.64
15 Feb	0.31	0.36	0.28	0.36	0.30	0.18	b	b	b	b	0.36	0.22	177.04
11 Mar	0.24	0.23	0.31	0.19	0.41	0.15	0.18	0.28	0.46	0.21	0.50	0.20	380.60
19 Apr	0.22	0.26	0.10	0.67	0.24	0.17	0.09	0.25	0.16	0.22	b	b	510.40
10 May	0.23	0.17	0.21	0.27	0.20	0.17	0.17	0.17	0.23	0.15	0.23	0.14	229.10
14 Jun	0.61	0.06	0.13	0.22	0.25	0.14	0.12	0.17	0.27	0.14	0.35	0.17	603.90
12 Jul	0.21	0.17	0.28	0.15	0.37	0.10	0.29	0.12	0.29	0.13	0.30	0.11	640.08
23 Aug	0.36	0.16	0.26	0.27	b	b	0.59	0.19	0.67	0.14	0.66	0.11	489.95
13 Sep	0.51	0.24	0.38	0.49	0.70	0.18	0.53	0.19	0.62	0.21	0.65	0.20	536.26
11 Oct	0.36	0.35	0.30	0.32	0.38	0.19	0.29	0.22	0.32	0.21	0.35	0.22	265.89
2 Nov	c	c	c	c	c	c	0.37	0.78	c	c	c	c	262.21
1 Dec	0.23	0.28	0.10	0.70	0.16	0.24	0.08	0.41	0.10	0.23	0.27	0.15	206.01

[a] P = g organic carbon produced/m^2/day.
[b] Data not available.
[c] 0.0 transmittance reading on bottom.

TABLE M-57

GROSS PRIMARY PRODUCTIVITY (P)[a], EXTINCTION COEFFICIENT PER METER (k) AND SURFACE RADIATION (g-cal/cm^2/day)
ST. LUCIE PLANT
NOVEMBER-DECEMBER 1976

Date	Station and parameter												Surface radiation
	0		1		2		3		4		5		
	P	k	P	k	P	k	P	k	P	k	P	k	
10 Nov	0.54	0.68	0.26	1.01	0.30	0.66	0.38	0.35	0.32	0.68	0.32	0.55	350.33
13 Dec[b]													150.89

[a] P = g organic carbon produced/m^2/day.
[b] Data not available due to equipment failure.

TABLE M-58

COMPARISON OF MONTHLY MEAN GROSS PRIMARY
PRODUCTIVITY AT OFFSHORE STATIONS
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Month (Mean)	May (0.21)	Jun (0.29)	Jul (0.29)	Sep (0.57)	Oct (0.33)	Dec (0.31)
Mar (0.35)	0.14	0.06	0.06	0.22	0.02	0.04
May (0.21)		0.08	0.08	0.36*	0.12	0.10
Jun (0.29)			0.00	0.28	0.04	0.02
Jul (0.29)				0.28	0.04	0.02
Sep (0.57)					0.24	0.26
Oct (0.33)						0.02

* Significant at α = .05, HSD = 0.31

APPENDIX N

Z O O P L A N K T O N

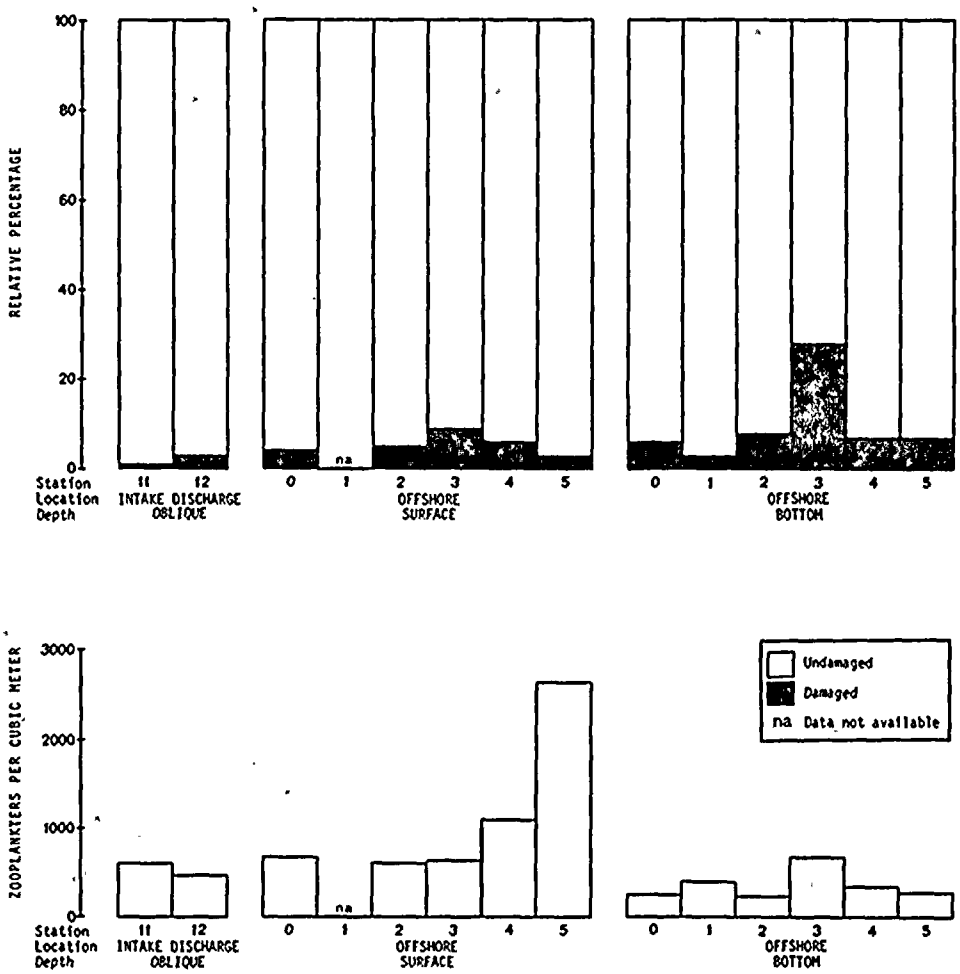


Figure N-1. Undamaged zooplankton density and relative percentages of damaged and undamaged zooplankters, St. Lucie Plant, December 1976.

TABLE N-1

SUMMARY OF DECEMBER 1976 DATA
ST. LUCIE PLANT

Parameter	Station and depth[a]										
	11	12	0			1			2		
	Ø	Ø	S	B	$\bar{X}$	S	B	$\bar{X}$	S	B	$\bar{X}$
Density (No./m^3)	607.7	471.8	682.2	242.7	462.5	NA[b]	406.1	NA[b]	606.3	225.5	415.9
Biomass (ash-free dry weight, mg/m^3)	0.43	3.90	3.80	1.92	2.86	NA[b]	80.60	NA[b]	3.77	2.36	3.07
Salinity (‰)	36.0	35.5	35.1	35.1	35.1	35.1	35.1	35.1	36.0	36.0	36.0
Temperature (°C)	24.1	28.9	23.8	23.8	23.8	23.7	23.7	23.7	24.2	24.2	24.2
Dissolved Oxygen (ppm)	6.2	6.3	5.7	5.7	5.7	6.4	5.9	6.2	5.8	5.9	5.9

Parameter	Station and depth[a]								
	3			4			5		
	S	B	$\bar{X}$	S	B	$\bar{X}$	S	B	$\bar{X}$
Density (No./m^3)	626.0	677.4	651.7	1092.8	328.9	710.9	2636.5	281.2	1458.9
Biomass (ash-free dry weight, mg/m^3)	2.47	8.65	5.56	8.86	3.81	6.34	22.05	0.49	11.27
Salinity (‰)	35.8	36.0	35.9	36.0	35.8	35.9	36.0	36.0	36.0
Temperature (°C)	24.4	24.4	24.4	24.2	24.3	24.3	24.5	24.3	24.4
Dissolved Oxygen (ppm)	6.3	6.2	6.3	6.3	6.0	6.2	6.3	5.9	6.1

[a]Ø = Oblique; S = Surface; B = Bottom.

[b]Data not available.

TABLE N-2

DENSITY[a] AND PERCENTAGE COMPOSITION (%) OF MAJOR ZOOPLANKTON TAXA[b] COLLECTED
ST. LUCIE PLANT
DECEMBER 1976

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S[e]	B	S	B	S	B	S	B	S	B
UNDAMAGED[d]														
Protozoa	1.6 (<1)	7.6 (2)												
Coelenterata				1.8 (1)		4.3 (1)	2.0 (<1)	1.4 (1)				6.2 (2)	11.6 (<1)	
Mollusca	15.6 (3)	11.4 (2)	3.1 (1)			8.5 (2)	4.1 (1)	2.9 (1)	2.6 (<1)	27.7 (4)	3.6 (<1)		49.3 (2)	
Polychaeta		1.9 (<1)	18.4 (3)	3.5 (1)		2.1 (1)	18.2 (3)	1.4 (1)	25.7 (4)		32.4 (3)	12.4 (4)	17.4 (1)	2.5 (1)
Crustacea														
nauplii		3.8 (1)				6.4 (2)			10.3 (2)		7.2 (1)	6.2 (2)	8.7 (<1)	2.5 (1)
cladocera														
ostracoda		3.8 (1)				2.1 (1)			2.6 (<1)	13.8 (2)		8.3 (3)	20.3 (1)	10.0 (4)
copepoda	28.1 (5)	24.7 (5)	279.7 (41)	135.3 (56)		216.9 (53)	399.6 (66)	138.9 (62)	391.5 (63)	525.3 (78)	607.4 (56)	194.5 (59)	1762.8 (67)	183.4 (65)
cirripedia (barnacle) nauplii	457.6 (75)	293.1 (62)	6.1 (1)	1.8 (1)		31.9 (8)	2.0 (<1)	1.4 (1)	7.7 (1)			6.2 (2)	31.9 (1)	15.1 (5)
decapoda	6.3 (1)	7.6 (2)	6.1 (1)	15.9 (7)		17.0 (4)	2.0 (<1)	11.6 (5)	30.9 (5)			16.5 (5)	156.8 (6)	27.6 (10)
others	1.6 (<1)	20.9 (4)		1.8 (1)			2.0 (<1)	1.4 (1)						
Chaetognatha				3.5 (1)		4.3 (1)	4.0 (1)	5.7 (3)	5.2 (1)	13.8 (2)	10.8 (1)		55.1 (2)	2.5 (1)
Echinodermata	53.1 (9)	32.3 (7)	12.3 (2)	15.8 (7)		12.7 (3)	8.1 (1)	24.6 (11)	2.6 (<1)	13.8 (2)	194.1 (18)	12.4 (4)	261.3 (10)	
Chordata														
urochordata	1.6 (<1)		30.7 (5)	15.8 (6)		27.7 (7)	26.4 (4)	5.8 (3)	23.2 (4)	27.7 (4)	75.5 (7)	16.5 (5)	40.6 (2)	25.1 (9)
fish			18.4 (3)			2.1 (1)		2.9 (1)	2.6 (<1)			4.2 (1)		2.5 (1)
Eggs	42.2 (7)	64.7 (14)	307.4 (45)	47.5 (20)		68.0 (17)	137.9 (23)	26.1 (12)	118.5 (19)	55.3 (8)	161.8 (15)	45.5 (14)	220.7 (8)	10.0 (4)
Miscellaneous						2.1 (1)		1.4 (1)						
SUBTOTAL UNDAMAGED	607.7	471.8	682.2	242.7		406.1	606.3	225.5	626.0	677.4	1092.8	328.9	2636.5	281.2
SUBTOTAL DAMAGED[f]	3.2 (1)	13.3 (3)	30.7 (4)	14.2 (6)		10.7 (3)	30.3 (5)	18.7 (8)	64.5 (9)	262.7 (28)	64.7 (6)	22.7 (7)	81.2 (3)	22.5 (7)
TOTAL UNDAMAGED + DAMAGED	610.9	485.1	712.9	256.9		416.8	636.6	244.2	690.5	940.1	1157.5	351.6	2717.7	303.7

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.
[b] For detailed taxonomic listing, see Table N-3.
[c] Ø = oblique; S = surface; B = bottom.
[d] Percentage is based on total undamaged.
[e] Data not available.
[f] Percentage is based on total undamaged + damaged.

TABLE N-3

QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
13 DECEMBER 1976

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S[c]	B	S	B	S	B	S	B	S	B
UNDAMAGED														
PROTOZOA														
foraminifera	1.6	7.6												
COELENTERATA														
anthomedusae				1.8										
siphonophora						4.3	2.0	1.4				6.2	11.6	
MOLLUSCA														
gastropoda														
larvae	10.9	7.6	3.1			6.4	4.1	2.9	2.6	27.7	3.6		40.6	
thecosomata (pteropoda)														
Creseis acicula						2.1							5.8	
pelecypoda														
larvae	4.7	3.8											2.9	
POLYCHAETA														
intermediates												6.2	2.9	
larvae		1.9	18.4	3.5		2.1	18.2	1.4	25.7		32.4	6.2	14.5	2.5
ARTHROPODA														
crustacea														
nauplii		3.8				6.4			10.3		7.2	6.2	8.7	2.5
ostracoda														
Conchoecia elegans		3.8				2.1			2.6	13.8		8.3	20.3	10.0
copepoda[d]														
calanoida	23.4	15.2	172.2	119.5		168.0	322.5	107.1	296.2	387.1	528.3	167.6	1318.5	160.8
Acartia bermudensis												(5)		
A. negligens	(8)													
Calanopia americana						(5)								
Clausocalanus arcuicornis		(7)												
C. furcatus			(15)	(10)		(25)	(35)	(25)	(20)	(29)	(15)		(10)	(25)
Eucalanus elongatus												(5)		
Labidocera sp.			(10)	(25)		(15)	(15)			(12)	(40)	(50)	(35)	(10)
L. aestiva			(10)	(25)		(5)	(5)		(5)		(35)		(15)	
Nannocalanus minor								(20)					(30)	(20)
Neocalanus gracilis		(86)	(5)											
Paracalanus aculeatus	(50)		(30)	(15)		(25)	(40)	(30)	(40)	(59)	(10)	(40)	(5)	(35)
Tomora stylifera								(5)						
T. turbinata	(25)	(7)		(25)		(25)		(20)	(20)				(5)	
Undinula vulgaris									(15)					(10)
immatures			(5)				(5)							

TABLE N-3
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
13 DECEMBER 1976

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S[c]	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
unidentified	(17)		(25)											
cyclopoida	4.7	3.8	101.4	15.8		48.9	71.0	27.5	95.3	124.4	71.9	18.6	444.3	22.6
Corycaeus(Agetus) typicus													(10)	
C.(Corycaeus) speciosus													(15)	
C.(Onychocorycaeus) latus			(29)				(15)	(29)	(15)		(17)		(10)	(13)
Farranula carinata			(12)				(35)	(14)		(20)				
F. gracilis	(50)		(6)			(20)	(25)	(7)	(25)		(83)	(40)	(15)	
F. rostrata						(13)								(25)
Oithona sp.		(100)												
O. plumifera				(60)		(27)	(5)		(15)	(40)			(5)	
O. robusta	(50)			(20)								(40)		(25)
Oncaea mediterranea			(35)	(20)		(40)	(15)	(50)	(45)	(40)		(20)	(45)	(38)
O. venusta			(18)				(5)							
harpacticoida		5.7	6.1				6.1	4.3		13.8	7.2	8.3		
Eutorpina sp.		(100)	(100)				(50)	(100)			(100)	(100)		
unidentified							(50)							
cirripedia														
cypris larvae	1.6						2.0							
nauplii (barnacle)	457.6	293.1	6.1	1.8		31.9	2.0	1.4	7.7			6.2	31.9	15.1
isopoda		1.9												
amphipoda														
gammaridea		19.0												
euphausiacea														
postlarvae				1.8										
zoeae								1.4						
decapoda														
brachyura														
zoeae														
leucosiidae									2.6					
pinnotheridae														
Dissodactylus sp.	1.6	1.9											2.9	2.5
Pinnixa sayana													2.9	
unidentified														
portunidae														
Portunus sp.				1.8										
xanthidae														
Panopeus herbstii									2.6					
caridea														
postlarvae													14.5	
zoeae				1.8		8.5							2.9	

TABLE N-3
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
13 DECEMBER 1976

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S[c]	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
penaeidea														
penaeidae														
protozoeae													2.9	2.5
sergestidae														
adults														
Lucifer faxoni													2.9	
protozoeae	4.7	5.7	6.1	12.3		8.5	2.0	11.6	28.3			16.5	127.8	22.6
BRYOZOA														
cyphonautes larvae								1.4						
CHAETOGNATHA														
Sagitta sp.							2.0	1.4		13.8	7.2		14.5	
S. enflata				3.5			2.0	2.9	2.6				26.1	2.5
S. friderici													2.9	
Spadella sp.													2.9	
unidentified						4.3		1.4	2.6		3.6		8.7	
ECHINODERMATA														
larvae	53.1	32.3	12.3	15.8		12.7	8.1	24.6	2.6	13.8	194.1	12.4	261.3	
CHORDATA														
urochordata														
appendicularia														
Oikopleura sp.	1.6		30.7	15.8		27.7	26.4	5.8	23.2	27.7	75.5	16.5	40.6	25.1
fish														
eggs			18.4			2.1		2.9	2.6			2.1		2.5
larvae												2.1		
EGGS	42.2	64.7	307.4	47.5		68.0	137.9	26.1	118.5	55.3	161.8	45.5	220.7	10.0
UNIDENTIFIED DEVELOPMENTAL STAGES						2.1								
SUBTOTAL UNDAMAGED	607.7	471.8	682.2	242.7		406.1	606.3	225.5	626.0	677.4	1092.8	328.9	2636.5	281.2
DAMAGED														
COELENTERATA														
hydromedusae								1.4						
ARTHROPODA														
crustacea														
copepoda	1.6		24.6	8.8		6.4	22.3	8.7	38.7	179.7	28.7	12.4	29.0	7.5

TABLE N-3
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
13 DECEMBER 1976

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S[c]	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
amphipoda													2.9	
gammaridea		1.9												
euphausiacea														
postlarvae													2.9	
decapoda														
brachyura														
zoeae				1.8			2.0		12.9	27.7			2.9	
caridea														
zoeae		1.9								13.8				
penaeidea														
sergestidae													2.9	2.5
protozoeae			6.1				2.0		2.6					
CHAETOGNATHA		1.9		1.8			2.0	4.3		27.7	10.8	4.1	11.6	5.0
CHORDATA														
urochordata														
appendicularia	1.6	7.6		1.8		4.3	2.0	4.3	10.3	13.8	25.2	6.2	29.0	7.5
SUBTOTAL DAMAGED	3.2	13.3	30.7	14.2		10.7	30.3	18.7	64.5	262.7	64.7	22.7	81.2	22.5
TOTAL UNDAMAGED + DAMAGED	610.9	485.1	712.9	256.9		416.8	636.6	244.2	690.5	940.1	1157.5	351.6	2717.7	303.7

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.

[b] Ø = Oblique; S = Surface; B = Bottom.

[c] Data not available.

[d] Values in parentheses represent the relative percentage of copepod species sampled at random and are not to be construed as number per cubic meter.

TABLE N-4

TOTAL AND MEAN ZOOPLANKTERS PER CUBIC METER[a]
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

Date	Station and depth[b] 11 ø	12 ø	0 S	0 B	0 X	1 S	1 B	1 X	2 S	2 B	2 X
25 JAN	105.5	197.5	992.7	651.4	822.1	1006.0	1122.3	1064.2	1357.3	2501.1	1929.2
15 FEB	567.5	459.1	1729.7	319.0	1024.4	4469.6	1893.9	3181.8	2579.2	1691.7	2135.5
11 MAR	680.9	362.1	3323.3	4706.2	4014.8	8445.3	9064.3	8754.8	3802.0	28912.5	16357.3
19-20 APR[c]	237.6	351.9	1727.5	2272.2	1999.9	3930.2	1391.5	2660.9	4194.0	1721.8	2957.9
10 MAY	310.4	349.2	1210.7	3361.2	2286.0	1285.7	1999.2	1642.5	1688.1	3161.2	2424.7
14 JUN	967.4	288.3	633.4	2684.8	1659.1	1446.4	16180.0	8813.2	402.0	1303.6	852.8
12 JUL	948.8	1042.6	5686.3	15261.6	10474.0	3497.9	9580.3	6539.1	746.0	9233.4	4989.7
23 AUG	964.8	607.6	2258.1	3391.5	2824.8	4008.0	8070.0	6039.0	1930.9	2475.9	2203.4
13 SEP	963.1	1228.3	2171.5	2405.5	2288.5	3620.5	3744.3	3682.4	3139.6	3727.1	3433.4
11-19 OCT[d]	3331.2	2408.1	870.1	1500.3	1185.2	2376.4	3188.7	2782.6	3064.0	910.6	1987.3
2 NOV	1862.7	1630.5	1413.1	569.3	991.2	7183.6	4010.7	5597.1	2122.5	2457.6	2290.1
1 DEC	363.2	319.8	1476.6	126.0	801.3	1797.5	16.7	907.1	701.9	477.1	589.5
MEAN	941.9	770.4	1957.8	3104.1	2530.9	3588.9	5021.8	4305.4	2144.0	4881.1	3512.6

Date	Station and depth[b] 3 S	3 B	3 X	4 S	4 B	4 X	5 S	5 B	5 X
25 JAN	1449.6	3469.0	2459.3	1594.3	1753.0	1673.7	2280.0	2395.1	2341.6
15 FEB	3118.6	6698.2	4908.4	2958.3	8964.6	5961.5	4542.6	5142.3	4842.5
11 MAR	4795.4	3886.9	4341.2	4503.2	4372.7	4438.0	6169.9	3942.2	5056.1
19-20 APR[c]	3664.2	6150.5	4907.4	1518.3	1909.7	1714.0	2962.3	1316.4	2139.4
10 MAY	636.1	766.1	701.1	2146.4	5183.2	3664.8	3557.5	2474.1	3015.7
14 JUN	295.5	1427.2	861.4	363.9	1740.0	1052.0	757.2	7850.0	4303.6
12 JUL	3908.5	6519.4	5214.0	1412.0	9605.2	5508.6	15016.3	1970.2	8493.3
23 AUG	2364.4	5337.8	3851.1	1115.7	6873.5	3994.6	3226.7	3663.2	3445.0
13 SEP	2371.7	2116.8	2244.3	1313.0	5370.7	3344.9	3344.9	4986.2	4165.6
11-19 OCT[d]	1490.4	1201.0	1345.7	1062.5	2238.0	1650.3	645.7	2235.1	1440.4
2 NOV	2666.2	3278.6	2972.4	4880.0	4377.6	4628.8	2251.1	5397.3	3824.2
1 DEC	1362.7	28.0	695.4	1181.1	260.5	720.8	1131.8	324.1	728.0
MEAN	2343.6	3406.6	2875.1	2004.1	4387.4	3196.0	3782.8	3474.7	3649.6

[a]Values expressed are undamaged zooplankters and represent the mean of three subsamples.
[b]ø = Oblique; S = Surface; B = Bottom.
[c]Stations 11 and 12 collected 20 APR; all other stations collected 19 APR.
[d]Stations 11 and 12 collected 11 OCT; all other stations collected 19 OCT.

TABLE N-5

RESULTS OF ZOOPLANKTON BIOMASS ANALYSIS[a]
ST. LUCIE PLANT
JANUARY-DECEMBER 1977

	Station and depth[b]										
	11	12	0			1			2		
	ø	ø	S	B	X	S	B	X	S	B	X
25 JAN	1.28	4.05	6.00	1.58	3.79	15.83	1.50	8.67	14.24	3.49	8.87
15 FEB	4.17	13.29	10.97	6.13	8.55	32.08	16.26	24.17	1.87	22.54	12.21
11 MAR	2.62	9.22	21.07	19.45	20.26	7.66	7.66	7.66	26.92	374.26	200.59
19-20 APR[c]	2.02	6.07	16.17	16.03	16.10	15.79	13.87	14.83	15.34	27.06	21.20
10 MAY	1.72	5.46	3.51	27.27	15.39	42.81	17.69	30.25	4.33	35.38	19.86
14 JUN	1.59	4.20	7.67	16.99	12.33	16.85	58.70	37.78	2.12	37.94	20.03
12 JUL	4.28	7.93	48.04	41.12	44.58	50.84	89.99	70.42	60.80	46.95	53.88
23 AUG	2.13	5.18	16.51	23.95	20.23	28.26	20.42	24.34	14.89	NA[d]	NA[d]
13 SEP	4.03	3.72	17.91	22.72	20.31	19.36	26.78	23.07	27.45	26.53	26.99
11-19 OCT[e]	6.62	12.88	3.60	0.85	2.23	10.84	38.22	24.50	7.92	2.44	5.18
2 NOV	2.22	4.21	5.24	5.12	5.18	36.12	40.41	38.27	3.38	11.39	7.39
1 DEC	0.84	1.22	5.63	11.49	8.56	11.34	14.43	12.89	31.66	16.07	23.87
MEAN	2.79	6.45	13.53	16.06	14.79	23.98	28.83	26.40	17.58	54.91	36.37

	Station and depth[b]								
	3			4			5		
	S	B	X	S	B	X	S	B	X
25 JAN	4.15	9.86	7.01	13.40	2.55	7.98	5.95	3.83	4.89
15 FEB	23.78	38.49	31.14	15.25	1.72	8.49	12.93	41.25	27.09
11 MAR	48.35	19.73	34.04	19.22	11.82	15.52	86.33	18.76	52.55
19-20 APR[c]	19.12	22.95	21.04	13.09	14.48	13.79	16.18	13.44	14.81
10 MAY	3.42	17.37	10.40	7.00	38.29	22.65	4.44	24.40	14.42
14 JUN	12.86	27.44	20.15	2.96	24.69	13.83	25.33	70.79	48.06
12 JUL	30.80	105.70	68.25	NA[d]	46.39	NA[d]	223.47	16.58	120.03
23 AUG	29.81	NA[d]	NA[d]	8.79	NA[d]	NA[d]	29.24	19.42	24.33
13 SEP	19.20	24.49	21.85	15.24	28.22	21.73	24.26	51.63	37.95
11-19 OCT[e]	2.41	1.47	1.94	2.91	4.08	3.50	3.70	6.19	5.00
2 NOV	8.37	11.86	10.12	11.21	10.09	10.65	3.86	14.13	9.00
1 DEC	10.37	10.98	10.68	17.20	21.38	19.29	7.36	85.87	46.62
MEAN	17.72	26.39	21.51	11.48	18.52	13.74	36.92	30.52	33.73

[a]Ash-free dry weight expressed in mg/m^3.
[b]ø = Oblique; S = Surface; B = Bottom.
[c]Stations 11 and 12 collected 20 APR; all other stations collected 19 APR.
[d]Data not available.
[e]Stations 11 and 12 collected 11 OCT; all other stations collected 19 OCT.

TABLE N-6

DENSITY[a] AND PERCENTAGE COMPOSITION (%) OF MAJOR ZOOPLANKTON TAXA[b] COLLECTED
ST. LUCIE PLANT
JANUARY 1977

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED[d]														
Protozoa						2.0 (<1)								
Coelenterata														
Mollusca	15.4 (15)	28.1 (14)	129.2 (13)	52.9 (8)	59.0 (6)	84.3 (8)	125.9 (9)	155.1 (6)	89.0 (6)	86.3 (3)	30.9 (2)	112.9 (6)	75.2 (3)	358.4 (15)
Polychaeta	3.8 (4)	13.1 (7)	2.0 (<1)	5.5 (1)	2.0 (<1)	8.0 (1)	5.8 (<1)	2.6 (<1)	9.9 (1)	15.6 (1)	9.3 (1)	5.7 (<1)		10.1 (<1)
Crustacea nauplii	0.4 (<1)		150.7 (15)	16.4 (3)	8.1 (1)	20.1 (2)	9.7 (1)	2.6 (<1)	16.5 (1)		15.4 (1)	7.6 (<1)	15.8 (1)	7.6 (<1)
cladocera													4.0 (<1)	
ostracoda		1.8 (1)		5.5 (1)	2.0 (<1)		15.5 (1)	31.6 (1)	3.3 (<1)	15.7 (1)	3.1 (<1)	26.8 (2)	7.9 (<1)	12.6 (1)
copepoda	59.4 (56)	91.8 (47)	653.9 (66)	505.4 (78)	811.0 (81)	865.5 (77)	1022.5 (75)	1935.7 (77)	1083.7 (75)	2613.9 (75)	1310.0 (82)	1290.2 (74)	1757.3 (77)	1751.7 (73)
cirripedia (barnacle) nauplii	6.0 (6)	16.9 (9)	6.9 (1)	7.3 (1)	26.4 (3)	20.1 (2)	11.6 (1)	13.2 (1)	23.1 (2)	70.6 (2)	12.4 (1)	5.7 (<1)	11.9 (1)	7.6 (<1)
decapoda	0.4 (<1)	2.8 (1)	9.8 (1)	5.5 (1)	8.1 (1)	14.0 (1)	65.7 (5)	115.7 (5)	56.0 (4)	227.5 (7)	18.5 (1)	172.1 (10)	87.3 (4)	143.7 (6)
others	3.4 (3)	19.6 (10)			16.3 (2)	10.0 (1)	1.9 (<1)	10.5 (<1)		15.6 (1)				2.5 (<1)
Chaetognatha			2.0 (<1)		2.0 (<1)	8.0 (1)	1.9 (<1)	13.2 (1)	16.5 (1)	31.4 (1)	24.8 (2)	3.8 (<1)	47.5 (2)	7.5 (<1)
Echinodermata				1.8 (<1)	8.1 (1)	4.0 (<1)		2.6 (<1)			24.7 (2)	3.8 (<1)	4.0 (<1)	
Chordata urochordata				5.5 (1)	20.3 (2)	50.2 (4)	42.6 (3)	94.7 (4)	75.8 (5)	196.2 (6)	49.4 (3)	28.7 (2)	122.7 (5)	70.7 (3)
fish					2.0 (<1)	2.0 (<1)	5.8 (<1)				9.3 (1)	7.6 (<1)	4.0 (<1)	
Eggs	15.8 (15)	23.4 (12)	39.2 (4)	45.6 (7)	40.7 (4)	34.1 (3)	46.5 (3)	123.6 (5)	72.5 (5)	196.2 (6)	86.5 (5)	88.1 (5)	138.5 (6)	22.7 (1)
Miscellaneous	0.9 (1)						1.9 (<1)		3.3 (<1)				11.9 (1)	
SUBTOTAL UNDAMAGED	105.5	197.5	992.7	651.4	1006.0	1122.3	1357.3	2501.1	1449.6	3469.0	1594.3	1753.0	2283.0	2395.1
SUBTOTAL DAMAGED[e]	2.2 (2)	9.3 (5)	50.9 (5)	29.2 (4)	38.5 (4)	38.1 (3)	36.7 (3)	73.7 (3)	62.6 (4)	94.1 (3)	43.3 (3)	61.2 (3)	110.9 (5)	108.5 (4)
TOTAL UNDAMAGED + DAMAGED	107.7	206.8	1043.6	680.6	1044.5	1160.4	1394.0	2574.8	1512.2	3563.1	1637.6	1814.2	2398.9	2503.6

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.
[b] For detailed taxonomic listing, see Table N-18.
[c] Ø = oblique; S = surface; B = bottom.
[d] Percentage is based on total undamaged.
[e] Percentage is based on total undamaged + damaged.

TABLE N-7

DENSITY[a] AND PERCENTAGE COMPOSITION (%) OF MAJOR ZOOPLANKTON TAXA[b] COLLECTED
ST. LUCIE PLANT
FEBRUARY 1977

	Station and depth[c]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED[d]														
Protozoa														
Coelenterata				0.3 (<1)			2.4 (<1)	3.2 (<1)	6.7 (<1)	11.3 (<1)	2.3 (<1)	31.6 (<1)	12.1 (<1)	8.6 (<1)
Mollusca	38.5 (7)	47.4 (10)	5.1 (<1)	1.6 (1)	32.7 (1)	34.7 (2)	12.1 (1)	9.4 (1)	26.8 (1)	19.8 (<1)	23.3 (1)	15.8 (<1)	38.2 (1)	32.3 (1)
Polychaeta	1.0 (<1)						2.4 (<1)		1.7 (<1)		2.3 (<1)			
Crustacea														
nauplii	1.0 (<1)		17.8 (1)	0.5 (<1)	3.3 (<1)	2.2 (<1)	7.3 (<1)	1.6 (<1)	1.7 (<1)				2.0 (<1)	
cladocera														
ostracoda	1.0 (<1)			1.1 (<1)	6.5 (<1)	6.5 (<1)		32.8 (2)	1.7 (<1)	923.0 (14)		412.1 (5)		23.7 (1)
copepoda	367.0 (65)	177.4 (39)	1501.2 (87)	266.9 (84)	4114.5 (91)	1626.9 (86)	2266.7 (88)	1405.5 (83)	2818.3 (90)	5207.5 (78)	2605.2 (88)	8020.2 (90)	4261.3 (94)	4748.5 (92)
cirripedia (barnacle) nauplii	9.1 (2)	23.7 (5)			22.9 (1)									2.2 (<1)
decapoda	5.0 (1)		5.1 (<1)	24.5 (8)	7.9 (<1)	4.3 (<1)	7.2 (<1)	54.8 (3)	21.9 (1)	319.0 (5)	11.6 (<1)	202.9 (2)	4.0 (<1)	71.1 (1)
others	31.4 (6)	12.8 (18)		1.4 (<1)	26.7 (1)	52.1 (3)		14.1 (1)		17.0 (<1)		12.7 (<1)	10.0 (<1)	28.0 (1)
Chaetognatha	9.1 (2)		15.2 (1)	2.2 (1)	9.8 (<1)	6.6 (<1)	31.5 (1)	28.2 (2)	92.0 (3)	82.0 (1)	37.1 (1)	101.3 (1)	66.3 (2)	51.6 (1)
Echinodermata														
Chordata														
urochordata			5.1 (<1)	0.8 (<1)	32.8 (1)	26.0 (1)	12.1 (1)	9.4 (1)	28.5 (1)	8.5 (<1)	20.9 (1)	9.5 (<1)		21.5 (<1)
fish	1.0 (<1)		2.5 (<1)	0.3 (<1)	55.8 (1)	2.2 (<1)	2.4 (<1)	3.1 (<1)		110.1 (2)				
Eggs	103.4 (18)	127.8 (28)	175.2 (10)	19.4 (6)	154.2 (3)	132.4 (7)	235.1 (9)	129.6 (8)	118.8 (4)		253.3 (9)	158.5 (2)	148.7 (3)	154.8 (3)
Miscellaneous			2.5 (<1)								2.3 (<1)			
SUBTOTAL UNDAMAGED	567.5	459.1	1729.7	319.0	4469.6	1893.9	2579.2	1691.7	3118.6	6698.2	2958.3	8964.6	4542.6	5142.3
SUBTOTAL DAMAGED[e]	16.2 (3)	23.7 (5)	38.0 (2)	7.6 (2)	52.5 (1)	71.6 (4)	50.9 (2)	46.9 (3)	77.0 (2)	146.7 (2)	67.4 (2)	149.1 (2)	56.3 (1)	187.2 (4)
TOTAL UNDAMAGED + DAMAGED	583.7	482.8	1767.7	326.6	4522.1	1965.5	2630.1	1738.6	3195.6	6844.9	3025.7	9113.7	4598.9	5329.5

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.
[b] For detailed taxonomic listing, see Table N-19.
[c] Ø = oblique; S = surface; B = bottom.
[d] Percentage is based on total undamaged.
[e] Percentage is based on total undamaged + damaged.

TABLE N-8

DENSITY[a] AND PERCENTAGE COMPOSITION (%) OF MAJOR ZOOPLANKTON TAXA[b] COLLECTED
ST. LUCIE PLANT
MARCH 1977

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	β	β	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED[d]														
Protozoa	2.4 (<1)													
Coelenterata	0.8 (<1)	20.9 (6)	5.0 (<1)	14.5 (<1)	5.1 (<1)		2.4 (<1)	54.7 (<1)	5.1 (<1)	17.7 (1)		12.4 (<1)	18.4 (<1)	18.9 (1)
Mollusca	38.0 (6)	13.9 (4)	15.1 (1)	63.9 (1)	50.5 (1)	93.6 (1)	24.2 (1)	191.5 (1)	119.8 (3)	88.4 (2)	22.2 (1)	68.2 (2)	25.8 (<1)	66.2 (2)
Polychaeta	86.6 (13)	20.9 (6)	10.1 (<1)	110.3 (2)	85.9 (1)	140.4 (2)	4.8 (<1)		5.0 (<1)	11.7 (<1)	3.7 (<1)		3.7 (<1)	15.8 (<1)
Crustacea														
nauplii	3.2 (1)	20.9 (6)	2.5 (<1)			54.6 (1)	2.4 (<1)		12.7 (<1)	2.9 (<1)	3.7 (<1)			6.3 (<1)
cladocera											3.7 (<1)			
ostracoda		7.0 (2)	7.6 (<1)	145.2 (3)	40.2 (1)	144.2 (2)		164.1 (1)		11.8 (<1)			11.0 (<1)	517.2 (13)
copepoda	305.7 (45)	118.3 (33)	3078.5 (93)	3745.3 (80)	7091.0 (84)	7450.2 (82)	3535.7 (93)	23468.8 (81)	4308.9 (90)	3436.4 (88)	4145.0 (92)	3851.8 (88)	5599.6 (91)	2765.7 (70)
cirripedia (barnacle) nauplii	75.2 (11)	41.7 (12)	35.3 (1)	226.4 (5)	393.9 (5)	479.5 (5)	31.5 (1)	875.3 (3)		8.8 (<1)		24.8 (1)	36.8 (1)	315.3 (8)
decapoda	1.6 (<1)	14.0 (4)		31.9 (1)	106.4 (1)	140.4 (2)	2.4 (<1)	574.6 (2)	5.0 (<1)	29.4 (1)		9.3 (<1)	36.8 (1)	53.8 (1)
others	17.8 (3)	48.8 (14)	7.6 (<1)	113.2 (2)	303.1 (4)	272.9 (3)	7.3 (<1)	574.4 (2)	5.1 (<1)	44.1 (1)		49.6 (1)	47.9 (1)	6.3 (<1)
Chaetognatha			10.2 (<1)	11.6 (<1)	50.7 (1)	23.4 (<1)	12.1 (<1)	13.7 (1)	50.8 (1)	29.4 (1)	25.9 (1)	12.4 (<1)	55.2 (1)	6.4 (<1)
Echinodermata	4.9 (1)					3.9 (<1)								9.5 (<1)
Chordata														
urochordata	86.5 (13)	20.9 (6)	25.3 (1)	148.1 (3)	85.9 (1)	78.0 (1)	9.7 (1)	1367.7 (5)	147.9 (3)	59.0 (2)	44.3 (1)	142.7 (3)	11.0 (<1)	53.6 (1)
fish	0.8 (<1)	27.8 (8)	15.1 (1)	2.9 (<1)	75.8 (1)	23.4 (<1)	14.5 (<1)	46.5 (2)	10.2 (<1)	5.8 (<1)	59.1 (1)	65.1 (2)	132.4 (2)	
Eggs	57.4 (8)		108.5 (3)	92.9 (2)	156.6 (2)	159.8 (2)	15.5 (4)	1039.4 (4)	119.8 (3)	138.6 (4)	195.6 (4)	130.2 (3)	176.6 (3)	107.2 (3)
Miscellaneous		7.0 (2)	2.5 (<1)						5.1 (<1)	2.9 (<1)		6.2 (<1)	14.7 (<1)	
SUBTOTAL UNDAMAGED	680.9	362.1	3323.3	4706.2	8445.3	9064.3	3802.0	28912.5	4795.4	3886.9	4503.2	4372.7	6169.9	3942.2
SUBTOTAL DAMAGED[e]	23.5 (3)	13.9 (4)	80.8 (2)	101.6 (2)	520.3 (6)	187.1 (2)	82.4 (2)	1340.5 (4)	140.2 (3)	129.5 (3)	92.3 (2)	130.2 (3)	209.7 (3)	94.7 (2)
TOTAL UNDAMAGED + DAMAGED	704.4	376.0	3404.1	4807.8	8965.6	9251.4	3884.4	30253.0	4935.6	4016.4	4595.5	4502.9	6379.6	4036.9

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.
[b] For detailed taxonomic listing, see Table N-20.
[c] β = oblique; S = surface; B = bottom.
[d] Percentage is based on total undamaged.
[e] Percentage is based on total undamaged + damaged.

TABLE N-9

DENSITY[a] AND PERCENTAGE COMPOSITION (%) OF MAJOR ZOOPLANKTON TAXA[b] COLLECTED
ST. LUCIE PLANT
APRIL 1977[c]

Taxon	Station and depth[d]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED[e]														
Protozoa	0.8 (<1)	11.6 (3)			7.5 (<1)						2.0 (<1)			
Coelenterata	0.8 (<1)		4.1 (<1)		22.5 (1)	3.4 (<1)	2.7 (<1)	9.1 (1)	4.9 (<1)	7.9 (<1)	6.1 (<1)		3.7 (<1)	12.1 (1)
Mollusca	28.4 (12)	23.2 (7)	37.0 (2)	37.7 (2)	120.2 (3)	37.2 (3)	54.3 (1)	52.3 (3)	98.0 (3)	283.8 (5)	38.8 (3)	71.4 (4)	92.2 (3)	39.5 (3)
Polychaeta	1.7 (1)		12.3 (1)	2.2 (<1)	45.1 (1)		16.3 (<1)	2.3 (<1)	14.7 (<1)		16.3 (1)		11.1 (<1)	3.0 (<1)
Crustacea														
nauplii														
cladocera	0.8 (<1)			2.2 (<1)								4.9 (<1)		9.1 (1)
ostracoda								2.3 (<1)	4.9 (<1)					
copepoda	103.6 (44)	89.6 (25)	1283.5 (74)	1757.2 (77)	1796.2 (46)	749.7 (54)	3505.1 (84)	1248.8 (73)	2821.5 (77)	4786.0 (78)	1100.6 (73)	1405.0 (74)	2232.2 (75)	851.6 (65)
cirripedia (barnacle) nauplii	6.7 (3)	96.2 (27)	4.1 (<1)	8.9 (<1)	15.0 (<1)	6.8 (1)		2.3 (<1)		7.9 (<1)	6.1 (<1)	9.9 (1)	29.5 (1)	18.2 (1)
decapoda	16.5 (7)	18.4 (5)	36.9 (2)	89.0 (4)	195.2 (5)	185.8 (13)	97.6 (2)	111.3 (6)	83.3 (2)	276.2 (5)	77.3 (5)	170.0 (9)	250.7 (9)	145.9 (11)
others	5.8 (2)	15.0 (4)	4.1 (<1)	6.6 (<1)	37.5 (1)	6.8 (1)		6.9 (<1)	14.7 (<1)		2.0 (<1)		14.8 (1)	6.0 (1)
Chaetognatha			20.5 (1)	11.2 (1)			70.5 (2)	20.4 (1)	117.6 (3)	157.7 (3)	8.1 (1)	17.2 (1)	33.2 (1)	12.1 (1)
Echinodermata	3.3 (1)						21.7 (1)							
Chordata														
urochordata	44.2 (19)	36.5 (10)	131.6 (8)	250.7 (11)	1337.8 (34)	300.5 (22)	181.7 (4)	93.2 (5)	362.5 (10)	370.7 (6)	116.2 (8)	120.6 (6)	92.2 (3)	118.6 (9)
fish	0.8 (<1)	1.7 (1)	57.6 (3)	11.1 (1)	67.6 (2)	10.1 (1)	2.7 (<1)	45.5 (3)		47.4 (1)	8.2 (1)		18.5 (1)	15.1 (1)
Eggs	24.2 (10)	59.7 (17)	135.8 (8)	95.4 (4)	285.6 (7)	91.2 (7)	241.4 (6)	127.4 (7)	137.2 (4)	212.9 (4)	136.6 (9)	93.5 (5)	184.2 (6)	85.2 (7)
Miscellaneous									4.9 (<1)					
SUBTOTAL UNDAMAGED	237.6	351.9	1727.5	2272.2	3930.2	1391.5	4194.0	1721.8	3664.2	6150.5	1518.3	1909.7	2962.3	1316.4
SUBTOTAL DAMAGED[f]	5.9 (2)	18.3 (5)	201.6 (11)	62.1 (3)	548.6 (12)	141.9 (9)	92.1 (2)	75.1 (4)	200.9 (5)	425.8 (7)	163.0 (10)	78.8 (4)	180.7 (6)	151.9 (10)
TOTAL UNDAMAGED + DAMAGED	243.5	370.2	1929.1	2334.3	4478.8	1533.4	4286.1	1796.9	3865.1	6576.3	1681.3	1988.5	3143.0	1468.3

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.
[b] For detailed taxonomic listing, see Table N-21.
[c] Stations 11 and 12 collected 20 April, all other stations collected 19 April.
[d] Ø = oblique; S = surface; B = bottom.
[e] Percentage is based on total undamaged.
[f] Percentage is based on total undamaged + damaged.

TABLE N-10

DENSITY[a] AND PERCENTAGE COMPOSITION (%) OF MAJOR ZOOPLANKTON TAXA[b] COLLECTED
ST. LUCIE PLANT
MAY 1977

	Station and depth[c]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED[d]														
Protozoa					1.8 (<1)									
Coelenterata														
Mollusca	29.4 (10)	10.5 (3)	7.6 (1)	45.0 (1)	29.4 (2)	19.6 (1)	7.7 (1)	12.2 (<1)	22.5 (4)	15.9 (2)	15.9 (1)	30.6 (1)	333.5 (9)	107.6 (4)
Polychaeta					1.8 (<1)		3.8 (<1)		5.0 (1)	3.2 (<1)	3.2 (<1)	10.2 (<1)		
Crustacea														
nauplii		4.2 (1)	7.6 (1)	4.5 (<1)	9.2 (1)	7.4 (<1)	15.3 (1)		15.0 (2)	9.5 (1)		5.1 (<1)	40.4 (1)	4.9 (<1)
cladocera														
ostracoda	2.7 (1)	4.2 (1)		27.0 (1)	14.7 (1)	4.9 (<1)	11.5 (1)	1845.5 (58)	12.5 (2)	267.0 (35)	73.2 (3)	1411.7 (27)	10.1 (<1)	44.0 (2)
copepoda	143.9 (46)	208.4 (60)	1012.9 (84)	2852.2 (85)	1011.6 (79)	1689.3 (85)	750.4 (45)	700.7 (22)	269.3 (42)	298.8 (39)	1191.0 (56)	2507.3 (48)	2274.1 (64)	1368.8 (55)
cirripedia (barnacle) nauplii	24.0 (8)	23.1 (7)	5.1 (<1)	4.5 (<1)	7.4 (1)							20.4 (<1)	10.1 (<1)	
decapoda	10.6 (3)	8.4 (2)	17.7 (2)	229.8 (7)	71.7 (6)	79.0 (4)	145.3 (9)	138.5 (4)	49.9 (8)	38.3 (5)	143.4 (7)	346.7 (7)	363.8 (10)	547.8 (22)
others	2.6 (1)	16.8 (5)	2.5 (<1)	18.0 (1)	27.6 (2)	44.3 (2)	3.8 (<1)	12.3 (<1)		15.9 (2)		30.6 (1)	10.1 (<1)	9.8 (<1)
Chaetognatha	5.3 (2)	4.2 (1)	35.5 (3)	99.1 (3)	5.5 (<1)	29.5 (2)	287.2 (17)	346.1 (11)	69.8 (11)	57.1 (8)	375.8 (18)	667.7 (13)	50.5 (1)	190.7 (8)
Echinodermata														
Chordata														
urochordata	5.3 (2)	2.1 (<1)	2.5 (<1)	4.5 (<1)	9.2 (1)		76.5 (5)	24.4 (1)	25.0 (4)		22.3 (1)	15.3 (<1)	60.6 (2)	44.0 (2)
fish						2.5 (<1)	3.8 (<1)		7.5 (1)	3.2 (<1)				9.8 (<1)
Eggs	86.6 (28)	67.3 (19)	119.3 (10)	76.6 (2)	95.8 (8)	122.7 (6)	382.8 (23)	81.5 (3)	159.6 (25)	57.2 (8)	321.6 (15)	137.6 (3)	404.3 (11)	146.7 (6)
Miscellaneous														
SUBTOTAL UNDAMAGED	310.4	349.2	1210.7	3361.2	1285.7	1999.2	1688.1	3161.2	636.1	766.1	2146.4	5183.2	3557.5	2474.1
SUBTOTAL DAMAGED[e]	5.3 (2)	27.3 (7)	83.8 (7)	49.5 (2)	114.2 (8)	71.2 (3)	91.9 (5)	85.5 (3)	54.8 (8)	19.1 (2)	159.3 (7)	428.2 (8)	212.2 (6)	171.1 (7)
TOTAL UNDAMAGED + DAMAGED	315.7	376.5	1294.5	3410.7	1399.9	2070.4	1780.0	3246.7	690.9	785.2	2305.7	5611.4	3769.7	2645.2

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.
[b] For detailed taxonomic listing, see Table N-22.
[c] Ø = oblique; S = surface; B = bottom.
[d] Percentage is based on total undamaged.
[e] Percentage is based on total undamaged + damaged.

TABLE N-11

DENSITY[a] AND PERCENTAGE COMPOSITION (%) OF MAJOR ZOOPLANKTON TAXA[b] COLLECTED
ST. LUCIE PLANT
JUNE 1977

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED[d]														
Protozoa	7.1 (1)	7.0 (2)	15.3 (2)	10.5 (<1)	3.3 (<1)	19.8 (<1)	14.2 (4)		23.0 (8)	10.7 (1)	11.7 (3)		110.1 (15)	
Coelenterata			6.6 (1)	7.9 (<1)							4.7 (1)	25.4 (2)		
Mollusca	249.6 (26)	16.4 (6)	155.0 (25)	103.0 (4)	93.3 (7)	207.7 (1)	35.6 (9)	11.3 (1)	26.9 (9)	21.4 (2)	29.0 (8)		234.0 (31)	61.0 (1)
Polychaeta							3.6 (1)	5.6 (<1)		10.7 (1)		5.1 (<1)		
Crustacea														
nauplii				2.6 (<1)	13.3 (1)		7.1 (2)							
cladocera														
ostracoda						9.9 (1)	3.6 (1)	11.2 (1)		117.6 (8)		5.1 (<1)	32.1 (4)	152.5 (2)
copepoda	461.3 (48)	161.9 (56)	423.6 (67)	2455.3 (92)	1163.4 (80)	14394.1 (97)	170.5 (42)	870.7 (67)	84.5 (29)	1015.8 (71)	263.5 (72)	1293.5 (74)	211.1 (28)	6456.9 (82)
cirripedia (barnacle) nauplii	138.4 (14)	65.7 (23)					17.8 (4)				9.3 (3)		55.0 (7)	10.2 (1)
decapoda	67.4 (7)	25.7 (9)	8.8 (1)	60.7 (2)	96.6 (7)	712.1 (4)	53.5 (13)	224.9 (17)	72.8 (25)	122.8 (9)	18.7 (5)	258.8 (15)	41.4 (6)	406.7 (5)
others	7.0 (1)	7.0 (2)		2.6 (<1)	3.3 (<1)	49.5 (<1)	3.6 (1)	11.3 (1)	7.7 (3)	16.0 (1)				10.2 (<1)
Chaetognatha	9.4 (1)		6.6 (1)	23.7 (1)	13.3 (1)	49.5 (1)	60.5 (15)	140.4 (11)	26.8 (9)	85.5 (6)	11.7 (3)	121.7 (7)	4.6 (1)	162.7 (2)
Echinodermata							3.6 (1)							
Chordata														
urochordata	2.4 (<1)	2.3 (1)	2.2 (<1)	13.2 (<1)	33.3 (2)	217.6 (1)	7.1 (2)	5.6 (<1)	46.1 (16)	26.7 (2)	2.3 (1)	25.3 (2)	55.1 (7)	559.3 (7)
fish	3.5 (<1)			5.3 (1)	3.3 (<1)			11.3 (1)						
Eggs	21.3 (2)	2.3 (1)	15.3 (2)		23.3 (2)	19.8 (<1)	21.3 (5)	11.3 (1)	7.7 (3)		11.7 (3)	5.1 (<1)	13.8 (2)	30.5 (<1)
Miscellaneous											2.3 (1)			
SUBTOTAL UNDAMAGED	967.4	289.3	633.4	2684.8	1446.4	16100.0	402.0	1303.6	295.5	1427.2	363.9	1740.0	757.2	7850.0
SUBTOTAL DAMAGED[e]	24.8 (3)	63.2 (18)	21.9 (3)	118.7 (4)	110.0 (7)	168.2 (1)	277.0 (41)	382.0 (23)	49.9 (14)	37.4 (3)	58.3 (14)	96.4 (5)	91.8 (11)	325.4 (4)
TOTAL UNDAMAGED + DAMAGED	992.2	351.5	655.3	2803.5	1556.4	16348.2	679.0	1685.6	345.4	1464.6	422.2	1836.4	849.0	8175.4

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.
[b] For detailed taxonomic listing, see Table N-23.
[c] Ø = oblique; S = surface; B = bottom.
[d] Percentage is based on total undamaged.
[e] Percentage is based on total undamaged + damaged.

TABLE N-12

DENSITY[a] AND PERCENTAGE COMPOSITION (%) OF MAJOR ZOOPLANKTON TAXA[b] COLLECTED
ST. LUCIE PLANT
JULY 1977

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	ø	ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED[d]														
Protozoa	27.7 (3)	10.5 (1)	19.4 (<1)		24.0 (1)				20.6 (1)		53.2 (4)	30.0 (<1)		19.4 (1)
Coelenterata				30.2 (<1)				10.0 (<1)			5.9 (<1)	15.0 (<1)		20.1 (2)
Mollusca	20.8 (2)	10.5 (1)	71.0 (1)	50.3 (<1)	56.0 (2)	48.7 (1)	14.8 (2)	119.4 (1)	20.6 (1)	71.5 (1)	53.2 (4)	60.0 (1)	25.6 (<1)	72.8 (4)
Polychaeta				20.1 (<1)	8.0 (<1)			29.9 (<1)			5.9 (<1)			14.6 (1)
Crustacea nauplii										23.8 (<1)				4.9 (<1)
cladocera				20.1 (<1)				10.0 (<1)	61.7 (2)	23.9 (<1)	5.9 (<1)	15.0 (<1)		24.3 (1)
ostracoda						32.5 (<1)	3.7 (<1)			71.5 (1)				4.9 (<1)
copepoda	431.3 (46)	723.0 (69)	5240.6 (92)	13209.1 (87)	2865.7 (82)	8508.8 (89)	452.9 (61)	7741.1 (84)	2653.7 (68)	5101.2 (78)	945.4 (67)	8226.3 (86)	14060.6 (94)	1460.4 (74)
cirripedia (barnacle) nauplii	188.6 (20)	170.3 (16)		30.2 (<1)	8.0 (<1)	32.5 (<1)		19.9 (<1)	61.7 (2)					24.3 (1)
decapoda	54.2 (6)	89.0 (8)	45.3 (1)	1217.4 (8)	160.0 (5)	584.5 (6)	14.8 (2)	924.9 (10)	61.7 (2)	762.6 (12)	47.2 (3)	479.6 (5)	153.6 (1)	19.5 (1)
others	1.4 (<1)	10.5 (1)	6.5 (<1)		8.0 (<1)	48.6 (1)				11.9 (<1)			25.6 (<1)	
Chaetognatha	8.4 (1)		38.8 (1)	70.5 (1)				19.9 (<1)		35.8 (1)	70.8 (5)	45.0 (1)	51.2 (<1)	14.6 (1)
Echinodermata														
Chordata urochordata	20.8 (2)		103.3 (2)	110.6 (1)	192.1 (6)	129.9 (1)	196.7 (26)	119.4 (1)	534.8 (14)	357.6 (6)	118.2 (8)	674.3 (7)	605.8 (4)	67.9 (3)
fish			12.9 (<1)	10.1 (<1)		16.2 (<1)		10.0 (<1)	20.6 (1)		11.8 (1)			
Eggs	194.2 (21)	28.8 (3)	142.0 (3)	482.9 (3)	176.1 (5)	178.6 (2)	63.1 (9)	228.9 (3)	473.1 (12)	59.6 (1)	94.5 (7)	60.0 (1)	93.9 (1)	213.5 (11)
Miscellaneous	1.4 (<1)		6.5 (<1)	10.1 (<1)										
SUBTOTAL UNDAMAGED	948.8	1042.6	5686.3	15261.6	3497.9	9580.3	746.0	9233.4	3908.5	6519.4	1412.0	9605.2	15016.3	1970.2
SUBTOTAL DAMAGED[e]	25.0 (3)	102.1 (9)	226.0 (4)	322.1 (2)	248.2 (7)	535.6 (5)	133.6 (15)	467.8 (5)	205.7 (5)	405.3 (6)	301.3 (18)	434.6 (4)	622.8 (4)	480.4 (20)
TOTAL UNDAMAGED + DAMAGED	973.8	1144.7	5912.3	15583.7	3746.1	10115.9	879.6	9701.2	4114.2	6924.7	1713.3	10039.8	15639.1	2450.6

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.
[b] For detailed taxonomic listing, see Table N-24.
[c] ø = oblique; S = surface; B = bottom.
[d] Percentage is based on total undamaged.
[e] Percentage is based on total undamaged + damaged.

TABLE N-13

DENSITY[a] AND PERCENTAGE COMPOSITION (%) OF MAJOR ZOOPLANKTON TAXA[b] COLLECTED
ST. LUCIE PLANT
AUGUST 1977

	Station and depth[c]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED[d]														
Protozoa		3.2 (1)				7.6 (<1)	34.2 (2)	6.9 (<1)	30.7 (1)		6.3 (1)		22.2 (1)	
Coelenterata			26.9 (1)	89.1 (3)	48.3 (1)	76.1 (1)	4.9 (<1)	48.5 (2)	19.1 (1)	118.2 (2)	6.3 (1)	25.9 (<1)	3.7 (<1)	66.8 (2)
Mollusca	29.2 (3)	31.8 (5)		33.0 (1)	123.2 (3)	129.4 (2)	78.2 (4)	13.9 (1)	26.8 (1)	52.6 (1)	31.6 (3)	38.8 (1)	103.5 (3)	55.7 (2)
Polychaeta	12.0 (1)	6.3 (1)		11.0 (<1)	37.5 (1)	22.8 (<1)	14.7 (1)	6.9 (<1)	15.3 (1)	39.4 (1)	6.3 (1)	38.8 (1)		11.1 (<1)
Crustacea														
nauplii	3.4 (<1)				112.5 (3)	30.5 (<1)				13.1 (<1)			7.4 (<1)	
cladocera	17.2 (2)		5.4 (<1)	11.0 (<1)	246.5 (6)	685.2 (9)	97.8 (5)	624.3 (25)	126.5 (5)	591.7 (11)	12.7 (1)	504.9 (7)	395.5 (12)	478.9 (13)
ostracoda														44.5 (1)
copepoda	306.2 (32)	162.3 (27)	1844.2 (82)	2334.5 (69)	2625.3 (66)	4606.4 (57)	1383.2 (72)	1317.9 (53)	1804.9 (76)	3405.7 (64)	947.9 (85)	4272.3 (62)	2383.8 (71)	2271.7 (62)
cirripedia (barnacle) nauplii	394.0 (41)	286.4 (47)			150.0 (4)	60.9 (1)	4.9 (<1)		7.7 (<1)		3.2 (<1)	12.9 (<1)	3.7 (<1)	
decapoda	146.1 (15)	60.4 (10)	26.8 (1)	253.2 (8)	336.0 (10)	1423.5 (18)	97.9 (5)	110.9 (5)	222.3 (9)	407.3 (8)	72.9 (7)	1242.3 (18)	70.3 (2)	177.9 (5)
others	8.6 (1)	22.2 (4)			10.7 (<1)	83.7 (1)		6.9 (<1)	7.6 (<1)		3.2 (<1)	38.8 (1)	3.7 (<1)	11.1 (<1)
Chaetognatha	10.3 (1)		10.7 (1)	22.0 (1)	26.8 (1)	76.1 (1)	63.5 (3)	13.8 (1)	80.5 (3)	184.0 (3)	9.5 (1)	38.7 (1)	81.4 (3)	100.1 (3)
Echinodermata														
Chordata														
urochordata	24.1 (3)	22.3 (4)	317.2 (14)	605.7 (18)	182.2 (5)	639.5 (8)	83.1 (4)	228.9 (9)		394.4 (7)	3.2 (<1)	517.8 (8)	51.7 (2)	367.5 (10)
fish			10.8 (1)	22.0 (1)	26.8 (1)	182.7 (2)	24.5 (1)	69.3 (3)	11.5 (1)	78.9 (2)	12.6 (1)	129.4 (2)	59.1 (2)	44.5 (1)
Eggs	13.7 (1)	12.7 (2)	16.1 (1)	11.0 (<1)	26.8 (1)	38.0 (1)	39.1 (2)	27.7 (1)	11.5 (1)	39.4 (1)		12.9 (<1)	40.7 (1)	33.4 (1)
Miscellaneous					5.4 (<1)	7.6 (<1)	4.9 (<1)			13.1 (<1)				
SUBTOTAL UNDAMAGED	964.8	607.6	2258.1	3391.5	4008.0	8070.0	1930.9	2475.9	2364.4	5337.8	1115.7	6873.5	3226.7	3663.2
SUBTOTAL DAMAGED[e]	41.2 (4)	95.5 (14)	155.9 (7)	473.5 (12)	96.5 (2)	548.1 (6)	112.6 (6)	194.2 (7)	103.6 (4)	446.9 (8)	85.5 (7)	530.7 (7)	125.7 (4)	233.8 (6)
TOTAL UNDAMAGED + DAMAGED	1006.0	703.1	2414.0	3865.0	4104.5	8618.1	2043.5	2670.1	2468.0	5784.7	1201.2	7404.2	3352.4	3897.0

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.
[b] For detailed taxonomic listing, see Table N-25.
[c] Ø = oblique; S = surface; B = bottom.
[d] Percentage is based on total undamaged.
[e] Percentage is based on total undamaged + damaged.

TABLE N-14

DENSITY[a] AND PERCENTAGE COMPOSITION (%) OF MAJOR ZOOPLANKTON TAXA[b] COLLECTED
ST. LUCIE PLANT
SEPTEMBER 1977

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED[d]														
Protozoa		4.9 (<1)	5.1 (<1)		13.3 (<1)		4.1 (<1)		5.2 (<1)	6.2 (<1)			4.8 (<1)	
Coelenterata			10.2 (1)			4.8 (<1)		10.1 (<1)			4.8 (<1)			
Mollusca	271.1 (28)	32.4 (3)	107.5 (5)	116.8 (5)	270.7 (8)	166.3 (4)	24.4 (1)	50.5 (1)	15.6 (1)		4.8 (<1)	58.7 (1)	38.6 (1)	40.3 (1)
Polychaeta			10.2 (1)	16.6 (1)	22.2 (1)							8.4 (<1)	4.8 (<1)	6.7 (<1)
Crustacea														
nauplii	2.7 (<1)		10.3 (1)								9.5 (1)		4.8 (<1)	
cladocera	1.3 (<1)	3.2 (<1)	30.7 (1)		13.3 (<1)	9.6 (<1)	12.2 (<1)	30.3 (1)		24.9 (1)		25.1 (1)	57.9 (2)	6.7 (<1)
ostracoda														
copepoda	324.7 (34)	594.0 (48)	1685.2 (78)	1742.7 (73)	2817.7 (78)	2921.8 (78)	2789.7 (89)	3050.4 (82)	2252.1 (95)	1681.2 (79)	1064.7 (81)	4432.3 (83)	2727.1 (82)	4033.5 (81)
cirripedia (barnacle) nauplii	259.0 (27)	543.6 (44)	20.5 (1)	8.3 (<1)	124.2 (3)	61.8 (2)		30.3 (1)				50.3 (1)		
decapoda	50.8 (5)	26.0 (2)	215.0 (10)	471.0 (20)	203.8 (6)	399.4 (11)	105.8 (3)	242.4 (7)	26.0 (1)	161.8 (8)	76.4 (6)	343.5 (6)	130.4 (4)	261.6 (5)
others	17.4 (2)	11.4 (1)		16.7 (1)	17.7 (1)	33.3 (1)	8.2 (<1)				4.8 (<1)		4.8 (<1)	6.7 (<1)
Chaetognatha	2.6 (<1)		20.5 (1)	4.2 (<1)	8.9 (<1)	38.0 (1)	40.7 (1)	20.2 (1)	41.6 (2)	31.2 (2)	14.3 (1)	33.5 (1)	48.3 (1)	40.2 (1)
Echinodermata				4.2 (<1)	13.3 (<1)		12.2 (<1)			18.7 (1)		16.7 (<1)	9.7 (<1)	26.8 (1)
Chordata														
urochordata	18.7 (2)	1.6 (<1)	51.2 (2)	12.5 (1)	88.8 (3)	66.5 (2)	56.9 (2)	212.1 (6)	15.6 (1)	149.3 (7)	109.8 (8)	360.3 (7)	197.9 (6)	422.8 (9)
fish		1.6 (<1)			13.3 (<1)	28.5 (1)	61.0 (2)	50.5 (1)	5.2 (<1)	18.6 (1)	14.3 (1)	8.4 (<1)	111.0 (3)	127.5 (3)
Eggs	12.1 (1)	9.7 (1)	5.1 (<1)	12.5 (1)	13.3 (<1)	14.3 (<1)	24.4 (1)	30.3 (1)	10.4 (<1)	18.7 (1)	4.8 (<1)	33.5 (1)	4.8 (<1)	13.4 (<1)
Miscellaneous										6.2 (<1)	4.8 (<1)			
SUBTOTAL UNDAMAGED	963.1	1228.3	2171.5	2405.5	3620.5	3744.3	3139.6	3727.1	2371.7	2116.8	1313.0	5370.7	3344.9	4986.2
SUBTOTAL DAMAGED[e]	28.1 (3)	144.5 (11)	107.5 (5)	70.9 (3)	97.5 (3)	118.9 (3)	109.9 (3)	161.6 (4)	62.3 (3)	186.6 (8)	109.9 (8)	310.1 (6)	72.4 (2)	187.9 (4)
TOTAL UNDAMAGED + DAMAGED	991.2	1372.8	2279.0	2476.4	3718.0	3863.2	3249.5	3888.7	2434.0	2303.4	1422.9	5680.8	3417.3	5174.1

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.
[b] For detailed taxonomic listing, see Table N-26.
[c] Ø = oblique; S = surface; B = bottom.
[d] Percentage is based on total undamaged.
[e] Percentage is based on total undamaged + damaged.

TABLE N-15

DENSITY[a] AND PERCENTAGE COMPOSITION (%) OF MAJOR ZOOPLANKTON TAXA[b] COLLECTED
ST. LUCIE PLANT
OCTOBER 1977[c]

Taxon	Station and depth[d]													
	11	12	0		1		2		3		4		5	
	ϕ	ϕ	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED[e]														
Protozoa														
Coelenterata	1.8 (<1)		23.5 (3)	56.5 (4)	22.7 (1)	10.7 (<1)	119.6 (4)		13.1 (1)	13.5 (1)	8.9 (1)	26.0 (1)	10.4 (2)	29.2 (1)
Mollusca	148.3 (5)	67.2 (3)	38.1 (4)	62.2 (4)	62.3 (3)	43.0 (1)	33.2 (1)	2.9 (<1)	2.6 (<1)	5.4 (1)	23.6 (2)	7.4 (<1)	4.1 (1)	26.0 (1)
Polychaeta	285.8 (9)	72.6 (3)	11.7 (1)	33.9 (2)	155.7 (7)	35.8 (1)	86.3 (3)	2.9 (<1)	7.9 (1)	2.7 (1)	8.9 (1)	11.1 (1)	12.3 (2)	29.2 (1)
Crustacea														
nauplii	10.7 (<1)		35.2 (4)	8.5 (1)	25.5 (1)	21.5 (<1)	39.8 (1)	8.7 (1)	10.5 (1)	8.1 (1)	14.8 (1)	7.4 (<1)	20.5 (3)	29.2 (1)
cladocera	157.2 (5)	40.3 (2)	17.6 (2)	257.0 (17)	390.9 (16)	999.7 (31)	942.8 (31)	411.8 (45)	137.2 (9)	225.6 (19)	309.8 (29)	983.5 (44)	76.1 (12)	684.5 (31)
ostracoda														
copepoda	923.3 (28)	1010.4 (42)	539.0 (62)	350.4 (23)	1200.9 (51)	1458.4 (46)	1118.7 (37)	217.5 (24)	150.4 (10)	190.8 (16)	336.3 (32)	657.1 (29)	376.2 (58)	729.9 (33)
cirripedia (barnacle) nauplii	1643.1 (49)	1085.7 (45)	17.6 (2)	48.0 (3)	53.8 (2)	35.8 (1)	39.8 (1)	17.4 (2)	7.9 (1)	45.6 (4)	3.0 (<1)	111.4 (5)	32.9 (5)	55.2 (3)
decapoda	118.0 (4)	83.4 (4)	114.2 (13)	19.8 (1)	99.2 (4)	247.1 (8)	46.4 (2)	17.4 (2)	10.6 (1)	13.5 (1)	20.7 (2)	77.9 (3)	28.9 (4)	142.7 (6)
others	10.7 (<1)	10.8 (1)												6.5 (<1)
Chaetognatha			11.7 (1)	19.8 (1)	22.7 (1)	17.8 (1)	16.6 (1)		18.5 (1)	10.8 (1)	14.8 (1)	14.8 (1)	4.1 (1)	19.4 (1)
Echinodermata	7.2 (<1)	5.4 (<1)	38.1 (4)	630.1 (42)	277.6 (12)	258.0 (8)	597.5 (20)	229.1 (25)	1115.8 (75)	655.4 (55)	303.9 (29)	309.1 (14)	57.6 (9)	421.7 (19)
Chordata														
urochordata	5.4 (<1)	2.7 (<1)	17.6 (2)	2.8 (<1)	39.7 (2)	39.4 (1)	13.3 (<1)	2.9 (<1)	5.3 (<1)	13.4 (1)	5.9 (1)	7.4 (<1)	8.2 (1)	19.5 (1)
fish														
Eggs	19.7 (1)	26.9 (1)	2.9 (<1)	2.8 (<1)	11.3 (1)		3.3 (<1)		5.3 (<1)	8.1 (1)	8.9 (1)	7.4 (<1)	8.2 (1)	3.2 (<1)
Miscellaneous		2.7 (<1)	2.9 (<1)	8.5 (1)	14.1 (1)	21.5 (1)	6.7 (<1)		5.3 (<1)	8.1 (1)	3.0 (<1)	18.5 (1)	6.2 (1)	38.9 (2)
SUBTOTAL UNDAMAGED	3331.2	2408.1	870.1	1500.3	2376.4	3188.7	3064.0	910.6	1490.4	1201.0	1062.5	2238.0	645.7	2235.1
SUBTOTAL DAMAGED[f]	82.2 (2)	53.8 (2)	11.7 (1)	87.8 (6)	88.0 (4)	401.2 (11)	235.6 (7)	133.4 (13)	44.8 (3)	59.2 (5)	221.3 (17)	408.2 (15)	6.2 (1)	249.7 (10)
TOTAL UNDAMAGED + DAMAGED	3413.4	2461.9	881.8	1588.1	2464.4	3589.9	3299.6	1044.0	1535.2	1260.2	1283.8	2646.2	651.9	2484.8

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.
[b] For detailed taxonomic listing, see Table N-27.
[c] Stations 11 and 12 collected 11 October, all other stations collected 19 October.
[d] ϕ = oblique; S = surface; B = bottom.
[e] Percentage is based on total undamaged.
[f] Percentage is based on total undamaged + damaged.

TABLE N-16

DENSITY[a] AND PERCENTAGE COMPOSITION (%) OF MAJOR ZOOPLANKTON TAXA[b] COLLECTED
ST. LUCIE PLANT
NOVEMBER 1977

	Station and depth[c]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED[d]														
Protozoa					126.5 (2)	121.2 (3)	5.0 (<1)				5.1 (<1)			
Coelenterata	6.5 (<1)			2.5 (<1)	19.4 (<1)	5.1 (<1)	10.0 (<1)	6.6 (<1)	4.0 (<1)		72.0 (1)	32.5 (1)	4.4 (<1)	59.4 (1)
Mollusca	91.8 (5)	86.8 (5)	13.8 (1)	31.3 (5)	272.5 (4)	247.5 (6)	19.9 (1)	218.6 (9)	92.0 (3)	357.9 (11)	10.3 (<1)	263.7 (6)	109.5 (5)	81.6 (1)
Polychaeta	500.7 (27)	234.1 (14)	22.1 (1)	13.8 (2)	2579.6 (35)	833.3 (20)	29.8 (1)	192.1 (8)	100.0 (4)	319.5 (9)	1239.4 (25)	486.9 (11)	43.8 (2)	378.6 (7)
Crustacea														
nauplii		4.3 (<1)	2.8 (<1)	1.3 (<1)	29.2 (1)	166.7 (4)		6.6 (<1)	68.0 (3)	12.8 (<1)	20.6 (<1)	16.2 (<1)		
cladocera	3.7 (<1)		5.5 (<1)	7.5 (1)	214.1 (3)	237.4 (6)	168.6 (7)	13.2 (1)	247.8 (9)	57.5 (2)	601.7 (12)	89.3 (2)	258.4 (11)	59.4 (1)
ostracoda					9.7 (1)					6.4 (<1)				
copepoda	402.4 (21)	472.8 (28)	753.4 (51)	317.1 (53)	2647.8 (36)	2121.1 (51)	639.6 (28)	854.6 (34)	1267.0 (47)	1252.5 (37)	2381.0 (48)	1492.9 (33)	910.9 (38)	2999.4 (54)
cirripedia (barnacle) nauplii	786.3 (42)	754.6 (45)	16.6 (1)	36.4 (6)	477.0 (7)		19.8 (1)	410.8 (16)	24.0 (1)	396.2 (12)	190.3 (4)	1030.4 (23)	48.2 (2)	653.3 (12)
decapoda	6.4 (<1)	12.9 (1)	33.1 (2)	27.7 (5)	68.1 (1)	101.3 (1)	24.8 (1)	185.5 (7)	40.0 (1)	115.2 (3)	143.6 (3)	166.4 (4)	13.2 (1)	289.5 (5)
others	9.3 (<1)	17.3 (1)		3.8 (1)		45.5 (1)		39.7 (2)		32.0 (1)		28.4 (1)		14.9 (<1)
Chaetognatha	0.9 (<1)		19.3 (1)	2.5 (<1)	58.4 (1)	30.4 (1)	248.0 (11)	13.2 (1)	32.0 (1)	38.4 (1)	51.4 (1)	28.5 (1)	122.5 (5)	29.8 (1)
Echinodermata	25.0 (1)	21.7 (1)	19.3 (1)	110.3 (19)	321.2 (4)	40.4 (1)	19.8 (1)	477.0 (19)	655.5 (24)	607.1 (18)	92.6 (2)	478.7 (11)	105.1 (4)	556.8 (10)
Chordata														
urochordata	1.9 (1)	17.3 (1)	527.2 (36)	8.8 (1)	340.7 (5)	55.6 (1)	927.2 (40)	33.1 (1)	119.9 (4)	57.5 (2)	56.6 (1)	186.6 (4)	626.3 (26)	237.6 (4)
fish				1.3 (<1)			5.0 (<1)							7.4 (<1)
Eggs	0.9 (<1)			2.5 (<1)			5.0 (1)	6.6 (<1)	16.0 (1)	6.4 (<1)	5.1 (<1)	16.2 (<1)		7.4 (<1)
Miscellaneous	26.9 (1)	8.7 (1)		2.5 (1)	19.4 (1)	5.1 (<1)				19.2 (1)	10.3 (<1)	60.9 (1)	8.8 (<1)	22.2 (<1)
SUBTOTAL UNDAMAGED	1862.7	1630.5	1413.1	569.3	7183.6	4010.6	2122.5	2457.6	2666.2	3278.6	4880.0	4377.6	2251.1	5397.3
SUBTOTAL DAMAGED[e]	10.2 (1)	43.4 (3)	63.5 (4)	26.4 (4)	136.3 (2)	141.7 (3)	199.3 (9)	39.7 (2)	32.0 (1)	127.9 (4)	92.5 (2)	93.4 (2)	153.2 (6)	178.2 (3)
TOTAL UNDAMAGED + DAMAGED	1872.9	1673.9	1476.6	595.7	7319.9	4152.3	2320.8	2497.3	2698.2	3406.5	4972.5	4471.0	2404.3	5575.5

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.
[b] For detailed taxonomic listing, see Table N-28.
[c] Ø = oblique; S = surface; B = bottom.
[d] Percentage is based on total undamaged.
[e] Percentage is based on total undamaged + damaged.

TABLE N-17

DENSITY[a] AND PERCENTAGE COMPOSITION (%) OF MAJOR ZOOPLANKTON TAXA[b] COLLECTED
ST. LUCIE PLANT
DECEMBER 1977

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED[d]														
Protozoa	0.8 (<1)						1.5 (<1)				4.7 (<1)			
Coelenterata			7.1 (<1)		10.4 (1)				8.9 (1)		21.0 (2)	1.6 (1)	1.6 (<1)	2.2 (<1)
Mollusca	4.0 (1)	5.8 (2)	31.0 (2)	6.0 (5)	33.2 (2)		8.9 (1)	19.6 (4)	13.3 (1)	0.4 (1)	21.0 (2)	4.8 (2)	20.4 (2)	2.2 (<1)
Polychaeta	0.8 (<1)	4.7 (1)	2.4 (<1)		7.1 (1)		3.0 (<1)	2.0 (<1)	4.4 (<1)	0.4 (1)		1.6 (1)	12.6 (1)	2.2 (<1)
Crustacea nauplii			4.7 (<1)		2.1 (<1)		1.5 (<1)	3.9 (1)	1.5 (<1)	0.8 (2)		3.2 (1)	7.8 (1)	2.3 (1)
cladocera														
ostracoda				3.0 (2)	10.4 (1)		5.9 (1)	9.8 (2)		0.8 (2)		40.2 (14)		7.8 (2)
copepoda	140.8 (33)	93.3 (28)	738.3 (43)	78.0 (60)	1195.3 (64)	9.3 (39)	371.6 (49)	211.0 (38)	1016.4 (71)	14.6 (42)	677.9 (53)	167.4 (57)	83.2 (7)	130.8 (29)
cirripedia (barnacle) nauplii	171.2 (46)	129.6 (40)	19.1 (1)		12.5 (1)		2.9 (<1)	3.9 (1)		0.4 (1)	2.3 (<1)	1.6 (1)	37.7 (3)	7.8 (2)
decapoda	7.2 (2)	5.8 (2)	4447.8 (29)	16.5 (13)	232.5 (12)	2.3 (10)	168.8 (22)	160.3 (29)	23.6 (2)	2.4 (7)	62.9 (5)	8.0 (3)	718.9 (62)	109.6 (24)
others		31.6 (10)			4.7 (1)	0.7 (3)			1.5 (<1)				1.6 (<1)	1.1 (<1)
Chaetognatha			11.9 (1)	6.0 (5)	12.5 (1)	1.1 (5)	10.4 (1)	5.9 (1)	11.7 (1)	0.8 (2)	37.3 (3)	3.2 (1)	6.3 (1)	7.9 (2)
Echinodermata	0.8 (<1)		4.7 (<1)		6.2 (1)	0.4 (2)	1.5 (<1)	2.0 (<1)	1.5 (<1)	0.4 (1)	4.7 (<1)	1.6 (1)	4.7 (<1)	3.4 (1)
Chordata urochordata		2.3 (1)	38.1 (7)	7.5 (6)	49.8 (3)	2.2 (9)	16.3 (2)	15.7 (3)	103.1 (7)	3.1 (9)	260.9 (21)	24.1 (8)	64.3 (6)	57.0 (13)
fish			2.4 (1)						1.5 (<1)		4.6 (<1)			
Eggs	37.6 (10)	46.7 (14)	169.1 (11)	9.0 (7)	220.0 (12)	0.7 (3)	109.6 (14)	39.0 (7)	162.0 (11)	3.5 (10)	81.5 (6)	3.2 (1)	171.1 (15)	6.7 (1)
Miscellaneous					6.3 (<1)			4.0 (1)	13.3 (1)	0.4 (1)	2.3 (<1)		1.6 (<1)	1.1 (<1)
SUBTOTAL UNDAMAGED	363.2	319.8	1476.6	126.0	1797.5	16.7	701.9	477.1	1362.7	28.0	1181.1	260.5	1131.8	342.1
SUBTOTAL DAMAGED[e]	8.8 (2)	8.2 (3)	64.3 (4)	4.5 (3)	68.5 (4)	7.1 (30)	56.3 (7)	82.2 (15)	64.8 (5)	7.0 (20)	86.2 (7)	33.8 (11)	26.7 (2)	107.3 (24)
SUBTOTAL UNDAMAGED + DAMAGED	372.0	328.0	1540.9	130.5	1866.0	23.8	758.2	559.3	1427.5	35.0	1267.3	294.3	1158.5	449.4

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.
[b] For detailed taxonomic listing, see Table N-29.
[c] Ø = oblique; S = surface; B = bottom.
[d] Percentage is based on total undamaged.
[e] Percentage is based on total undamaged + damaged.

TABLE N-18
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
25 JANUARY 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED														
PROTOZOA														
foraminifera						2.0								
MOLLUSCA														
gastropoda														
larvae	8.1	19.7	111.6	38.3	24.4	50.2	120.1	134.1	79.1	78.5	21.6	105.3	55.4	343.3
thecosomata (pteropoda)														
Creseis acicula							1.9	2.6					4.0	
pelecypoda														
larvae	7.3	8.4	17.6	14.6	34.6	34.1	3.9	18.4	9.9	7.8	9.3	7.6	15.8	15.1
POLYCHAETA														
intermediates	3.4	13.1		1.8		6.0	5.8	2.6		7.8	3.1	1.9		2.5
larvae	0.4		2.0	3.7	2.0	2.0			9.9	7.8	6.2	3.8		7.6
ARTHROPODA														
crustacea														
nauplii	0.4		150.7	16.4	8.1	20.1	9.7	2.6	16.5		15.4	7.6	15.8	7.6
cladocera														
Penilia sp.													4.0	
ostracoda														
Conchoecia elegans		0.9		5.5	2.0		15.5	31.6	3.3	15.7	3.1	26.8	7.9	12.6
myodocopa		0.9												
copepoda[c]														
calanoida	47.0	69.3	458.1	452.5	491.9	726.9	925.7	1772.6	919.0	2221.5	1124.6	1131.3	1349.6	1615.5
Acartia sp.				(5)										
A. bermudensis	(45)	(59)	(15)	(10)	(5)	(25)	(10)	(5)						
A. danae													(5)	
A. spinata	(10)	(24)			(20)		(5)			(10)	(5)	(10)		
Clausocalanus furcatus	(10)				(5)	(10)			(30)		(10)			(14)
Eucalanus monachus											(5)			
Labidocora sp.	(20)		(20)		(10)		(10)		(20)	(20)	(10)			(19)
L. aestiva									(5)				(65)	
Paracalanus aculeatus	(5)	(18)	(45)	(55)	(40)	(45)	(75)	(60)	(40)	(55)	(45)	(75)	(15)	(67)
Pontellina plumata										(5)				
Temora turbinata	(10)		(20)	(30)	(20)	(20)		(15)		(10)	(25)	(15)	(15)	
Undinula vulgaris									(5)					
immatures								(5)						
unidentified								(15)						

TABLE N-18
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
25 JANUARY 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
cyclopoida	2.6	6.5	119.4	40.1	294.7	120.5	81.3	144.7	158.1	384.6	179.2	141.7	399.8	118.6
Corycaeus sp.								(5)						(5)
C.(Agetus) flaccus						(10)		(5)						
C. (A.) typicus			(5)											
C.(Corycaeus) speciosus				(13)				(5)	(10)					(5)
C.(Onychocorycaeus) latus	(75)			(20)	(12)		(20)		(30)	(30)	(10)	(33)	(20)	(30)
Farranula gracilis			(5)			(15)	(5)	(10)	(10)				(5)	(15)
Oithona sp.	(25)		(42)	(33)							(30)			
O. plumifera		(100)		(33)	(41)			(10)	(35)	(10)	(20)	(22)		(15)
O. robusta			(47)		(18)	(75)	(30)			(15)			(30)	
Oncaea conifera								(15)						
O. mediterranea					(29)		(45)	(45)	(15)	(45)	(30)	(44)	(45)	(30)
O. venusta											(10)			
unidentified								(5)						
harpacticoida	9.8	16.0	76.4	12.8	24.4	18.1	15.5	18.4	6.6	7.8	6.2	17.2	7.9	17.6
Euterpina	(93)	(92)	(56)	(100)	(100)	(86)	(100)	(80)	(100)	(100)		(100)		(100)
Macrosetella sp.	(7)	(8)				(14)							(100)	
unidentified			(44)					(20)			(100)			
cirripedia														
cypris larvae	2.1	10.3			4.1	4.0		7.9						2.5
nauplii (barnacle)	6.0	16.9	5.9	7.3	26.4	20.1	11.6	13.2	23.1	70.6	12.4	5.7	11.9	7.6
mysidacea								2.6		7.8				
cumacea		0.9					1.9							
isopoda		1.9			4.1	6.0								
amphipoda														
gammaridea	1.3	6.5			8.1									
hyperiidea										7.8				
decapoda														
anomura														
megalops													4.0	2.5
zoeae														
porcellanidae								2.6				3.8	4.0	
brachyura														
zoeae														
leucosiidae												1.9		
majidae										15.7				
pinnotheridae														
Dissodactylus sp.	0.4	1.9	3.9	5.5	2.0	8.0	50.4	84.2	39.5	172.7	12.3	145.5	55.4	103.5
Pinnixa sp.												1.9		
P. chaetopterana					4.1	2.0	1.9			7.8				2.5
P. sayana												3.8		2.5

TABLE N-18
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
25 JANUARY 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
Pinnotheres maculatus		0.9				2.0	1.9		6.6				4.0	2.5
portunidae														
Callinectes sp.								2.6						
Ovalipes ocellatus												1.9		
Portunus sp.					2.0		1.9	10.5			3.1	1.9	4.0	5.0
P. gibbesii							1.9					1.9		
xanthidae														
Hexapanopous sp.												1.9	7.9	
unidentified													4.0	2.5
caridea														
zoeae						2.0	1.9					1.9		
penaeidea														
penaeidae														
zoeae														
Sicyonia sp.												1.9		
sergestidae														
adults														
Lucifer faxoni			5.9				1.9	5.3	3.3					15.1
protozoeae								10.5	6.6	23.5	3.1	3.8	4.0	7.6
zoeae														
Lucifer sp.										7.8				
thalassinidea														
zoeae							3.9							
BRYOZOA														
cyphonautes larvae	0.9						1.9		3.3				11.9	
CHAETOGNATHA														
Pterosagitta draco					2.0									
Sagitta sp.											3.1		4.0	2.5
S. enflata							1.9	7.9	9.9	31.4	9.3	1.9	15.8	2.5
unidentified			2.0			8.0		5.3	6.6		12.4	1.9	27.7	2.5
ECHINODERMATA														
larvae				1.8	8.1	4.0		2.6			24.7	3.8	4.0	
CHORDATA														
urochordata														
appendicularia														
Oikopleura sp.				5.5	20.3	50.2	42.6	94.7	75.8	196.2	49.4	28.7	122.7	70.7

TABLE N-18
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
25 JANUARY 1977

	Station and depth[b]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
CHORDATA (continued)														
fish														
eggs					2.0	2.0	5.8				9.3	7.6		
larvae													4.0	
EGGS	15.8	23.4	39.2	45.6	40.7	34.1	46.5	123.6	72.5	196.2	86.5	88.1	138.5	22.7
SUBTOTAL UNDAMAGED	105.5	197.5	992.7	651.4	1006.0	1122.3	1357.3	2501.1	1449.6	3469.0	1594.3	1753.0	2288.0	2395.1
DAMAGED														
ARTHROPODA														
crustacea														
copepoda	2.2	8.4	35.2	27.4	26.4	30.1	21.3	34.2	32.9	47.1	30.9	30.6	63.3	83.3
decapoda														
anomura														
zoeae														
porcellanidae								2.6	3.3					
brachyura														
zoeae					2.0	2.0	1.9		3.3			11.5	4.0	2.5
penaeidea														
penaeidae														
protozoeae					2.0									
zoeae		0.9												
sergestidae														
adults														
Lucifer sp.			2.0	1.8									4.0	
protozoeae									3.3					
zoeae										7.8				
CHAETOGNATHA					2.0	2.0		5.3	3.3	7.8	3.1	5.7	11.9	5.0
CHORDATA														
urochordata														
appendicularia			13.7		6.1	4.0	13.5	31.6	16.5	31.4	9.3	13.4	27.7	17.7
SUBTOTAL DAMAGED	2.2	9.3	50.9	29.2	38.5	38.1	36.7	73.7	62.6	94.1	43.3	61.2	110.9	108.5
TOTAL UNDAMAGED + DAMAGED	107.7	206.8	1043.6	680.6	1044.5	1160.4	1394.0	2574.8	1512.2	3563.1	1637.6	1814.2	2398.9	2503.6

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.

[b] Ø = Oblique; S = Surface; B = Bottom.

[c] Values in parentheses represent the relative percentage of copepod species sampled at random and are not to be construed as number per cubic meter.

TABLE N-19
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
15 FEBRUARY 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED														
COELENTERATA														
hydromedusae								1.6				6.3	2.0	
siphonophora				0.3			2.4	1.6	6.7	11.3	2.3	25.3	10.1	8.6
MOLLUSCA														
gastropoda														
larvae	38.5	45.0	5.1	1.6	26.2	19.5	9.7	9.4	21.8	8.5	18.6	15.8	26.1	19.4
thecosomata (pteropoda)														
Creseis acicula										2.8				
pelecypoda														
larvae		2.4			6.5	15.2	2.4		5.0		4.7		12.1	12.9
POLYCHAETA														
larvae	1.0						2.4		1.7	8.5	2.3			
ARTHROPODA														
crustacea														
nauplii	1.0		17.8	0.5	3.3	2.2	7.3	1.6	1.7				2.0	
ostracoda														
Conchoecia olegans	1.0			1.1	6.5	6.5		32.8	1.7	923.0		412.1		23.7
copepoda[c]														
calanoida	353.9	151.4	1465.6	257.5	3921.8	1546.7	2143.0	1339.9	2532.7	4823.6	2391.4	7795.2	4178.8	4559.2
Acartia bermudensis	(40)	(50)	(45)	(5)	(80)	(40)					(5)		(15)	
A. spinata		(5)											(10)	(10)
Calanopia americana				(5)										
Labidocera sp.	(40)		(55)	(80)	(5)	(20)	(55)						(15)	(40)
L. aestiva	(15)			(5)				(10)	(10)	(5)	(10)		(5)	
Paracalanus aculeatus	(5)	(45)		(5)	(15)	(40)	(45)	(50)	(70)	(45)	(75)	(90)	(55)	(35)
Temora turbinata								(40)	(20)	(35)	(10)	(10)		(15)
immatures										(5)				
unidentified										(10)				
cyclopoida	3.0		22.9	4.6	137.9	47.7	104.3	62.5	281.1	372.6	206.8	218.7	72.4	144.1
Corycaeus sp.							(16)							
C.(Agetus) flaccus						(19)	(21)			(35)		(40)		
C.(Corycaeus) clausi													(10)	(25)
C.(C.) speciosus				(8)	(22)	(19)	(37)	(60)	(35)	(10)	(45)	(20)	(65)	(25)
C.(Onychocorycaeus) latus			(75)	(8)	(6)	(19)	(16)	(25)	(10)		(35)	(5)		(10)
Farranula gracilis			(25)		(6)		(11)		(10)				(5)	
Oithona sp.				(8)	(6)									
O. plumifera														(10)

TABLE N-19
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
15 FEBRUARY 1977

	Station and depth[b]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
Oncaea conifera										(5)		(5)		
O. mediterranea	(100)			(77)	(61)	(44)		(15)	(45)	(50)	(20)	(30)	(20)	(30)
harpacticoida	10.1	26.0	12.7	4.8	55.8	32.5	19.4	3.1	5.0	11.3	7.0	6.3	10.1	45.2
Euterpina sp.	(100)	(100)	(67)	(87)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Macrosetella sp.			(33)	(11)										
cirripedia														
cypris larvae	30.4	28.4		1.1	9.8	28.2		14.1		5.7		3.2	10.0	25.8
nauplii (barnacle)	9.1	23.7			22.9									2.2
mysidacea						2.2				5.7		6.3		
cumacea														2.2
isopoda		4.7				2.2						3.2		
amphipoda														
caprellida		2.4												
gammaridea	1.0	47.3			16.4	19.5								
euphausiacea														
postlarvae				0.3						2.8				
decapoda										2.8				
anomura														
zoeae														
paguridea														
unidentified	1.0							1.6	1.7	2.8		3.2		
brachyura														
immatures										2.8		3.2		
zoeae														
pinnotheridae														
Dissodactylus sp.			5.1	20.7			2.4	45.3	13.4	282.3		158.5		25.8
Pinnixa sp.														4.3
P. chaetopterana					3.3									
P. sayana								1.6						
Pinnotheres maculatus	1.0			0.5				1.6						10.8
unidentified						4.3	2.4		1.7					4.3
portunidae														
Callinectes sp.					3.3						2.3			
Ovalipes ocellatus								1.6						2.2
Portunus sp.				2.7					1.7	11.3	7.0	3.2	4.0	8.6
xanthidae														
Hexapanopeus sp.												6.3		
unidentified	2.0													
unidentified				0.3										4.3

TABLE N-19
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
15 FEBRUARY 1977

	Station and depth[b]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
caridea														
postlarvae									1.7					
zoeae				0.3				3.1		17.0		19.0		6.5
penaeidea														
sergestidae														
adults														
Lucifer faxoni									1.7			9.5		
postlarvae														
Lucifer faxoni											2.3			
protozoeae	1.0						2.4							4.3
zoeae														
unidentified														
thalassinidea														
zoeae					3.3					2.8				
BRYOZOA														
cyphonautes larvae			2.5								2.3			
CHAETOGNATHA														
Pterosagitta draco	1.0										4.6			
Sagitta sp.	4.1		2.5	0.8	3.3	2.2	16.9	11.0	31.8	19.8	9.3	41.2	24.1	21.5
S. enflata	2.0					2.2	7.3	3.1	15.0	22.6	9.3	15.8	16.1	25.8
S. friderici				0.3		2.2		1.6	3.3				2.0	
S. helenae				0.3				3.1	13.4	19.8	4.6	25.3	10.0	
S. hispida								1.6		14.1		6.3	2.0	
unidentified	2.0		12.7	0.8	6.5		7.3	7.8	28.5	5.7	9.3	12.7	12.1	4.3
CHORDATA														
urochordata														
thaliacea														
salpida					3.3							9.5		
appendicularia														
Oikopleura sp.			5.1	0.8	29.5	23.8	12.1	9.4	28.5	8.5	20.9			21.5
larvae						2.2								
fish														
eggs	1.0		2.5	0.3	55.8	2.2	2.4	3.1						
EGGS	103.4	127.8	175.2	19.4	154.2	132.4	235.1	129.6	118.8	110.1	253.3	158.5	148.7	154.8
SUBTOTAL UNDAMAGED	567.5	459.1	1729.7	319.0	4469.6	1893.9	2579.2	1691.7	3118.6	6698.2	2958.3	8964.6	4542.6	5142.3

TABLE N-19
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
15 FEBRUARY 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
DAMAGED														
COELENTERATA														
hydromedusae												3.2		
ARTHROPODA														
crustacea														
copepoda	16.2	21.3	33.0	6.7	52.5	52.1	36.4	35.9	43.5	118.5	46.5	107.8	42.2	146.2
decapoda														
zoeae												3.2		
brachyura														
zoeae			2.5	0.3				1.6	5.0	5.6	2.3	3.2	2.0	2.2
penaeidea														
sergestidae														
adults														
Lucifer faxoni										2.8			2.0	
unidentified														
CHAETOGNATHA			2.5	3.3		10.0	12.1	4.7	26.8	19.8	16.3	28.5	8.1	36.6
CHORDATA														
urochordata														
appendicularia				0.3		8.7	2.4	4.7	1.7		2.3	3.2	2.0	2.2
UNIDENTIFIED WORMS		2.4												
SUBTOTAL DAMAGED	16.2	23.7	38.0	7.6	52.5	71.6	50.9	46.9	77.0	146.7	67.4	149.1	56.3	187.2
TOTAL UNDAMAGED + DAMAGED	583.7	482.8	1767.7	326.6	4522.1	1965.5	2630.1	1738.6	3195.6	6844.9	3025.7	9113.7	4598.9	5329.5

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.

[b] Ø = Oblique; S = Surface; B = Bottom.

[c] Values in parentheses represent the relative percentage of copepod species sampled at random and are not to be construed as number per cubic meter.

TABLE N-20

QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
11 MARCH 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED														
PROTOZOA														
foraminifera	2.4													
COELENTERATA														
actinula larvae		20.9												
hydromedusae			2.5											
siphonophora	0.8		2.5	14.5	5.1		2.4	54.7	5.1	17.7		12.4	18.4	18.9
NEMATODA		7.0												
MOLLUSCA														
gastropoda														
larvae	31.5	13.9	15.1	55.2	40.4	66.3	19.4	191.5	84.1	85.5	7.4	40.3	3.7	41.0
thecosomata (pteropoda)										2.9				
Cresois acicula	1.6										7.4	18.6	22.1	12.6
pelecypoda														
larvae	4.9			8.7	10.1	27.3	4.8		35.7		7.4	9.3		12.6
POLYCHAETA														
adults	1.6												3.7	
intermediates	81.7	20.9	10.1	110.3	85.9	105.3			2.5	8.8	3.7			15.8
larvae	3.3					35.1	4.8		2.5	2.9				
ARTHROPODA														
crustacea														
nauplii	3.2	20.9	2.5			54.6	2.4		12.7	2.9	3.7			6.3
unidentified developmental stages										5.9			3.7	
cladocera														
Evadne sp.											3.7			
ostracoda														
Conchoecia elegans		7.0	7.6	145.2	40.4	144.2		164.1		11.8			11.0	517.2
copepoda[c]														
calanoida	269.3	97.4	2866.6	3553.7	6298.0	6966.8	3375.9	21554.1	3908.6	3203.4	3949.4	3306.0	4966.8	2504.0
Acartia bermudensis	(10)	(10)			(5)	(10)								
A. spinata			(5)											
Clausocalanus furcatus	(5)											(10)		
Euchaeta marina												(10)		
Labidocera sp.		(10)		(10)	(11)			(45)					(10)	(48)
L. acutifrons							(5)							

TABLE N-20
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
11 MARCH 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
L. aestiva	(15)			(5)	(5)	(20)		(20)						
Paracalanus aculeatus	(70)	(80)	(85)	(65)	(63)	(60)	(95)	(20)	(95)	(55)	(95)	(55)	(40)	(38)
Temora turbinata			(10)	(15)	(16)	(10)		(15)	(5)	(45)	(5)	(25)	(50)	(14)
Undinula vulgaris				(5)										
cyclopoida	34.0	13.9	174.1	156.8	676.8	460.0	121.1	1586.5	349.3	206.5	173.5	530.3	496.7	249.1
Corycaeus(Agetus) flaccus	(5)				(5)			(15)		(30)				
C.(Corycaeus) clausi					(15)									
C.(C.) speciosus	(40)		(25)	(45)	(55)	(100)	(4)			(15)	(15)		(5)	(65)
C.(Onychocorycaeus) latus	(20)			(10)										
Farranula carinata							(10)							
F. gracilis			(40)	(15)			(40)	(10)	(85)	(30)	(45)	(25)	(15)	
Oithona plumifera	(15)									(15)				
Oncaea mediterranea	(20)	(100)	(30)	(30)	(25)		(20)	(75)	(15)	(10)	(40)	(70)	(80)	(35)
O. venusta			(5)				(10)							
Sapphirina stellata												(5)		
harpacticoida	2.4	7.0	37.8	34.8	116.2	23.4	38.7	328.2	51.0	26.5	22.1	15.5	136.1	12.6
Euterpina sp.	(100)			(100)	(93)	(100)		(20)						
Macrosetella gracilis			(100)		(7)		(100)	(80)	(100)	(100)	(100)	(100)	(100)	(100)
Microsetella sp.		(100)												
cirripedia														
cypris larvae	6.5	20.9	5.1	92.9	292.9	257.3		355.6	5.1	29.5		43.4	36.8	6.3
nauplii (barnacle)	68.7	41.7	35.3	226.4	393.9	479.5	31.5	875.3		8.8		24.8	36.8	315.3
stomatopoda														
protozoeae										2.9				
cumacea				2.9	5.1	3.9								
isopoda		7.0												
amphipoda														
gammaridea	17.8	20.9				11.7	4.9							
hyperiidea			2.5		5.1								3.7	
euphausiacea														
postlarvae				2.9						2.9		3.1		
protozoeae				2.9			2.4	54.7		2.9				
zoeae				11.6				164.1				3.1	3.7	
decapoda														
larvae									2.5	5.9				
anomura														
paguridea														
zoeae				2.9										3.2
brachyura														
megalops					25.3		2.4							
zoeae														
leucosiidae				2.9										

TABLE N-20
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
11 MARCH 1977

	Station and depth[b]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
majidae	0.8													
pinnotheridae					5.1									
Dissodactylus sp.					5.1	3.9								
Pinnixa chaetopterana				2.9										
P. sayana					5.1	3.9								
Pinnotheres maculatus				8.7		74.1								3.2
portunidae		7.0		2.9				27.4	2.5	2.9			11.0	
Ovalipes ocellatus						3.9								
Portunus sp.				2.9	15.2	11.7		164.1		11.8			7.4	9.5
raninidae								82.1						
xanthidae														
Neopanope sp.		7.0												
Panopeus herbstii												6.2		
caridea														
postlarvae						3.9							3.7	
zoeae				2.9		15.6				5.9				3.2
penaeidea														
penaeidae														
protozoeae	0.8					3.9							3.7	6.3
sergestidae														
adults														
Lucifer faxoni					20.2							3.1	3.7	3.2
protozoeae					15.2	11.7		82.1		2.9				25.2
zoeae														
Lucifer faxoni				2.9	15.2	7.8		191.5					7.3	
Sergestes sp.				2.9										
thalassinidea														
zoeae								27.4						
BRYOZOA														
cyphonautes larvae			2.5						5.1	2.9			14.7	
CHAETOGNATHA														
Krohnitta sp.									2.5					
Sagitta sp.			5.1	2.9	20.2		9.7	27.4	12.7	5.9		6.2	3.7	
S. enflata					5.1			27.4		8.8	7.4		14.7	3.2
S. friderici			5.1	5.8	5.1			27.4	5.1		11.1		3.7	
S. helenae					5.1				10.2		3.7		3.7	3.2
S. hispida								27.4	2.5	2.9		6.2	22.1	
S. serratodentata atlantica								27.4	5.1	5.9			7.3	
unidentified				2.9	15.2	23.4	2.4		12.7	5.9	3.7			

TABLE N-20
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
11 MARCH 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ECHINODERMATA														
larvae	4.9					3.9								9.5
CHORDATA														
urochordata														
appendicularia														
Oikopleura sp.	86.5	13.9	25.3	148.1	85.9	78.0	9.7	1367.7	147.9	59.0	44.3	142.7	11.0	53.6
larvae		7.0												
fish														
eggs	0.8		15.1	2.9	75.8	15.6	12.1	465.0	10.2	2.9	59.1	65.1	125.1	
larvae						7.8	2.4			2.9			7.3	
EGGS	57.4	27.8	108.5	92.9	156.6	159.8	155.0	1039.4	119.8	138.6	195.6	130.2	176.6	107.2
UNIDENTIFIED												6.2		
SUBTOTAL UNDAMAGED	680.9	362.1	3323.3	4706.2	8445.3	9064.3	3802.0	28912.5	4795.4	3886.9	4503.2	4372.7	6169.9	3942.2
DAMAGED														
ARTHROPODA														
crustacea														
copepoda	8.9	13.9	63.1	84.2	409.1	167.6	72.7	492.4	94.3	73.7	77.5	93.0	136.1	82.0
euphausiacea														
zoeae								27.4						
decapoda														
larvae										2.9	3.7			
brachyura														
megalops										2.9				
zoeae								27.4		2.9				
penaeidea														
penaeidae														
sergestidae														
adults														
Lucifer sp.										2.9				
CHAETOGNATHA			7.6		55.6	7.8	9.7	191.5	30.6	44.2	7.4	9.3	69.9	3.2
CHORDATA														
urochordata														
appendicularia	14.6		10.1	17.4	55.6	11.7		601.8	15.3		3.7	27.9	3.7	9.5
SUBTOTAL DAMAGED	23.5	13.9	80.8	101.6	520.3	187.1	82.4	1340.5	140.2	129.5	92.3	130.2	209.7	94.7

TABLE N-20
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
11 MARCH 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
TOTAL UNDAMAGED + DAMAGED	704.4	376.0	3404.1	4807.8	8965.6	9251.4	3884.4	30253.0	4935.6	4016.4	4595.5	4502.9	6379.6	4036.9

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.

[b] Ø = Oblique; S = Surface; B = Bottom.

[c] Values in parentheses represent the relative percentage of copepod species sampled at random and are not to be construed as number per cubic meter.

TABLE N-21

QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
19/20 APRIL 1977[b]

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED														
PROTOZOA														
foraminifera	0.8	11.6			7.5						2.0			
COELENTERATA														
actinula larvae	0.8									7.9				
siphonophora			4.1		22.5	3.4	2.7	9.1			2.0		3.7	12.1
trachymedusae									4.9		4.1			
MOLLUSCA														
gastropoda														
larvae	28.4	23.2	32.9	24.4	112.7	37.2	54.3	38.7	68.6	220.7	34.7	61.5	84.8	30.4
thecosomata (pteropoda)														
Creseis acicula			4.1	13.3				13.6	29.4	55.2	4.1	9.9	3.7	3.0
pelecypoda														
larvae					7.5					7.9			3.7	6.1
POLYCHAETA														
adults							2.7				2.0			
intermediates	1.7		12.3	2.2	45.1		13.6	2.3	14.7		14.3		11.1	3.0
ARTHROPODA														
crustacea														
cladocera														
Evadne sp.	0.8			2.2								4.9		9.1
ostracoda														
Conchoecia elegans								2.3	4.9					
copepoda[d]														
calanoida	80.2	73.0	900.9	1595.2	1225.0	557.2	3141.6	1116.9	2586.4	4588.8	943.7	1198.3	1716.5	684.3
Acartia bermudensis	(10)	(5)		(5)	(5)	(5)								
Clausocalanus furcatus				(10)	(5)		(5)				(5)	(10)		(10)
Labidocera aestiva				(5)										
Nannocalanus minor						(5)								
Paracalanus aculeatus	(60)	(80)	(75)	(70)	(50)	(65)	(85)	(70)	(75)	(70)	(80)	(55)	(60)	(45)
Temora stylifera	(25)	(15)	(20)	(10)	(40)	(25)	(10)	(5)	(20)	(25)	(15)	(30)	(40)	(45)
Undinula vulgaris	(5)		(5)					(25)	(5)	(5)		(5)		
cyclopoida	18.4	16.6	378.5	155.3	526.1	189.1	358.1	127.4	225.3	189.3	148.8	194.4	504.6	152.1
Corycaeus(Corycaeus) clausi	(18)													
C.(C.) speciosus		(25)	(25)			(25)	(50)	(20)		(18)	(5)	(35)	(15)	(26)
C.(Onychocorycaeus) latus				(20)	(15)	(20)		(45)	(45)	(45)		(10)	(35)	(11)
Farranula gracilis	(71)	(50)	(70)	(75)	(85)	(55)	(45)	(30)	(40)	(36)	(90)	(50)	(50)	(63)

TABLE N-21
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
19/20 APRIL 1977[b]

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
Oncaea mediterranea	(12)	(25)	(5)	(5)			(5)	(5)	(15)		(5)	(5)		
harpacticoida	5.0		4.1	6.7	45.1	3.4	5.4	4.5	9.8	7.9	8.1	12.3	11.1	15.2
Euterpina sp.	(67)				(20)		(100)	(100)	(50)	(100)	(33)			
Macrosetella gracilis	(33)		(100)	(100)	(80)				(50)		(67)	(100)	(100)	(100)
cirripedia														
cypris larvae		1.7	4.1		7.5								3.7	
nauplii (barnacle)	6.7	96.2	4.1	8.9	15.0	6.8		2.3				9.9	29.5	18.2
mysidacea								2.3	4.9	7.9	6.1			
cumacea		1.7												
isopoda	0.8													3.0
amphipoda														
gammaridea	5.0	11.6			15.0									
hyperiidea				4.4		3.4								3.0
euphausiacea														
postlarvae					15.0	3.4		2.3	9.8				7.4	
zoeae				2.2				2.3			2.0		3.7	
decapoda														
zoeae				2.2				2.3						
anomura														
megalops				4.5	7.5									
zoeae														
paguridea														
diogenidae								2.3						
porcellanidae	0.8			2.2										
unidentified										15.8				
brachyura														
megalops				8.9		10.1						2.5		
zoeae														
majidae	0.8	1.7			7.5	3.4	5.4					2.5	7.4	
pinnotheridae														
Dissodactylus sp.	0.8					3.4		2.3	19.6	71.0				6.1
Pinnixa chaetopterana				4.5	7.5	3.4								
P. sayana													7.4	
Pinnotheres maculatus	1.7	1.7		4.5	22.5	20.3		15.9	4.9	31.6	2.0	29.5	66.3	27.4
P. ostreum	0.8													
unidentified													3.7	3.0
portunidae														
Callinectes sp.					7.5		2.7	4.5			2.0	2.5		
Portunus sp.		3.3	4.1	4.5		6.7	21.7	27.3	24.5	78.9	4.1	4.9	18.4	9.1
unidentified	2.5	1.7	12.3	6.7	45.1	84.4	43.4	9.1	4.9		59.1	88.6	25.8	15.2
xanthidae														
Hexapanopeus sp.	0.8									7.9		2.5		3.0

TABLE N-21
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
19/20 APRIL 1977[b]

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
unidentified	0.8	5.0				3.4				7.9				
unidentified					7.5			4.5		7.9				
caridea														
postlarvae			4.1	2.2										
zoeae			4.1	15.5	15.0	16.9		11.3	4.9	55.2	2.0	7.4	14.8	9.1
penaeidea														
penaeidae														
protozoeae				24.4	7.5		2.7							
sergestidae														
adults														
Lucifer faxoni				8.9	7.5							2.5		
protozoeae	7.5	5.0	12.3		60.1	33.8	21.7	27.3	9.8		8.1	19.7	99.5	70.0
zoeae														
Lucifer sp.									14.7					
L. faxoni													7.4	
thalassinidea														
zoeae								4.5				7.4		3.0
BRYOZOA														
cyphonautes larvae									4.9					
CHAETOGNATHA														
Krohnitta sp.							2.7							
Sagitta sp.			8.2	4.5			8.1	4.5	29.4	47.3		9.8	11.1	6.1
S. enflata			4.1	4.5			40.7	11.4	49.0	102.5	8.1		18.4	3.0
S. friderici								4.5	9.8					3.0
S. helenae				2.2			2.7		24.5	7.9				
S. hispida			4.1											
unidentified			4.1				16.3		4.9			7.4	3.7	
ECHINODERMATA														
larvae	3.3						21.7							
CHORDATA														
urochordata														
thaliacea														
doliolida														
Doliolum(Doliolina) intermedium				2.2	30.1		2.7					12.3	3.7	12.2
unidentified		1.7			45.1		2.7	6.8		31.6	4.1	2.5	3.7	3.0
appendicularia														
Oikopleura sp.	43.4	26.5	131.6	248.5	1262.6	300.5	176.3	86.4	362.5	339.1	112.1	105.8	84.8	103.4

TABLE N-21
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
19/20 APRIL 1977[b]

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
CHORDATA (continued)														
larvae	0.8	8.3												
fish														
eggs	0.8	1.7	37.0	11.1	60.1	3.4		2.3		23.7	4.1		7.4	3.0
larvae			20.6		7.5	6.7	2.7	43.2		23.7	4.1	17.2	11.1	12.1
EGGS	24.2	59.7	135.8	95.4	285.6	91.2	241.4	127.4	137.2	212.9	136.6	93.5	184.2	85.2
SUBTOTAL UNDAMAGED	237.6	351.9	1727.5	2272.2	3930.2	1391.5	4194.0	1721.8	3664.2	6150.5	1518.3	1909.7	2962.3	1316.4
DAMAGED														
ARTHROPODA														
crustacea														
copepoda	1.7	3.3	53.5	24.4	157.8	33.8	29.8	20.5	88.2	134.0	44.8	22.2	62.7	60.8
euphausiacea														
postlarvae				2.2										
decapoda														
zoeae														3.0
anomura														
paguridea														
diogenidae														
zoeae														
brachyura														
zoeae														
pinnotheridae													3.7	
portunidae							2.7	2.3						
xanthidae													3.7	3.0
unidentified		1.7				3.4	2.7	6.8			6.1	9.8	3.7	9.1
caridea														
zoeae				2.2	15.0				4.9	7.9				
penaeidea														
sergestidae														
protozoeae														3.0
zoeae														
Lucifer sp.							2.7							
thalassinidea														
zoeae								2.3						
CHAETOGNATHA			8.2		7.5	3.4	8.1	9.1	29.4	71.0	4.1	9.9	11.1	12.2

TABLE N-21
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
19/20 APRIL 1977[b]

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
CHORDATA														
urochordata														
appendicularia	4.2	13.3	139.9	33.3	368.3	101.3	46.1	34.1	78.4	212.9	108.0	36.9	95.8	60.8
SUBTOTAL DAMAGED	5.9	18.3	201.6	62.1	548.6	141.9	92.1	75.1	200.9	425.8	163.0	78.8	180.7	151.9
TOTAL UNDAMAGED + DAMAGED	243.5	370.2	1929.1	2334.3	4478.8	1533.4	4286.1	1796.9	3865.1	6576.3	1681.3	1988.5	3143.0	1468.3

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.

[b] Stations 11 and 12 collected 20 APR, all other stations collected 19 APR.

[c] Ø = Oblique; S = Surface; B = Bottom.

[d] Values in parentheses represent the relative percentage of copepod species sampled at random and are not to be construed as number per cubic meter.

TABLE N-22

QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
10 MAY 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED														
PROTOZOA														
foraminifera					1.8									
MOLLUSCA														
gastropoda														
larvae	22.7	6.3	7.6	27.0	23.9	14.7	7.7	12.2	22.5	6.3	12.7	30.6	333.5	97.8
thecosomata (pteropoda)														
Creseis acicula										3.2				
pelecypoda														
larvae	6.7	4.2		18.0	5.5	4.9				6.4	3.2			9.8
POLYCHAETA														
intermediates					1.8		3.8		5.0	3.2	3.2	10.2		
ARTHROPODA														
crustacea														
nauplii		4.2	7.6	4.5	9.2	7.4	15.3		15.0	9.5		5.1	40.4	4.9
ostracoda														
Conchoecia elegans	2.7	4.2		27.0	14.7	4.9	11.5	1845.5	12.5	267.0	73.2	1411.7	10.1	44.0
copepoda[c]														
calanoida	134.6	197.9	972.3	2780.1	982.1	1657.3	620.2	647.8	244.4	298.8	996.7	2171.0	2173.0	1315.0
Acartia bermudensis	(70)	(65)	(55)	(100)	(100)	(75)	(15)	(10)	(15)		(5)		(30)	
A. spinata	(25)	(5)	(45)			(25)							(10)	
Labidocera aestiva														(5)
Paracalanus aculeatus		(30)					(85)	(85)	(85)	(50)	(95)	(70)	(60)	(76)
Temora stylifera								(5)		(40)		(15)		(5)
T. turbinata	(5)											(5)		
Undinula vulgaris										(10)		(10)		(14)
cyclopoida	1.3	8.4	25.4	45.1	9.2	14.8	118.7	44.8	24.9		175.2	315.9	91.0	39.1
Corycaeus(Agetus) limbatus		(67)						(10)						
C.(Corycaeus) clausi							(6)				(20)	(45)	(33)	
C.(C.) speciosus	(100)		(14)				(31)				(40)	(20)		(33)
C.(Onychocorycaeus) latus							(13)	(10)						
Farranula gracilis		(33)	(29)				(6)	(20)	(33)		(5)	(25)	(33)	(33)
Oithona sp.						(40)	(19)	(10)	(17)					
O. plumifera													(33)	
Oncaea mediterranea			(57)	(100)		(60)	(25)	(50)	(33)		(35)	(10)		(33)
immatures					(100)				(17)					
harpacticoida	8.0	2.1	15.2	27.0	20.3	17.2	11.5	8.1			19.1	20.4	10.1	14.7
Euterpina sp.	(50)		(100)	(100)	(29)		(100)	(100)			(100)	(100)		(100)
Macrosetella gracilis					(29)									

TABLE N-22
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
10 MAY 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
immatures	(50)				(43)									
unidentified						(100)								
cirripedia														
cypris larvae	1.3	6.3		9.0	1.8							5.1	10.1	
nauplii (barnacle)	24.0	23.1	5.1	4.5	7.4							20.4	10.1	
stomatopoda														
zoeae												5.1		
mysidacea														
prehatching stages						2.5								
cumacea			2.5		25.8	34.4		4.1				5.1		
isopoda								4.1						4.9
amphipoda														
gammaridea	1.3	10.5				7.4	3.8							4.9
hyperiidea				9.0				4.1		15.9		15.3		
decapoda														
zoeae												20.4	10.1	14.7
anomura														
megalops						4.9								9.8
zoeae														
porcellanidae				4.5				4.1		3.2				
unidentified				9.0		7.4		4.1		3.2				19.6
brachyura														
megalops				4.5	1.8	4.9					3.2			
zoeae														
leucosiidae					1.8		3.8				3.2		10.1	4.9
majidae		2.1			1.8	2.5						5.1		
pinnotheridae														
Dissodactylus sp.		2.1			3.7			8.1					10.1	19.6
Pinnixa chaetopterana	2.7	2.1	2.5		3.7	7.4	3.8							4.9
P. sayana						2.5								4.9
Pinnotheros maculatus	2.7			4.5	12.9	19.7		8.1			6.4		30.3	39.1
P. ostreum	1.3													
unidentified	1.3					2.5	3.8						10.1	
portunidae														
Portunus sp.			2.5	4.5	3.7	2.5	3.8	20.4		3.2	3.2	10.2	10.1	14.7
unidentified	1.3				3.7	2.5			2.5	3.2		5.1	20.2	4.9
raninidae				4.5				4.1						
xanthidae														
Hexapanopeus sp.											3.2		10.1	14.7
Panopeus herbstii													10.1	
unidentified				4.5										
unidentified					5.5	2.5				3.2			20.2	9.8

TABLE N-22
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
10 MAY 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
caridea														
zoeae				4.5	3.7	7.4	3.8	28.5	5.0	6.4	3.2	71.4	20.2	102.7
penaeidea														
sergestidae														
adults														
Lucifer faxoni				9.0		7.4								4.9
protozoeae	1.3	2.1	12.7	40.6	27.6	4.9	126.3	48.9	42.4	15.9	121.0	214.1	202.2	83.1
thalassinidea														
zoeae				139.7	1.8			12.2				20.4		195.5
CHAETOGNATHA														
Sagitta sp.	2.7	2.1	17.8	49.6		12.3	34.5	61.1	7.5	9.5	57.3	122.3	10.1	44.0
S. bipunctata										3.2				
S. enflata	1.3		10.2	9.0	5.5	9.8	46.0	52.9	5.0	9.5	41.4	168.2	10.1	63.6
S. friderici			2.5	4.5					2.5	3.2	3.2	10.2		
S. holenae			2.5					24.4		3.2	3.2	20.4		
S. hispida						2.5		8.1	17.4	9.5	6.4	25.5		
S. serrodentata atlantica											3.2			
unidentified	1.3	2.1	2.5	36.0		4.9	206.7	199.6	37.4	19.0	261.1	321.1	30.3	83.1
CHORDATA														
urochordata														
appendicularia														
Oikopleura sp.			2.5	4.5	7.4		76.5	24.4	25.0		22.3	15.3	60.6	44.0
larvae	5.3	2.1			1.8									
fish														
eggs						2.5	3.8		7.5	3.2				4.9
larvae														4.9
EGGS	86.6	67.3	119.3	76.6	95.8	122.7	382.8	81.5	159.6	57.2	321.6	137.6	404.3	146.7
SUBTOTAL UNDAMAGED	310.4	349.2	1210.7	3361.2	1285.7	1999.2	1688.1	3161.2	636.1	766.1	2146.4	5183.2	3557.5	2474.1
DAMAGED														
ARTHROPODA														
crustacea														
cladocera	1.3													
copepoda	2.7	23.1	73.6	31.5	106.9	41.7	38.3	28.5	24.9	3.2	22.3	35.7	111.2	39.1
cumacea												5.1		

TABLE N-22
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
10 MAY 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
decapoda														
larvae		2.1										10.2		34.2
zoeae				4.5	1.8									
anomura														
megalops						2.5								
brachyura														
zoeae														
pinnotheridae		2.1											10.1	
unidentified			5.1			2.5		4.1	2.5			10.2	10.1	4.9
caridea														
zoeae												10.2		
thalassinidea														
zoeae				9.0										4.9
CHAETOGNATHA	1.3			4.5		9.8	42.1	44.8	27.4	12.7	130.6	356.8	40.4	73.3
CHORDATA														
urochordata														
appendicularia			5.1		5.5	14.7	11.5	8.1		3.2	6.4		40.4	14.7
SUBTOTAL DAMAGED	5.3	27.3	83.8	49.5	114.2	71.2	91.9	85.5	54.8	19.1	159.3	428.2	212.2	171.1
TOTAL UNDAMAGED + DAMAGED	315.7	376.5	1294.5	3410.7	1399.9	2070.4	1780.0	3246.7	690.9	785.2	2305.7	5611.4	3769.7	2645.2

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.

[b] Ø = Oblique; S = Surface; B = Bottom.

[c] Values in parentheses represent the relative percentage of copepod species sampled at random and are not to be construed as number per cubic meter.

TABLE N-23

QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
14 JUNE 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED														
PROTOZOA														
foraminifera	7.1	7.0	15.3	10.5	3.3	19.8	14.2		23.0	10.7	11.7		110.1	
COELENTERATA														
siphonophora			6.6	7.9							4.7	25.4		
MOLLUSCA														
gastropoda														
larvae	240.2	16.4	155.0	97.7	90.0	178.0	32.0	11.3	23.1		28.0		229.4	50.8
thecosomata (pteropoda)														
Creseis acicula														10.2
pelecypoda														
larvae	9.4			5.3	3.3	29.7	3.6	5.6	3.8	21.4			4.6	
POLYCHAETA														
intermediates							3.6			10.7		5.1		
ARTHROPODA														
insecta														
diptera											2.3			
crustacea														
nauplii				2.6	13.3		7.1							
ostracoda														
Conchoecia elegans						9.9	3.6	11.2		117.6		5.1	32.1	152.5
copepoda[c]														
calanoida	440.0	161.9	410.5	2423.6	1076.7	14726.0	142.1	803.3	84.5	823.4	247.2	1050.0	151.4	5755.3
Acartia bermudensis	(10)		(30)											
A. spinata	(20)		(10)	(25)	(20)				(56)		(45)			
Contropages furcatus							(50)	(40)		(20)		(65)	(5)	
Clausocalanus furcatus												(5)		
Labidocera aestiva				(5)										
Paracalanus aculeatus	(70)	(100)	(60)	(70)	(80)	(100)	(50)	(55)	(44)	(75)	(55)	(25)	(85)	(85)
Temora stylifera										(5)				
T. turbinata												(5)	(5)	
Undinula vulgaris								(5)					(5)	(15)
cyclopoida	15.4		13.1	31.7	86.7	158.2	28.4	67.4		176.4	16.3	243.5	59.7	691.4
Corycaeus (Corycaeus) clausi					(20)	(10)	(25)			(12)	(50)	(45)	(29)	(30)
C. (C.) speciosus					(27)	(50)				(12)		(10)	(57)	(60)
Farranula gracilis	(20)			(56)	(7)					(12)				
Oithona plumifera							(25)					(5)	(14)	
Oncaea mediterranea	(80)		(100)	(11)	(33)	(10)	(50)	(100)		(65)	(25)	(40)		(10)
immatures				(33)	(13)	(30)								

TABLE N-23
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
14 JUNE 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
unidentified											(25)			
harpacticoida	5.9					9.9				16.0				10.2
Euterpina sp.	(100)					(100)				(100)				(100)
cirripedia														
cypris larvae	2.3			2.6										
nauplii (barnacle)	138.4	65.7					17.8				9.3		55.0	10.2
stomatopoda														
protozoeae									7.7					
mysidacea						39.6								10.2
cumacea						9.9								
isopoda	3.5	2.3												
amphipoda														
gammaridea	1.2	4.7			3.3									
hyperiidea							3.6	11.3		16.0				
decapoda														
anomura														
megalops														10.2
zoeae														
porcellanidae								5.6	3.8					
unidentified												5.1		10.2
brachyura														
megalops	1.2							11.3		5.3				10.2
zoeae														
cancridae														
Cancer sp.								5.6						
leucosiidae						19.8					4.7			81.3
majidae							3.6							10.2
ocypodidae														
Uca sp.						19.8								
pinnotheridae														
Dissodactylus sp.	7.1	11.7	2.2		13.3	217.6	3.6	11.3	3.8			5.1		40.7
Pinnixa sp.	1.2													
P. chaetopterana	11.8	2.3			3.3	79.1								
Pinnotheres maculatus	18.9	7.0		15.8	50.0	207.7							9.2	
unidentified	1.2					9.9								
portunidae														
Portunus sp.			6.6	5.3				22.5	11.5	10.7	4.7	25.4	4.6	
unidentified	15.4			18.5					26.9	5.3	7.0			
raninidae												5.1		
xanthidae														
Hexapanopeus sp.	5.9						3.6							20.3
unidentified						9.9								

TABLE N-23
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
14 JUNE 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
unidentified	4.7			5.3	6.7				3.8	5.3	2.3	5.1		
caridea														
zoeae				2.6	3.3	19.8						15.2	4.6	50.8
penaeidea														
sergestidae														81.3
adults														
Lucifer faxoni				10.6	13.3	39.5		16.9	19.2	21.4		20.3		71.2
protozoeae		4.7		2.6	6.7	89.0	28.4	78.7	3.8	21.4		71.0	23.0	
zoeae														
Lucifer sp.							10.7	44.9		26.7		91.3		
thalassinidea														
zoeae							3.6	28.1		26.7		15.2		20.3
CHAETOGNATHA														
Sagitta sp.	3.5		4.4	13.2	6.7	9.9	3.6	33.7	15.4	21.4	4.7	25.3	4.6	61.0
S. enflata							46.2	84.3	3.8	37.4		35.5		10.2
S. fridorici	1.2		2.2	7.9								10.1		
S. helenae					3.3			5.6				5.1		
S. hispida						19.8	7.1	11.2	3.8	5.3	4.7	20.3		30.5
S. serratodentata atlantica									3.8					
unidentified	4.7			2.6	3.3	19.8	3.6	5.6		21.4	2.3	25.4		61.0
ECHINODERMATA														
larvae							3.6							
CHORDATA														
urochordata														
thaliacea														
salpida														
Thalia democratica									42.3				4.6	10.2
unidentified						9.9								
appendicularia														
Oikopleura sp.	2.4		2.2	13.2	33.3	207.7	7.1	5.6	3.8	26.7	2.3	25.3	50.5	549.1
larvae		2.3												
fish														
eggs	3.5			5.3	3.3									
larvae								11.3						
EGGS	21.3	2.3	15.3		23.3	19.8	21.3	11.3	7.7		11.7	5.1	13.8	30.5
SUBTOTAL UNDAMAGED	967.4	288.3	633.4	2684.8	1446.4	16180.0	402.0	1303.6	295.5	1427.2	363.9	1740.0	757.2	7850.0

TABLE N-23
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
14 JUNE 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
DAMAGED														
ARTHROPODA														
crustacea														
copepoda	22.4	42.2	15.3	108.2	96.7	118.7	195.3	331.4	38.4	10.7	51.3	35.5	78.0	101.7
decapoda														
brachyura														
zoeae														
pinnotheridae		11.7												
portunidae				2.6										
unidentified	2.4	7.0										10.1		
caridea														
zoeae								5.6						
penaeidea														
sergestidae														
adults														
Lucifer faxoni			4.4	5.3	3.3	9.9								30.5
protozoeae							3.6							
CHAETOGNATHA		2.3	2.2		3.3		35.5	45.0	11.5	16.0		45.7		91.5
CHORDATA														
urochordata														
thaliacea														
salpida														10.2
appendicularia				2.6	6.7	39.6	42.6			10.7	7.0	5.1	13.8	91.5
SUBTOTAL DAMAGED	24.8	63.2	21.9	118.7	110.0	168.2	277.0	382.0	49.9	37.4	58.3	96.4	91.8	325.4
TOTAL UNDAMAGED + DAMAGED	992.2	351.5	655.3	2803.5	1556.4	16348.2	679.0	1685.6	345.4	1464.6	422.2	1836.4	849.0	8175.4

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.

[b] Ø = Oblique; S = Surface; B = Bottom.

[c] Values in parentheses represent the relative percentage of copepod species sampled at random and are not to be construed as number per cubic meter.

TABLE N-24

QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
12 JULY 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED														
PROTOZOA														
foraminifera	27.7	10.5	19.4		24.0				20.6		53.2	30.0		19.4
COELENTERATA														
hydromedusae														
Obelia sp.								10.1				15.0		29.1
unidentified														
siphonophora				30.2							5.9			
MOLLUSCA														
gastropoda														
larvae	20.8	10.5	71.0	50.3	32.0	32.5	14.8	119.4	20.6	47.7	47.3	45.0	17.1	67.9
thecosomata (pteropoda)														
Creseis acicula										11.9		15.0		
pelecypoda														
larvae					24.0	16.2				11.9	5.9		8.5	4.9
POLYCHAETA														
intermediates				20.1	8.0			29.9			5.9			14.6
ARTHROPODA														
insecta														
gerridae														
nymphs			6.5											
crustacea														
nauplii										23.8				4.9
cladocera														
Evadne sp.									61.7		5.9	15.0		24.3
Penilia sp.				20.1				10.0		23.9				
ostracoda														
Conchoecia elegans						32.5	3.7			71.5				4.9
copepoda[c]														
calanoida	409.1	681.1	5085.7	12655.8	2761.7	8330.3	438.0	7502.3	2530.3	4827.1	898.1	7986.6	13983.8	1441.0
Acartia bermudensis	(5)		(5)			(25)								(30)
A. spinata		(20)				(15)					(10)			
Centropages furcatus										(5)				
Clausocalanus furcatus								(10)	(5)					
Paracalanus aculeatus	(30)	(35)	(95)	(80)	(45)	(15)		(90)	(55)	(30)	(25)	(55)	(15)	(5)
Temora stylifera	(10)				(15)		(50)		(10)	(10)	(35)			
T. turbinata	(55)	(45)		(20)	(40)	(45)	(10)		(10)	(55)	(5)	(45)	(85)	(65)
Undinula vulgaris							(40)		(20)		(25)			

TABLE N-24
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
12 JULY 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
cyclopoida	12.5	31.4	154.9	533.2	104.0	113.6	14.9	238.8	123.4	262.2	41.4	239.7	68.3	19.4
Corycaeus (Corycaeus) clausi	(86)	(22)	(62)	(80)	(90)			(79)	(33)	(94)		(83)	(40)	(50)
C. (C.) speciosus						(17)						(8)		
C. (Onychocorycaeus) latus		(11)	(15)			(17)	(25)		(17)				(60)	
Farranula gracilis			(15)			(17)	(25)	(21)	(33)	(6)	(40)			(50)
Oithona sp.		(33)				(17)					(20)	(8)		
Oncaea mediterranea	(14)	(33)	(8)	(20)	(10)	(33)	(25)		(17)		(40)			
immatures							(25)							
harpacticoida	9.7	10.5		20.1		64.9				11.9	5.9		8.5	
Euterpina sp.	(100)	(100)		(100)		(100)								
Macrosetella gracilis											(100)			
cirripedia														
cypris larvae		2.6	6.5		8.0	16.2								
nauplii (barnacle)	188.6	170.3		30.2	8.0	32.5		19.9	61.7					24.3
cumacea	1.4													
amphipoda														
gammaridea		7.9				16.2								
hyperiidea						16.2				11.9			25.6	
decapoda														
anomura														
megalops						16.2								
zoeae														
hippidae														
Emerita talpoida		2.6						10.0						
paguridea														
paguridae		2.6		30.2		16.2		18.9		23.8			8.5	
porcellanidae					8.0									
unidentified				10.1						11.9				
brachyura														
megalops					8.0					11.9		15.0		
zoeae														
leucosiidae				30.2				10.0						
majidae		2.6		120.7		48.7		49.8		11.9		60.0	8.5	
pinnotheridae														
Dissodactylus sp.	13.9	39.3	19.4	633.8	48.0	211.1		477.6		11.9		164.8	17.1	14.6
Pinnixa sp.	1.4				8.0									
P. chaetopterana	15.2	23.6	6.5	20.1	8.0									
P. sayana								19.9						
Pinnotheres maculatus		2.6		90.6				29.9		11.9				
unidentified		2.6						10.0						
portunidae														
Portunus sp.	1.4			10.1	8.0					35.8		15.0	17.1	

TABLE N-24
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
12 JULY 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
unidentified	2.8			10.1						11.9	5.9			
xanthidae														
Hexapanopeus sp.	4.2			20.1				19.9		11.9				
Panopeus herbstii	1.4													
unidentified	5.5	2.6			8.0	227.4		29.9		71.5				
unidentified	2.8				24.0	16.2		10.0		11.9				
caridea														
postlarvae										11.9				
zoeae	2.8	7.9		40.2		32.5		109.5		59.6	11.8	134.9	76.8	
penaeidea														
penaeidae														
protozoeae										11.9				
sergestidae														
adults														
Lucifer faxoni				30.2	8.0			10.0	20.6		17.7			4.9
protozoeae	2.8	2.6	19.4	140.8	32.0	16.2	14.8	109.5	41.1	452.9	5.9	89.9	25.6	
thalassinidea														
zoeae				30.2				10.0			5.9			
PHORONIDA														
actinotroch larvae	1.4													
BRYOZOA														
cyphonautes larvae				10.1										
CHAETOGNATHA														
Sagitta sp.	2.8		6.5	50.3						23.9	17.7	15.0	17.1	
S. bipunctata											11.8			
S. friderici	2.8			10.1									8.5	
S. helenae											5.9			
S. hispida			6.5								23.6			
unidentified	2.8		25.8	10.1				19.9		11.9	11.8	30.0	25.6	14.6
CHORDATA														
urochordata														
thaliacea														
salpida														
Thalia democratica										11.9				
appendicularia														
Oikopleura sp.	19.4		103.3	110.6	192.1	129.9	196.7	119.4	534.8	345.7	118.2	674.3	605.8	67.9
larvae	1.4													

TABLE N-24
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
12 JULY 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
fish														
eggs			12.9	10.1							11.8			
larvae						16.2		10.0	20.6					
EGGS	194.2	28.8	142.0	482.9	176.1	178.6	63.1	228.9	473.1	59.6	94.5	60.0	93.9	213.5
SUBTOTAL UNDAMAGED	948.8	1042.6	5686.3	15261.6	3497.9	9580.3	746.0	9233.4	3908.5	6519.4	1412.0	9605.2	15016.3	1970.2
DAMAGED														
COELENTERATA														
trachymedusae											5.9			
ARTHROPODA														
crustacea														
copepoda	20.8	73.3	200.1	291.8	216.2	405.9	92.8	298.5	82.3	262.2	260.0	224.8	520.4	393.0
decapoda														
zoeae		2.6												
brachyura														
megalops				10.1									8.5	
zoeae														
majidae								10.0						
pinnotheridae		2.6												
portunidae	1.4													
xanthidae						16.2				11.9				
unidentified	1.4	7.9		10.1		16.2	7.4			11.9		15.0		
caridea														
zoeae						16.2								4.9
penaeidea														
sergestidae														
adults														
Lucifer sp.														4.9
protozoeae								10.0						
CHAETOGNATHA			6.5	10.1		16.2	3.7	10.0	20.6	23.9	5.9			9.7
CHORDATA														
urochordata														
appendicularia	1.4	15.7	19.4		32.0	64.9	29.7	139.3	102.8	95.4	29.5	194.8	93.9	67.9
SUBTOTAL DAMAGED	25.0	102.1	226.0	322.1	248.2	535.6	133.6	467.8	205.7	405.3	301.3	434.6	622.8	480.4

TABLE N-24
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
12 JULY 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
TOTAL UNDAMAGED + DAMAGED	973.8	1144.7	5912.3	15583.7	3746.1	10115.9	879.6	9701.2	4114.2	6924.7	1713.3	10039.8	15639.1	2450.6

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.

[b] Ø = Oblique; S = Surface; B = Bottom.

[c] Values in parentheses represent the relative percentage of copepod species sampled at random and are not to be construed as number per cubic meter.

TABLE N-25

QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
23 AUGUST 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED														
PROTOZOA														
foraminifera						7.6	34.2	6.9	30.7	6.3	6.3		22.2	
tintinnida		3.2												
COELENTERATA														
actinula larvae								6.9						11.1
anthomedusae						7.6								
hydromedusae			5.4			7.6		13.9	3.8	65.7				
Obelia sp.				11.0					15.3	13.1			3.7	
leptomedusae					5.4									
siphonophora			21.5	77.1	42.9	60.9	4.9	27.7		39.4	6.3	25.9		55.7
MOLLUSCA														
gastropoda														
larvae	27.5	28.6		22.0	91.1	121.8	73.3	13.9	26.8	52.6	31.6	38.8	99.8	55.7
thecosomata (pteropoda)														
Cresois sp.							4.9							
pelecypoda														
larvae	1.7	3.2		11.0	32.1	7.6							3.7	
POLYCHAETA														
adults	1.7													
Tomopteris sp.												12.9		
intermediates	10.3			11.0	32.1	22.8	14.7	6.9	15.3	39.4		25.9		11.1
larvae		6.3			5.4						6.3			
ARTHROPODA														
arachnida														
hydracarina									3.8					
crustacea														
nauplii	3.4				112.5	30.5				13.1			7.4	
cladocera														
Evadne sp.	1.7		5.4		16.1	15.2	48.9	13.9	111.2	78.9	9.5	12.9	181.1	
Penilia sp.	5.2				117.9	517.7	29.3	367.6	3.8	355.0	3.2	271.9	11.1	323.0
unidentified	10.3			11.0	112.5	152.3	19.6	242.8	11.5	157.8		220.1	203.3	155.9
ostracoda														
Conchoecia elegans														44.5
copepoda[c]														
calanoida	158.2	85.9	1473.2	1662.8	1435.9	3114.1	630.5	804.6	1536.6	2222.3	685.6	2071.4	1944.0	1035.6
Acartia bermudensis	(10)					(20)			(10)					
A. spinata	(10)	(36)	(5)	(15)	(15)	(25)	(30)	(5)			(5)			

TABLE N-25
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
23 AUGUST 1977

	Station and depth[b]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
Calanopia americana					(5)	(5)								
Centropages furcatus								(10)		(20)				(5)
Clausocalanus furcatus								(20)			(5)			
Eucalanus attenuatus												(15)		(10)
E. monachus				(5)										
Labidocera aestiva	(25)													
Nannocalanus minor									(5)					
Paracalanus aculeatus	(35)	(64)	(45)	(45)	(70)	(40)	(45)	(50)		(15)	(20)	(30)	(70)	(55)
Temora stylifera			(5)			(10)								(5)
T. turbinata	(20)		(45)	(35)			(25)	(15)	(85)	(60)	(70)	(55)	(30)	(25)
Undinula vulgaris					(10)									
unidentified										(5)				
cyclopoida	141.1	60.5	365.6	649.7	1055.5	1393.3	738.0	478.6	260.6	1091.4	262.3	2097.3	432.4	1213.8
Corycaeus(Corycaeus) clausi	(6)		(10)		(20)	(10)		(35)	(5)		(5)		(20)	
C.(C.) speciosus	(13)	(30)		(10)	(20)	(35)		(15)	(5)	(10)	(5)	(30)		(25)
C.(Onychocorycaeus) latus	(47)	(30)	(60)	(65)	(45)	(55)	(70)	(10)	(50)	(55)	(85)	(60)	(55)	(40)
Farranula gracilis			(10)	(15)	(5)									
F. rostrata		(10)	(20)											
Oithona sp.	(20)	(30)												
O. plumifera	(13)							(10)	(10)	(5)	(5)	(10)		
Oncaea mediterranea				(10)	(10)		(30)	(30)	(30)	(30)			(25)	(35)
harpacticoida	6.9	15.9	5.4	22.0	133.9	99.0	14.7	34.7	7.7	92.0		103.6	7.4	22.3
Euterpina sp.	(50)	(50)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)		(100)	(100)	(100)
Harpacticus sp.	(50)	(50)												
cirripedia														
cypris larvae	8.6	22.2			10.7	60.9		6.9					3.7	11.1
nauplii (barnacle)	394.0	286.4			150.0	60.9	4.9		7.7		3.2	12.9	3.7	
stomatopoda														
protozoeae									3.8		3.2			
zoeae												12.9		
cumacea						7.6								
isopoda						15.2								
amphipoda														
hyperiidea												25.9		
decapoda														
anomura														
zoeae														
albunaeidae						7.6								
galatheidae										13.1				
paguridea														
paguridae					5.4									

TABLE N-25
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
23 AUGUST 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
porcellanidae							4.9					12.9		
unidentified						7.6								
brachyura														
megalops												25.9		
zoeae					10.7	22.8	4.9			13.1				
grapsidae														
Sesarma sp.														11.1
leucosiidae	1.7		10.7	22.0	10.7	7.6			19.2		3.2	12.9	3.7	11.1
majidae	1.7			77.1	16.1	15.2	9.8	34.7	3.8		3.2	220.1	3.7	
ocypodidae														
Ocypode quadrata											9.5			
Uca sp.		3.2			10.7	45.7								11.1
pinnotheridae														
Dissodactylus sp.	10.3	6.3	5.4		5.4	22.8	4.9	6.9		52.6	3.2	90.6	3.7	11.1
Pinnixa sp.					5.4									
P. chaetopterana						22.8								
Pinnotheres maculatus	22.4	9.5		22.0	32.2	129.4		6.9				64.7		11.1
unidentified												12.9		
portunidae														
Callinectes sp.											6.3		3.7	
Portunus sp.		3.2			42.9	7.6	14.7	13.9	15.3	13.1	15.8			
unidentified			10.7	22.0	5.4		29.3		42.7	26.3	19.0		44.4	
raninidae										13.1		12.9		
xanthidae														
Hexapanopous sp.						7.6						12.9		
Neopanope packardii						7.6					3.2			
unidentified						15.2						12.9		
caridea														
zoeae				11.0	16.1	22.8	4.9	20.8		39.4	6.3	38.8	7.4	22.3
penaeidea														
penaeidae														
protozoeae					10.7	45.7						12.9		
zoeae														
Sicyonia sp.												12.9		
Xiphopenaeus sp.										13.1		12.9		
sergestidae														
adults														
Lucifer faxoni	1.7			11.0		38.1	19.6	13.9	126.5	157.8		388.4	3.7	33.4
protozoeae	106.6	38.2		66.1	214.3	951.8		6.9	3.8	52.6	3.2	207.1		44.5
zoeae														
Lucifer sp.	1.7					30.4		6.9		13.1		38.8		11.1

TABLE N-25
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
23 AUGUST 1977

	Station and depth[b]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
thalassinidea														
zoeae				22.0		15.2	5.9					51.8		11.1
BRYOZOA														
cyphonautes larvae					5.4					13.1				
CHAETOGNATHA														
Pterosagitta draco	1.7													
Sagitta sp.	1.7			11.0	21.4	45.7	29.3		69.0	105.2	3.2	12.9	44.4	33.4
S. enflata								6.9		39.4		12.9		44.5
S. friderici					5.4		4.9	6.9	7.7				3.7	11.1
S. helenae							4.9			13.1			7.4	
unidentified	6.9		10.7	11.0		30.4	24.4		3.8	26.3	6.3	12.9	25.9	11.1
CHORDATA														
urochordata														
thaliacea														
doliolida										13.1				
Doliolum(Doliolina) intermedium					5.4	7.6		6.9		26.3				22.3
appendicularia										355.0	3.2			
Oikopleura sp.	24.1		317.2	605.7	176.8	631.9	83.1	222.0				517.8	51.7	345.2
larvae		22.3												
fish														
eggs			10.8	22.0	10.7	22.8	14.7		11.5	78.9	12.6		59.1	11.1
larvae					16.1	159.9	9.8	69.3		39.4		129.4		33.4
EGGS	13.7	12.7	16.1	11.0	26.8	38.0	39.1	27.7	11.5			12.9	40.7	33.4
UNIDENTIFIED DEVELOPMENTAL STAGES							4.9							
UNIDENTIFIED.						7.6								
SUBTOTAL UNDAMAGED	964.8	607.6	2258.1	3391.5	4008.0	8070.0	1930.9	2475.9	2364.4	5337.8	1115.7	6873.5	3226.7	3663.2
DAMAGED														
ARTHROPODA														
crustacea														
cladocera					5.4	129.4	19.6	76.3	26.3	26.3	38.8	38.8		22.3
copepoda	36.1	76.4	112.9	297.3	69.6	182.7	44.0	41.6	53.7	223.5	60.1	323.7	48.1	178.2
amphipoda														
hyperiidea						7.6								

TABLE N-25
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
23 AUGUST 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
decapoda														
anomura														
porcellanidae														
zoeae											3.2			
brachyura														
zoeae		3.2	16.1	11.0	5.4	45.7	19.6		19.2	13.1	9.5	12.9	3.7	
majidae												25.9		
pinnotheridae						15.2								
portunidae									11.5					
xanthidae											3.2			
caridea														
zoeae					10.7		9.8						3.7	
penaeidea														
sergestidae														
adults														
Lucifer sp.							4.9		7.7	13.1				
protozoeae	1.7	3.2				7.6								11.1
CHAETOGNATHA			5.4			15.2	5.9	20.8	7.7	92.0		64.7	55.4	11.1
CHORDATA														
urochordata														
thaliacea														
doliolida				11.0		7.6								
appendicularia	3.4	12.7	21.5	154.2	5.4	137.1	9.8	34.7	3.8	78.9	6.3	51.8	14.8	11.1
fish														
larvae								20.8			3.2	12.9		
SUBTOTAL DAMAGED	41.2	95.5	155.9	473.5	96.5	548.1	112.6	194.2	103.6	446.9	85.5	530.7	125.7	233.8
TOTAL UNDAMAGED + DAMAGED	1006.0	703.1	2414.0	3865.0	4104.5	8618.1	2043.5	2670.1	2468.0	5784.7	1201.2	7404.2	3352.4	3897.0

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.

[b] Ø = Oblique; S = Surface; B = Bottom.

[c] Values in parentheses represent the relative percentage of copepod species sampled at random and are not to be construed as number per cubic meter.

TABLE N-26

QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
13 SEPTEMBER 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED														
PROTOZOA														
foraminifera		4.9	5.1		13.3		4.1		5.2	6.2			4.8	
COELENTERATA														
actinula larvae						4.8					4.8			
hydromedusae														
Obelia sp.			5.1											
unidentified			5.1					10.1						
MOLLUSCA														
gastropoda														
larvae	230.8	32.4	102.4	87.6	155.3	128.3	24.4	50.5	15.6		4.8	41.9	38.6	33.6
pelecypoda														
larvae	40.3		5.1	29.2	115.4	38.0						16.8		6.7
POLYCHAETA														
adults				8.3								8.4		6.7
intermediates			10.2	8.3									4.8	
larvae					22.2									
ARTHROPODA														
crustacea														
nauplii	2.7		10.3								9.5		4.8	
cladocera														
Evadne sp.	1.3	1.6	30.7			4.8		10.1					53.1	
Penilia sp.					13.3	4.8		20.2		24.9		16.7		6.7
unidentified		1.6					12.2					8.4	4.8	
copepoda[c]														
calanoida	248.3	199.6	1470.0	1555.1	2045.6	2190.2	2627.0	2555.5	2184.7	1350.6	878.5	3795.6	2215.4	3536.8
Acartia bermudensis		(60)	(25)	(15)		(10)								
A. spinata	(40)	(40)	(25)		(20)		(5)							
Centropages furcatus								(5)		(5)	(5)			
Labidocera aestiva	(30)		(25)	(10)		(10)		(10)				(5)		
Paracalanus aculeatus	(20)		(25)	(70)	(80)	(55)	(40)	(30)	(55)	(40)	(60)	(55)	(45)	(40)
Temora stylifera										(10)				
T. turbinata	(10)			(5)		(25)	(55)	(55)	(45)	(45)	(35)	(40)	(55)	(60)
cyclopoida	33.5	63.3	174.2	129.3	213.0	204.3	146.4	414.1	67.4	280.8	167.1	527.8	502.0	335.6
Corycaeus (Corycaeus) clausi					(17)					(5)		(10)		(20)
C. (C.) speciosus	(13)		(12)		(6)	(25)	(10)	(24)				(10)	(5)	
C. (Onychocorycaeus) latus	(44)	(60)	(71)	(95)	(50)	(75)	(50)	(77)	(46)	(95)	(60)	(80)	(90)	(80)
Farranula gracilis			(6)				(40)		(18)				(5)	

TABLE N-26
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
13 SEPTEMBER 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
Oithona sp.		(30)	(12)	(5)	(11)									
O. plumifera	(19)				(17)									
Oncaea mediterranea	(19)								(36)		(10)			
Saphirella sp.	(6)	(10)												
immatures											(30)			
harpacticoida	45.6	331.1	41.0	58.3	559.1	527.3	16.3	80.8		49.8	19.1	108.9	9.7	161.1
Euterpina sp.	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)		(100)	(100)	(100)	(100)	(100)
cirripedia														
cypris larvae	14.8	3.3		16.7	17.7	33.3	4.1						4.8	
nauplii (barnacle)	259.0	543.6	20.5	8.3	124.2	61.8		30.3				50.3		
stomatopoda														
protozoeae							4.1							
cumacea		1.6												
tanaidacea		1.6												
isopoda	1.3										4.8			
amphipoda														
caprellida		1.6												
gammaridea	1.3	3.2												
hyperiidea														6.7
decapoda														
zoeae				12.5		4.8								
anomura														
zoeae														
hippidae														
Emerita talpoida												8.4		
paguridea														
diogenidae										6.2				
paguridae												8.4		6.7
porcellanidae									5.2		4.8			
brachyura														
megalops						14.3			5.2					20.1
zoeae														
grapsidae														
Sesarma sp.						14.3								
leucosiidae			5.1					10.1		12.5		8.4	4.8	6.7
majidae	1.3							10.1		6.2	4.8	25.1		
ocypodidae														
Uca sp.		3.3	25.6	12.5	26.6	57.0					4.8	8.4		6.7
pinnotheridae														
Dissodactylus sp.	4.0	4.9	5.1	33.3	4.4	28.5	12.2	10.1			4.8	8.4	19.3	13.4
Pinnixa sp.	1.3													

TABLE N-26
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
13 SEPTEMBER 1977

	Station and depth[b]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
P. chaetopterana	1.3	1.6		4.2	4.4									
Pinnotheres maculatus	10.8	3.3	5.1	16.7	48.8	133.0				6.2		16.8	19.3	33.5
unidentified						4.8								6.7
portunidae														
Callinectes sp.	1.3	3.2												
Portunus sp.			35.9	4.2			28.5	20.2	5.2	31.1	33.4		19.3	
unidentified	1.3	1.6	5.1	66.7	4.4	4.8	24.4	10.1	5.2	6.2	9.5	16.8	9.7	6.7
raninidae										6.2				
xanthidae														
Hexapanopeus sp.	1.3				8.9			10.1						
Neopanope sayi			5.1											
Panopeus herbstii	4.0							10.1						
unidentified			5.1	4.2	4.4	42.8						25.1		33.6
unidentified	2.7	1.6	25.6		4.4		8.1							
caridea														
postlarvae			5.1											
zoeae			10.2		4.4	9.5	28.5	30.3			9.5	16.7	9.7	13.4
thalassinidea														
zoeae												25.1	14.5	20.1
penaeidea														
penaeidae														
protozoeae					4.4							8.4		
zoeae														
Sicyonia sp.										6.2				
sergestidae														
adults														
Lucifer faxoni		1.6	10.3	33.3	13.3	9.5		30.3	5.2	6.2		16.7	19.3	6.7
protozoeae	21.5	3.3	71.7	262.6	62.1	52.3	4.1	60.6		37.4	4.8	125.7	9.7	87.3
zoeae														
Lucifer sp.		1.6		20.8	13.3	23.8		40.4		37.4		25.1	4.8	
BRYOZOA														
cyphonautes larvae										6.2				
CHAETOGNATHA														
Sagitta sp.	1.3					19.0	4.1		26.0	12.5	9.5	8.4	19.3	13.4
S. friderici													9.7	
S. helenae									5.2				14.5	
S. hispida							4.1	10.1	10.4	18.7		8.4	4.8	20.1
unidentified	1.3		20.5	4.2	8.9	19.0	32.5	10.1			4.8	16.7		6.7
ECHINODERMATA														
larvae				4.2	13.3		12.2			18.7		16.7	9.7	26.8

TABLE N-26
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
13 SEPTEMBER 1977

	Station and depth[b]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
CHORDATA														
urochordata														
thaliacea														
doliolida														
Doliolum(Doliolina) intermedium										6.2				
appendicularia														
Oikopleura sp.	17.4		51.2	12.5	88.8	66.5	56.9	212.1	15.6	143.1	109.8	360.3	197.9	422.8
larvae	1.3	1.6												
fish														
eggs						19.0		20.2	5.2	12.4	14.3		111.0	120.8
larvae		1.6			13.3	9.5	61.0	30.3		6.2		8.4		6.7
EGGS	12.1	9.7	5.1	12.5	13.3	14.3	24.4	30.3	10.4	18.7	4.8	33.5	4.8	13.4
UNIDENTIFIED											4.8			
SUBTOTAL UNDAMAGED	963.1	1228.3	2171.5	2405.5	3620.5	3744.3	3139.6	3727.1	2371.7	2116.8	1313.0	5370.7	3344.9	4986.2
DAMAGED														
COELENTERATA														
hydromedusae											4.8			
ARTHROPODA														
cladocera													4.8	
copepoda	24.1	128.2	87.1	58.3	79.9	76.0	85.4	70.7	41.5	87.1	81.2	176.0	33.8	80.5
decapoda														
zoeae										6.2				
brachyura														
zoeae														
ocypodidae					4.4									
pinnotheridae	2.7			4.2		4.8		10.1						
portunidae				4.2								8.4		
xanthidae	1.3	4.9				9.5								
unidentified		6.5				4.8						8.4		6.7
caridea														
zoeae							4.1							
penaeidea														
penaeidae														
zoeae				4.2										
sergestidae														
adults														
Lucifer sp.			5.1		4.4			10.1				25.1		

TABLE N-26
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
13 SEPTEMBER 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
protozoeae					4.4									
zoeae														
Lucifer sp.								10.1						
CHAETOGNATHA			10.2		4.4	4.8	16.3	10.1	20.8	24.9	23.9	58.7	19.3	53.7
CHORDATA														
urochordata														
thaliacea										12.4				
appendicularia		4.9	5.1			19.0	4.1	50.5		49.8		33.5	14.5	47.0
fish														
larvae										6.2				
SUBTOTAL DAMAGED	28.1	144.5	107.5	70.9	97.5	118.9	109.9	161.6	62.3	186.6	109.9	310.1	72.4	187.9
TOTAL UNDAMAGED + DAMAGED	991.2	1372.8	2279.0	2476.4	3718.0	3863.2	3249.5	3888.7	2434.0	2303.4	1422.9	5680.8	3417.3	5174.1

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.

[b] Ø = Oblique; S = Surface; B = Bottom.

[c] Values in parentheses represent the relative percentage of copepod species sampled at random and are not to be construed as number per cubic meter.

TABLE N-27

QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
11 OCTOBER 1977[b]

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED														
COELENTERATA														
actinula larvae							10.0							
medusae														
hydromedusae														
Liriope sp.									2.6				2.1	
Obelia sp.				2.8									6.2	
Stomotoca sp.										2.7				
unidentified	1.8		23.5	53.7	22.7	10.7	109.6		10.5	10.8	8.9	14.9	2.1	29.2
unidentified												7.4		
siphonophora												3.7		
NEMATODA		2.7												
MOLLUSCA														
gastropoda														
larvae	107.2	53.8	29.3	50.9	53.8	39.4	23.2		2.6	5.4	23.6		4.1	26.0
pelecypoda														
larvae	41.1	13.4	8.8	11.3	8.5	3.6	10.0	2.9				7.4		
POLYCHAETA														
intermediates	1.8	2.7			11.3	3.6	3.3		2.6				8.2	3.2
larvae	284.0	69.9	11.7	33.9	144.4	32.2	83.0	2.9	5.3	2.7	8.9	11.1	4.1	26.0
ARTHROPODA														
crustacea														
nauplii	10.7		35.2	8.5	25.5	21.5	39.8	8.7	10.5	8.1	14.8	7.4	20.5	29.2
prenauplii														6.5
cladocera														
Evadne sp.	5.4			2.8	2.8	3.6	13.3		5.3				2.1	
Penilia sp.	151.8	37.6	17.6	228.8	388.1	996.1	929.5	310.3	63.3	225.6	153.4	838.8	74.0	622.9
unidentified		2.7		25.4				101.5	68.6		156.4	144.7		61.6
copepoda[d]														
calanoida	812.6	744.4	506.8	308.0	940.4	1150.2	806.7	136.3	110.8	107.5	224.2	501.1	306.3	574.2
Acartia spinata		(5)									(10)			
Centropages furcatus										(5)		(15)		(15)
Labidocera aestiva		(5)	(15)					(5)		(5)	(15)		(10)	
Paracalanus aculeatus	(40)	(70)	(55)	(65)	(65)	(65)	(45)	(35)	(35)	(45)	(45)	(70)	(25)	(35)
Temora stylifera														(5)
T. turbinata	(60)	(20)	(30)	(35)	(35)	(35)	(55)	(60)	(65)	(45)	(30)	(15)	(65)	(45)
cyclopoida	100.0	129.0	32.2	39.6	249.2	301.0	292.1	75.4	37.0	77.9	112.1	141.1	67.8	152.5
Corycaeus sp.	(15)			(38)				(38)	(30)		(11)	(11)	(13)	

TABLE N-27
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
11 OCTOBER 1977[b]

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
C.(Corycaeus) clausi			(20)	(25)	(25)				(10)			(17)		(20)
C.(C.) speciosus	(5)					(45)	(30)		(20)	(10)	(11)		(19)	
C.(Onychocorycaeus) latus	(15)		(50)	(38)	(70)	(55)	(70)	(62)	(30)	(85)	(44)	(56)	(69)	(80)
Farranula gracilis	(10)													
Oithona sp.	(55)	(100)	(20)						(10)	(5)	(33)	(17)		
Oncaea mediterranea			(10)		(5)									
harpacticoida	10.7	137.0		2.8	11.3	7.2	19.9	5.8	2.6	5.4		14.9	2.1	3.2
Euterpina sp.	(100)	(95)		(100)	(100)	(100)	(100)	(100)	(100)	(100)		(100)	(100)	(100)
Macrosetella gracilis		(5)												
cirripedia														
cypris larvae	10.7	8.1												
nauplii (barnacle)	1643.1	1085.7	17.6	48.0	53.8	35.8	39.8	17.4	7.9	45.6	3.0	111.4	32.9	55.2
isopoda		2.7												
decapoda														
larvae												3.7		
anomura														
paguridea														
paguridae														
zoeae	1.8													
brachyura														
megalops						3.6								
zoeae														
leucosiidae	1.8					3.6				2.7				
pinnotheridae														
Dissodactylus sp.	1.8				2.8	3.6							2.1	
Pinnixa sp.	1.8													
P. chaetopterana		8.1				10.7								
Pinnotheres maculatus	9.0	8.1		2.8	5.7	50.1		8.7		5.4		18.6		35.7
portunidae														
Portunus sp.				2.8					5.3				2.1	3.2
unidentified													2.1	
raninidae						3.6							2.1	
xanthidae														
Hexapanopeus sp.												3.7		
unidentified	1.8	5.4	2.9											
caridea														
zoeae					2.8	10.7	6.7				5.9	3.7		9.7
penaeidea														
penaeidae														
protozoeae					5.7	10.7	3.3							6.5
zoeae														
Sicyonia sp.							3.3							

TABLE N-27
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
11 OCTOBER 1977[b]

Taxon	Station and depth[c]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
Xiphopenaeus sp.						3.6		2.9						
sergestidae														
adults														
Lucifer faxoni					19.8							3.7		
protozoeae	89.3	61.8	102.5	8.5	56.7	107.5	26.5	5.8	5.3	2.7	11.8	33.4	20.5	58.4
zoeae														
Lucifer sp.	10.7		8.8	5.7	5.7	39.4	6.6			2.7	3.0	11.1		29.2
BRYOZOA														
cyphonautes larvae			2.9	8.5	11.3	21.5	6.7		5.3	5.4	3.0	11.1	6.2	38.9
CHAETOGNATHA														
Krohnitta sp.						7.1								
Sagitta sp.					5.7		3.3							6.5
S. friderici						3.6	3.3							
S. helenae														3.2
S. hispida					11.3									3.2
unidentified			11.7	19.8	5.7	7.1	10.0		18.5	10.8	14.8	14.8	4.1	6.5
ECHINODERMATA														
larvae	7.2	5.4	38.1	630.1	277.6	258.0	597.5	229.1	1115.8	655.4	303.9	308.1	57.6	421.7
CHORDATA														
urochordata														
thaliacea			2.9											
appendicularia														
Oikopleura sp.	5.4		14.7	2.8	39.7	39.4	13.3	2.9	5.3	13.4	5.9	7.4	8.2	19.5
larvae		2.7												
EGGS	19.7	26.9	2.9	2.8	11.3		3.3		5.3	8.1	8.9	7.4	8.2	3.2
UNIDENTIFIED WORMS AND THEIR DEVELOPMENTAL STAGES												7.4		
UNIDENTIFIED					2.8					2.7				
SUBTOTAL UNDAMAGED	3331.2	2408.1	870.1	1500.3	2376.4	3188.7	3064.0	910.6	1490.4	1201.0	1062.5	2238.0	645.7	2235.1

TABLE N-27
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
2 NOVEMBER 1977[b]

	Station and depth[c]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
DAMAGED														
ARTHROPODA (continued)														
crustacea														
cladocera	21.4			39.6	22.7	265.1	146.0	87.0	42.2	48.4	188.8	304.3		146.0
copepoda	53.6	48.4	11.7	36.8	48.2	96.7	89.6	43.5	2.6	10.8	32.5	96.5	4.1	77.9
brachyura														
zoeae														
xanthidae	1.8	2.7												
unidentified	1.8											3.7		3.2
caridea														
zoeae						3.6								
penaeidea														
penaeidae														
zoeae														3.2
sergestidae														
adults														
Lucifer sp.					5.7	3.6		2.9						3.2
protozoeae	3.6			5.7										
zoeae														
Lucifer sp.						3.6								6.5
CHAETOGNATHA				5.7	5.7	14.3						3.7	2.1	9.7
CHORDATA														
urochordata														
appendicularia		2.7			5.7	14.3								
SUBTOTAL DAMAGED	82.2	53.8	11.7	87.8	88.0	401.2	235.6	133.4	44.8	59.2	221.3	408.2	6.2	249.7
TOTAL UNDAMAGED + DAMAGED	3413.4	2461.9	881.8	1588.1	2464.4	3489.9	3299.6	1044.0	1535.2	1260.2	1283.8	2646.2	651.9	2484.8

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.

[b] Stations 11 and 12 collected 11 OCT, all other stations collected 19 OCT.

[c] Ø = Oblique; S = Surface; B = Bottom.

[d] Values in parentheses represent the relative percentage of copepod species sampled at random and are not to be construed as number per cubic meter.

TABLE N-28

QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
2 NOVEMBER 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED														
PROTOZOA														
foraminifera					126.5	121.2	5.0							
tintinnida											5.1			
COELENTERATA														
medusae														
anthomedusae	0.9			2.5	9.7									14.9
hydromedusae	1.9						5.0	6.6			20.6	28.4	4.4	44.5
Obelia sp.	3.7					5.1			4.0		51.4			
unidentified							5.0							
siphonophora					9.7							4.1		
NEMATODA					9.7									
MOLLUSCA														
gastropoda														
larvae	41.7	34.7	11.0	15.0	116.8	151.5	14.9	53.0	12.0	76.7	10.3	85.2	92.0	51.9
thecosomata (pteropoda)									16.0					
pelecypoda														
larvae	50.1	52.1	2.8	16.3	155.7	96.0	5.0	165.6	64.0	281.2		178.5	17.5	29.7
POLYCHAETA														
adults				1.3				6.6	8.0	12.8		12.2	13.1	
intermediates	3.7	4.3			116.8	30.3	5.0	13.3	16.0	57.5	20.6	40.6	8.8	37.1
larvae	497.0	229.8	22.1	12.5	2462.8	803.0	24.8	172.2	76.0	249.2	1218.8	434.1	21.9	341.5
ARTHROPODA														
crustacea														
prenauplii						10.1								
nauplii		4.3	2.8	1.3	29.2	166.7		6.6	68.0	12.8	20.6	16.2		
cladocera														
Evadne sp.	3.7		5.5	7.5	214.1	237.4	168.6	6.6	243.8	57.5	591.4	81.2	249.6	52.0
Penilia sp.									4.0		10.3	8.1	8.8	7.4
unidentified								6.6						
ostracoda					9.7					6.4				
copepoda[c]														
calanoida	317.1	264.6	654.1	199.3	1761.9	1813.0	570.2	616.1	1043.2	1041.7	1846.2	1172.4	770.8	2494.5
Acartia bermudensis			(20)			(15)	(21)			(5)			(25)	
A. spinata	(15)	(25)												
Centropages furcatus				(5)		(10)	(21)					(15)		(10)
Clausocalanus furcatus		(10)												

TABLE N-28
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
2 NOVEMBER 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
Labidocera aestiva	(5)		(15)	(25)		(5)		(10)		(15)	(5)	(5)	(10)	(15)
Paracalanus aculeatus	(55)	(35)	(40)	(30)	(60)		(21)	(65)	(100)	(55)	(65)	(40)	(30)	(35)
Pseudodiaptomus sp.					(5)									
Temora turbinata	(5)	(30)	(25)	(40)	(35)	(70)	(37)	(25)		(25)	(30)	(40)	(35)	(40)
cyclopoida	17.6	13.0	66.2	42.6	223.9	101.0	59.5	165.6	127.9	102.2	329.1	133.9	122.6	267.3
Corycaeus sp.			(13)					(6)						(11)
C.(Corycaeus) clausi		(33)		(35)								(5)	(6)	(6)
C.(C.) speciosus			(7)		(33)	(83)	(20)	(59)	(5)	(17)	(10)	(25)	(29)	(17)
C.(Onychocorycaeus) latus	(82)	(67)		(65)	(67)	(17)	(40)	(35)	(15)	(58)	(65)	(55)	(65)	(67)
Oithona sp.	(9)		(80)				(40)		(80)	(25)	(25)	(15)		
Saphirella sp.	(9)													
harpacticoida	67.7	195.2	33.1	75.2	662.0	207.1	9.9	72.9	95.9	108.6	205.7	186.6	17.5	237.6
Euterpina sp.	(90)	(15)	(100)	(100)	(100)	(95)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
unidentified	(10)	(85)				(5)								
cirripedia														
cypris larvae	7.4	17.3		2.5		20.2		39.7		32.0		28.4		14.9
nauplii (barnacle)	786.3	754.6	16.6	36.4	477.0		19.8	410.8	24.0	396.2	190.3	1030.4	48.2	653.3
cumacea				1.3		5.1								
amphipoda														
garmaridea	1.9					10.1								
decapoda														
anomura														
zoeae														
paguridea											5.1			
diogenidae										6.4				
paguridae														
porcellanidae								19.9	4.0		5.1			
brachyura														
zoeae														7.4
leucosiidae								6.6						
majidae		4.3							4.0			4.1		7.4
ocypodidae														
Uca sp.														7.4
pinnotheridae														
Dissodactylus sp.		4.3		2.5	9.7	5.1		19.9		19.2	5.1	20.3	4.4	
Pinnotheres maculatus				2.5		5.1		6.6		19.2				14.9
unidentified								6.6						
portunidae														
Callinectes sp.	0.9													
Portunus sp.			11.0					6.6			5.1		4.4	
unidentified	0.9		8.3				9.9	19.9			41.1	16.2		

TABLE N-28

QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
2 NOVEMBER 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED														
PROTOZOA														
foraminifera					126.5	121.2	5.0							
tintinnida											5.1			
COELENTERATA														
medusae														
anthomedusae	0.9			2.5	9.7									14.9
hydromedusae	1.9						5.0	6.6			20.6	28.4	4.4	44.5
Obelia sp.	3.7					5.1			4.0		51.4			
unidentified							5.0							
siphonophora					9.7							4.1		
NEMATODA					9.7									
MOLLUSCA														
gastropoda														
larvae	41.7	34.7	11.0	15.0	116.8	151.5	14.9	53.0	12.0	76.7	10.3	85.2	92.0	51.9
thecosomata (pteropoda)									16.0					
pelecypoda														
larvae	50.1	52.1	2.8	16.3	155.7	96.0	5.0	165.6	64.0	281.2		178.5	17.5	29.7
POLYCHAETA														
adults				1.3				6.6	8.0	12.8		12.2	13.1	
intermediates	3.7	4.3			116.8	30.3	5.0	13.3	16.0	57.5	20.6	40.6	8.8	37.1
larvae	497.0	229.8	22.1	12.5	2462.8	803.0	24.8	172.2	76.0	249.2	1218.8	434.1	21.9	341.5
ARTHROPODA														
crustacea														
prenauplii						10.1								
nauplii		4.3	2.8	1.3	29.2	166.7		6.6	68.0	12.8	20.6	16.2		
cladocera														
Evadne sp.	3.7		5.5	7.5	214.1	237.4	168.6	6.6	243.8	57.5	591.4	81.2	249.6	52.0
Penilia sp.									4.0		10.3	8.1	8.8	7.4
unidentified								6.6						
ostracoda					9.7					6.4				
copepoda[c]														
calanoida	317.1	264.6	654.1	199.3	1761.9	1813.0	570.2	616.1	1043.2	1041.7	1846.2	1172.4	770.8	2494.5
Acartia bermudensis			(20)			(15)	(21)			(5)			(25)	
A. spinata	(15)	(25)												
Centropages furcatus				(5)		(10)	(21)					(15)		(10)
Clausocalanus furcatus		(10)												

TABLE N-28
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
2 NOVEMBER 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
Labidocera aestiva	(5)		(15)	(25)		(5)		(10)		(15)	(5)	(5)	(10)	(15)
Paracalanus aculeatus	(55)	(35)	(40)	(30)	(60)		(21)	(65)	(100)	(55)	(65)	(40)	(30)	(35)
Pseudodiaptomus sp.					(5)									
Temora turbinata	(5)	(30)	(25)	(40)	(35)	(70)	(37)	(25)		(25)	(30)	(40)	(35)	(40)
cyclopoida	17.6	13.0	66.2	42.6	223.9	101.0	59.5	165.6	127.9	102.2	329.1	133.9	122.6	267.3
Corycaeus sp.			(13)					(6)						(11)
C.(Corycaeus) clausi		(33)		(35)								(5)	(6)	(6)
C.(C.) speciosus			(7)		(33)	(83)	(20)	(59)	(5)	(17)	(10)	(25)	(29)	(17)
C.(Onychocorycaeus) latus	(82)	(67)		(65)	(67)	(17)	(40)	(35)	(15)	(58)	(65)	(55)	(65)	(67)
Oithona sp.	(9)		(80)				(40)		(80)	(25)	(25)	(15)		
Saphirella sp.	(9)													
harpacticoida	67.7	195.2	33.1	75.2	662.0	207.1	9.9	72.9	95.9	108.6	205.7	186.6	17.5	237.6
Euterpina sp.	(90)	(15)	(100)	(100)	(100)	(95)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
unidentified	(10)	(85)				(5)								
cirripedia														
cypris larvae	7.4	17.3		2.5		20.2		39.7		32.0		28.4		14.9
nauplii (barnacle)	786.3	754.6	16.6	36.4	477.0		19.8	410.8	24.0	396.2	190.3	1030.4	48.2	653.3
cumacea				1.3		5.1								
amphipoda														
gammaridea	1.9					10.1								
decapoda														
anomura														
zoeae														
paguridea											5.1			
diogenidae										6.4				
paguridae														
porcellanidae								19.9	4.0		5.1			
brachyura														
zoeae														
leucosiidae								6.6						7.4
majidae		4.3							4.0			4.1		7.4
ocypodidae														
Uca sp.														7.4
pinnotheridae														
Dissodactylus sp.		4.3		2.5	9.7	5.1		19.9		19.2	5.1	20.3	4.4	
Pinnotheres maculatus				2.5		5.1		6.6		19.2				14.9
unidentified								6.6						
portunidae														
Callinoctes sp.	0.9													
Portunus sp.			11.0					6.6			5.1		4.4	
unidentified	0.9		8.3				9.9	19.9			41.1	16.2		

TABLE N-28
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
2 NOVEMBER 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
xanthidae														
Hexapanopeus sp.												4.1		
Neopanope sp.						5.1								
Panopeus sp.				2.5							5.1			
unidentified	0.9													
unidentified						5.1		6.6		19.2	5.1			7.4
caridea														
zoeae				1.3	9.7	15.2	9.9		8.0		41.1	16.2		
penaeidea														
penaeidae														
protozoeae		4.3										8.1		
zoeae														
Xiphopenaeus sp.														7.4
sergestidae														
adults														
Lucifer faxoni			5.5	3.8		5.1		33.2	16.0			8.1		14.9
protozoeae	3.7		5.5	12.6	48.7	50.5	5.0	59.6	8.0	25.6	30.8	77.1	4.4	215.3
zoeae														
Lucifer sp.			2.8	2.5		10.1				25.6		12.2		7.4
PHORONIDA														
actinotroch larvae												12.2		14.8
BRYOZOA														
cyphonautes larvae	26.9	8.7		2.5	9.7	5.1				12.8	10.3	32.5	8.8	7.4
CHAETOGNATHA														
Sagitta sp.				2.5	29.2	5.1	24.8		8.0	12.8	25.7	12.2	17.5	14.9
S. enflata							5.0							
S. friderici						5.1								
S. helenae										6.4		4.1	8.7	
S. hispida								6.6						
Spadolla sp.										6.4				
unidentified	0.9		19.3		29.2	20.2	218.2	6.6	24.0	12.8	25.7	12.2	96.3	14.9
ECHINODERMATA														
immatures					9.7					6.4		12.2		
larvae	25.0	21.7	19.3	110.3	311.5	40.4	19.8	477.0	655.5	600.7	92.6	466.5	105.1	556.8
CHORDATA														
urochordata														
appendicularia														
Oikopleura sp.	1.9		527.2	8.8	331.0	55.6	922.2	33.1	119.9	57.5	56.6	186.6	626.3	237.6

TABLE N-28
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
2 NOVEMBER 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
CHORDATA (continued)														
larvae		17.3			9.7		5.0							
fish														
eggs				1.3			5.0							7.4
EGGS	0.9			2.5			5.0	6.6	16.0	6.4	5.1	16.2		7.4
UNIDENTIFIED DEVELOPMENTAL STAGES										6.4		16.2		
SUBTOTAL UNDAMAGED	1862.7	1630.5	1413.1	569.3	7183.6	4010.6	2122.5	2457.6	2666.2	3278.6	4880.0	4377.6	2251.1	5397.3
DAMAGED														
PROTOZOA														
foraminifera						5.1								
COELENTERATA														
hydromedusae										6.4				
MOLLUSCA														
pelecypoda														
larvae												4.1		
POLYCHAETA														
adults												4.1		
larvae												4.1		
ARTHROPODA														
crustacea														
cladocera						10.1			4.0					
copepoda	9.3	34.7	38.6	22.5	107.1	96.0	9.9	19.9	16.0	57.5	82.3	24.3	26.3	52.0
cirripedia														
cypris larvae						5.1								
nauplii (barnacle)												4.1		
decapoda														
anomura														
porcellanidae														
zoeae	0.9													
brachyura														
zoeae										12.8				
portunidae				1.3										
xanthidae														7.4

TABLE N-28
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
2 NOVEMBER 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
penaeidea														
sergestidae														
adults														
Lucifer sp.			2.8	1.3	9.7	5.1								7.4
protozoeae				1.3				6.6		12.8				7.4
zoeae														
Lucifer sp.			2.8					6.6						
CHAETOGNATHA						5.1	14.9	6.6	12.0	19.2	5.1	8.1	8.7	
CHORDATA														
urochordata														
appendicularia		8.7	19.3		19.5	15.2	173.5			19.2	5.1	44.6	118.2	104.0
SUBTOTAL DAMAGED	10.2	43.4	63.5	26.4	136.3	141.7	198.3	39.7	32.0	127.9	92.5	93.4	153.2	178.2
TOTAL UNDAMAGED + DAMAGED	1872.9	1673.9	1476.6	595.7	7319.9	4152.3	2320.8	2497.3	2698.2	3406.5	4972.5	4471.0	2404.3	5575.5

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.

[b] Ø = Oblique; S = Surface; B = Bottom.

[c] Values in parentheses represent the relative percentage of copepod species sampled at random and are not to be construed as number per cubic meter.

TABLE N-29

QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
1 DECEMBER 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
UNDAMAGED														
PROTOZOA														
radiolaria	0.8						1.5				4.7			
COELENTERATA														
medusae														
hydromedusae														
Obelia sp.					6.2									
unidentified			7.1						1.5		2.3	1.6		1.1
stauromedusae													1.6	
siphonophora					4.2				7.4		18.7			1.1
TURBELLARIA								2.0						
MOLLUSCA														
gastropoda														
larvae	4.0	5.8	26.2	4.5	22.8		8.9	17.6	10.3	0.4	21.0	4.8	14.1	2.2
thecosomata (pteropoda)														
Creseis sp.									1.5				1.6	
unidentified													1.6	
pelecypoda														
larvae			4.8	1.5	10.4			2.0	1.5				3.1	
POLYCHAETA														
adults		1.2					1.5	2.0	2.9				1.6	
intermediates									1.5	0.4			1.6	1.1
larvae	0.8	3.5	2.4		2.1		1.5					1.6	9.4	1.1
ARTHROPODA														
insecta														
thysanoptera									1.5				1.6	1.1
crustacea														
prenauplii						0.7								
nauplii			4.7		2.1		1.5	3.9	1.5	0.8		3.2	7.8	2.3
ostracoda														
Conchoecia elegans				3.0	10.4		5.9	9.8		0.4		40.2		7.8
unidentified										0.4				
stomatopoda														
protozoeae									1.5					
copepoda[c]														
calanoida	134.4	46.7	664.5	67.5	1128.9	8.2	337.6	183.6	848.5	11.5	605.7	156.1	76.9	111.8
Acartia spinata			(5)											

TABLE N-29
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
1 DECEMBER 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
Calanopia americana					(5)									
Euchaeta marina											(5)			
Labidocera sp.		(15)												
L. aestiva													(20)	
Paracalanus aculeatus	(100)	(85)	(80)	(90)	(65)	(86)	(20)	(65)	(100)	(85)	(65)	(85)	(65)	(80)
Temora stylifera								(10)				(5)	(15)	(20)
Temora turbinata			(15)		(30)	(14)		(25)						
Undinula vulgaris							(80)			(15)	(30)	(10)		
immatures				(10)										
cyclopoida	4.0	30.3	73.8	10.5	66.4	1.1	23.7	17.6	150.2	3.1	67.5	11.3	6.3	19.0
Corycaeus sp.		(10)											(36)	
Corycaeus (Corycaeus) speciosus	(100)			(17)					(10)		(13)		(21)	
C. (Onychocorycaeus) latus			(50)	(17)	(56)		(31)	(100)	(5)	(14)	(13)		(29)	(57)
Farranula gracilis			(15)				(46)			(57)	(63)	(50)	(14)	(29)
Oithona sp.		(75)			(13)				(85)					
O. plumifera				(33)	(6)									
Oncaea mediterranea		(10)	(35)	(33)	(19)		(23)			(29)	(6)	(50)		(14)
O. venusta					(6)						(6)			
harpacticoida	2.4	16.3					10.3	9.8	17.7		4.7			
Euterpina sp.		(30)				(100)								
Macrosetella gracilis							(100)	(100)	(100)		(100)			
unidentified		(70)												
cirripedia														
cypris larvae		3.5			4.2									
nauplii (barnacle)	171.2	129.6	19.1		12.5		2.9	3.9		0.4	2.3	1.6	37.7	7.8
isopoda		1.2												
amphipoda														
caprellida		1.2												
gammaridea		25.7											1.6	
hyperiidea														1.1
decapoda														
anomura														
zoeae														
paguridea														
paguridae			2.4											
porcellanidae														1.1
brachyura														
zoeae														
leucosiidae														1.1
majidae					2.1									
pinnotheridae														
Dissodactylus sp.	2.4	1.2			2.1	0.4						1.6		

TABLE N-29
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
1 DECEMBER 1977

	Station and depth[b]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
Pinnixa chaetopterana					8.3									
Pinnothores maculatus	0.8													
unidentified		2.3												
portunidae														
Portunus sp.									1.5					
unidentified			4.7				7.4		14.7	0.4			3.1	
xanthidae	0.8				2.1					0.4	4.7			
unidentified			2.4					2.0						
caridea														
postlarvae							1.5		1.5					
larvae			11.9	1.5	16.6		8.9	5.9	1.5	0.4	16.3		1.6	1.1
penaeidea														
sergestidae														
adults														
Lucifer faxoni											2.3			
protozoeae	3.2	2.3	426.4	15.0	199.2	1.9	149.5	150.4	4.4	1.2	37.3	6.4	714.2	106.3
zoeae														
Lucifer sp.					2.1						2.3			
thalassinidea														
zoeae							1.5	2.0						
BRYOZOA														
cyphonautes larvae									11.8					
CHAETOGNATHA														
Sagitta sp.							1.5		4.4		7.0		1.6	
S. enflata			9.5	4.5	8.3	0.4	7.4	3.9	2.9	0.8	9.3	1.6		3.4
S. helenae					2.1						7.0			
S. hispida			2.4				1.5	2.0	1.5		2.3			
unidentified				1.5	2.1	0.7			2.9		11.7	1.6	4.7	4.5
ECHINODERMATA														
immatures					2.1									
larvae														
bipinnaria	0.8													
unidentified			4.7		4.1	0.4	1.5	2.0	1.5	0.4	4.7	1.6	4.7	3.4
CHORDATA														
urochordata														
thaliacea														
doliolida														
Doliolum(Doliolina) intermedium				3.0				2.0		0.4	7.0		3.1	

TABLE N-29
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
1 DECEMBER 1977

Taxon	Station and depth[b]													
	11	12	0		1		2		3		4		5	
	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
CHORDATA (continued)														
unidentified					2.1						2.3			
salpida														
Thalia democratica										0.8				
unidentified									1.5					
appendicularia														
Oikopleura sp.			38.1	4.5	47.7	2.2	16.3	13.7	101.6	1.9	251.6	24.1	61.2	57.0
larvae		2.3												
fish														
eggs							109.6		1.5		2.3			
larvae			2.4								2.3			
EGGS	37.6	46.7	169.1	9.0	220.0	0.7		39.0	162.0	3.5	81.5	3.2	171.1	6.7
UNIDENTIFIED DEVELOPMENTAL STAGES					4.2			2.0						
UNIDENTIFIED					2.1					0.4	2.3			
SUBTOTAL UNDAMAGED	363.2	319.8	1476.6	126.0	1797.5	16.7	701.9	477.1	1362.7	28.0	1181.1	260.5	1131.8	342.1
DAMAGED														
MOLLUSCA														
gastropoda														
larvae								2.0						
POLYCHAETA	0.8													
ARTHROPODA														
crustacea														
zoeae								2.0						
ostracoda							1.5	2.0						
copepoda	8.0	7.0	26.2	1.5	37.4	2.2	29.6	44.9	41.2	3.1	32.6	19.3	3.1	17.9
euphausiacea									1.5					
decapoda														
brachyura														
zoeae														
portunidae							1.5							
unidentified		1.2												
caridea														
zoeae					8.3	0.4				0.4		1.6		

TABLE N-29
(continued)
QUALITATIVE AND QUANTITATIVE[a] ZOOPLANKTON ANALYSIS
ST. LUCIE PLANT
1 DECEMBER 1977

	Station and depth[b]													
	11	12	0		1		2		3		4		5	
Taxon	Ø	Ø	S	B	S	B	S	B	S	B	S	B	S	B
ARTHROPODA (continued)														
penaeidea														
sergestidae														
adults														
Lucifer sp.				1.5										
protozoeae			19.0		8.3	1.9	4.4	13.7			4.7	1.6	6.3	57.0
zoeae														
Lucifer sp.						0.4								
thalassinidea														
zoeae											2.3			
CHAETOGNATHA			16.7	1.5	4.1		10.4	3.9	11.8	2.3	23.3		1.6	
CHORDATA														
urochordata														
thaliacea														
doliolida														1.1
appendicularia			2.4		10.4	2.2	8.9	13.7	10.3	1.2	23.3	11.3	15.7	31.3
SUBTOTAL DAMAGED	8.8	8.2	64.3	4.5	68.5	7.1	56.3	82.2	64.8	7.0	86.2	33.8	26.7	107.3
TOTAL UNDAMAGED + DAMAGED	372.0	328.0	1540.9	130.5	1866.0	23.8	758.2	559.3	1427.5	35.0	1267.3	294.3	1158.5	449.4

[a] Values expressed are zooplankters per cubic meter and represent the mean of three subsamples.

[b] Ø = Oblique; S = Surface; B = Bottom.

[c] Values in parentheses represent the relative percentage of copepod species sampled at random and are not to be construed as number per cubic meter.

APPENDIX O

W A T E R

Q U A L I T Y

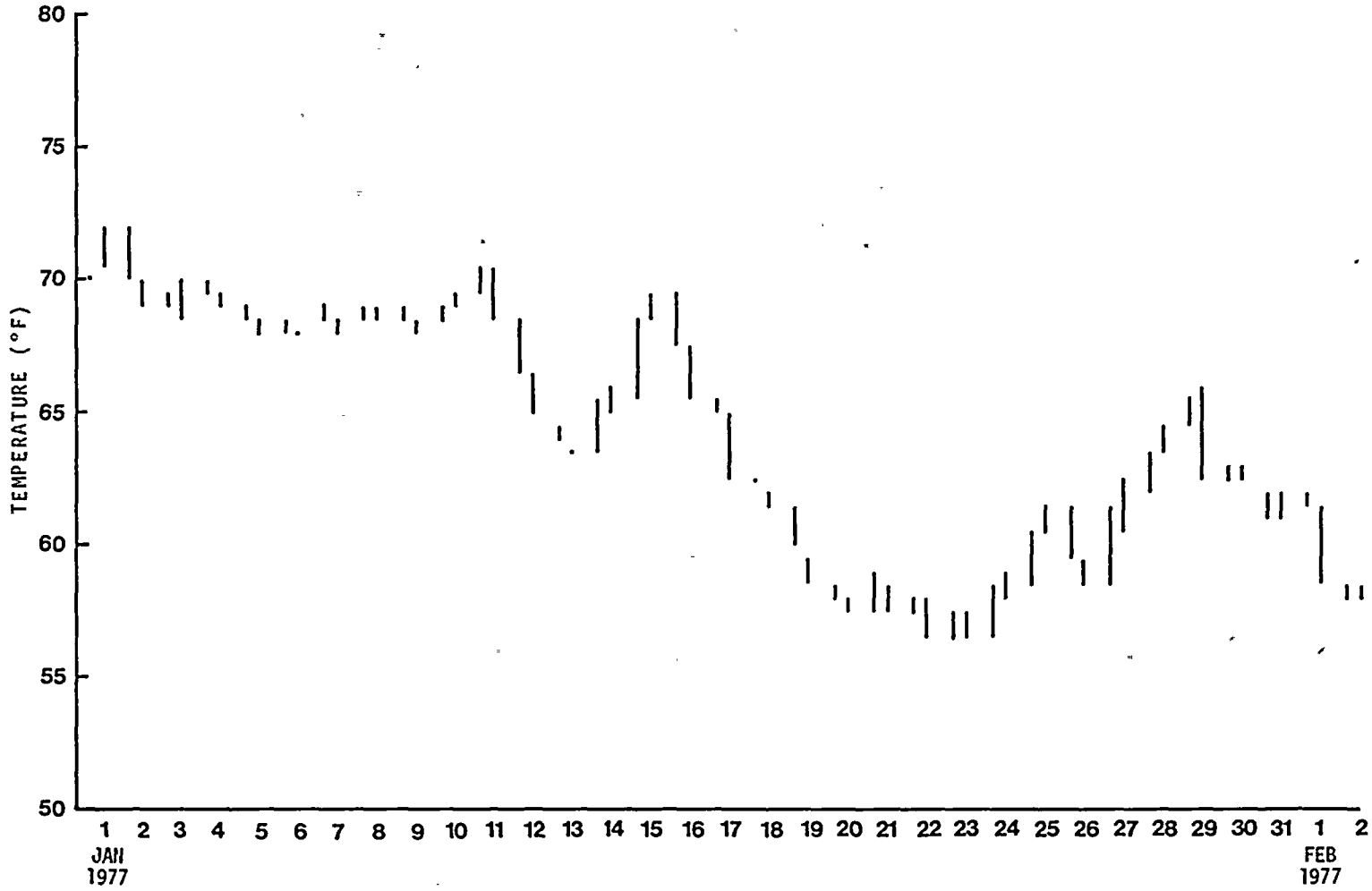


Figure O-1. Daily range of water temperatures continuously recorded at the St. Lucie Plant intake structure, 1977.

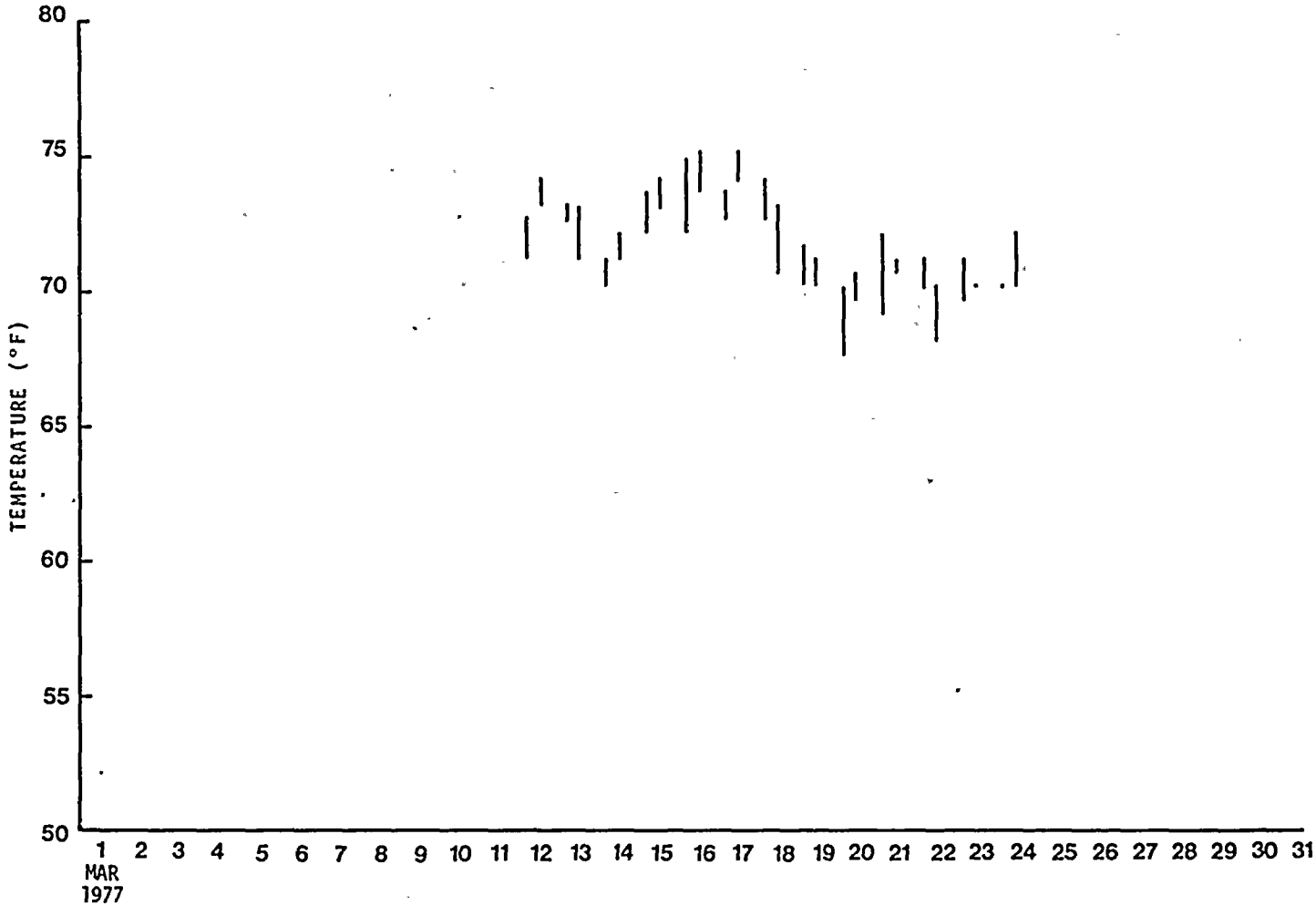


Figure O-1 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant intake structure, 1977.

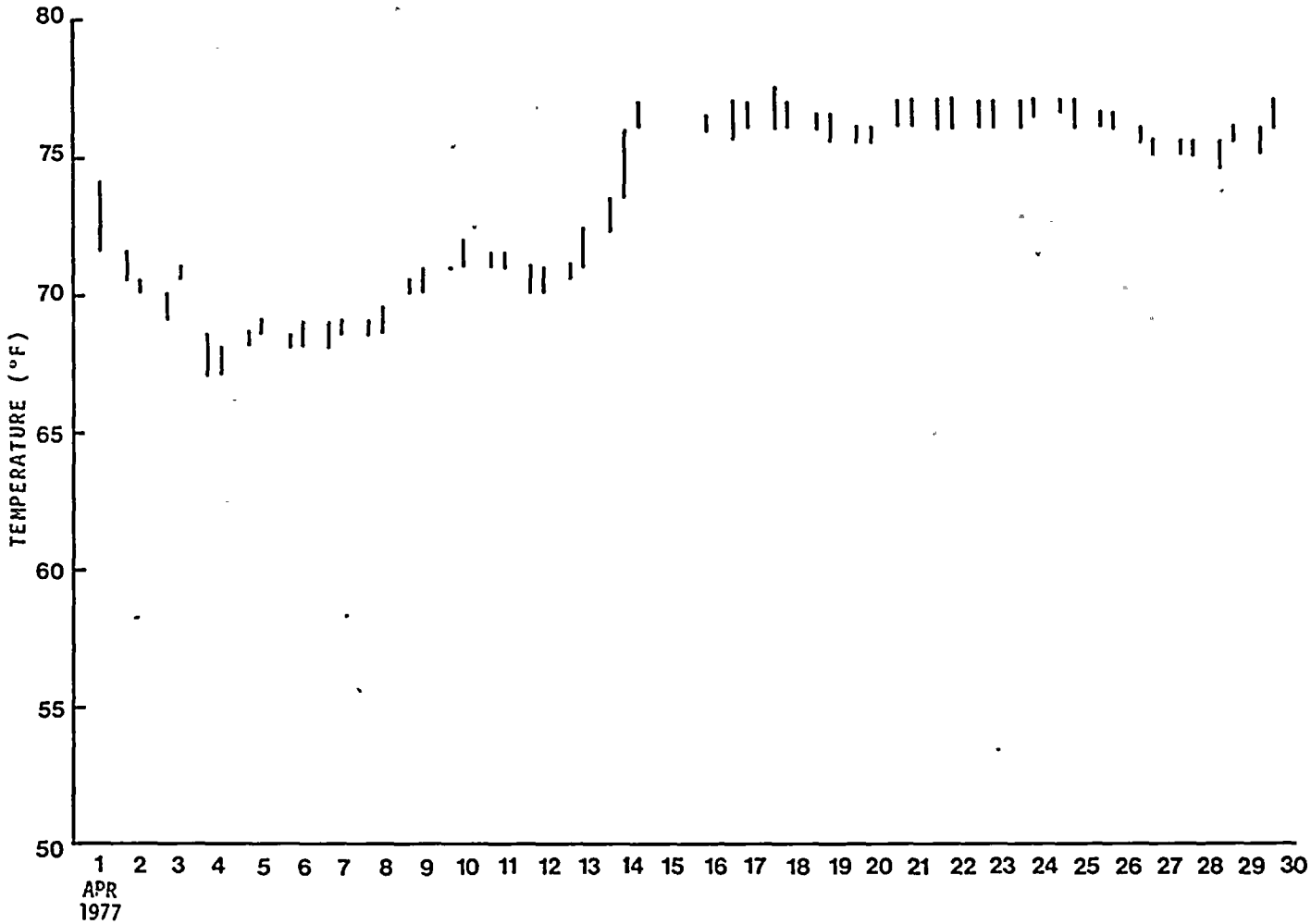


Figure 0-1 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant intake structure, 1977.

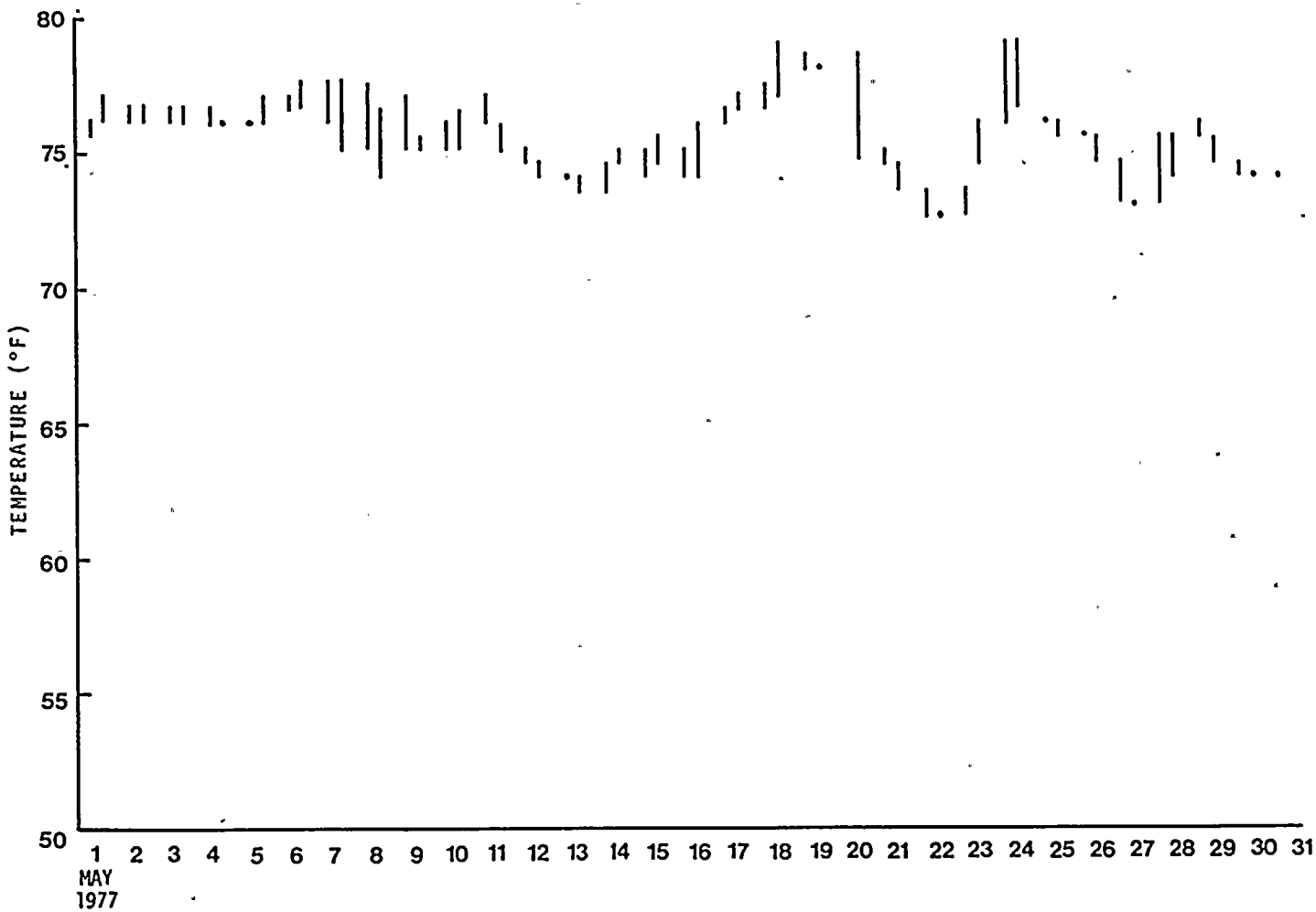


Figure O-1 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant intake structure, 1977.

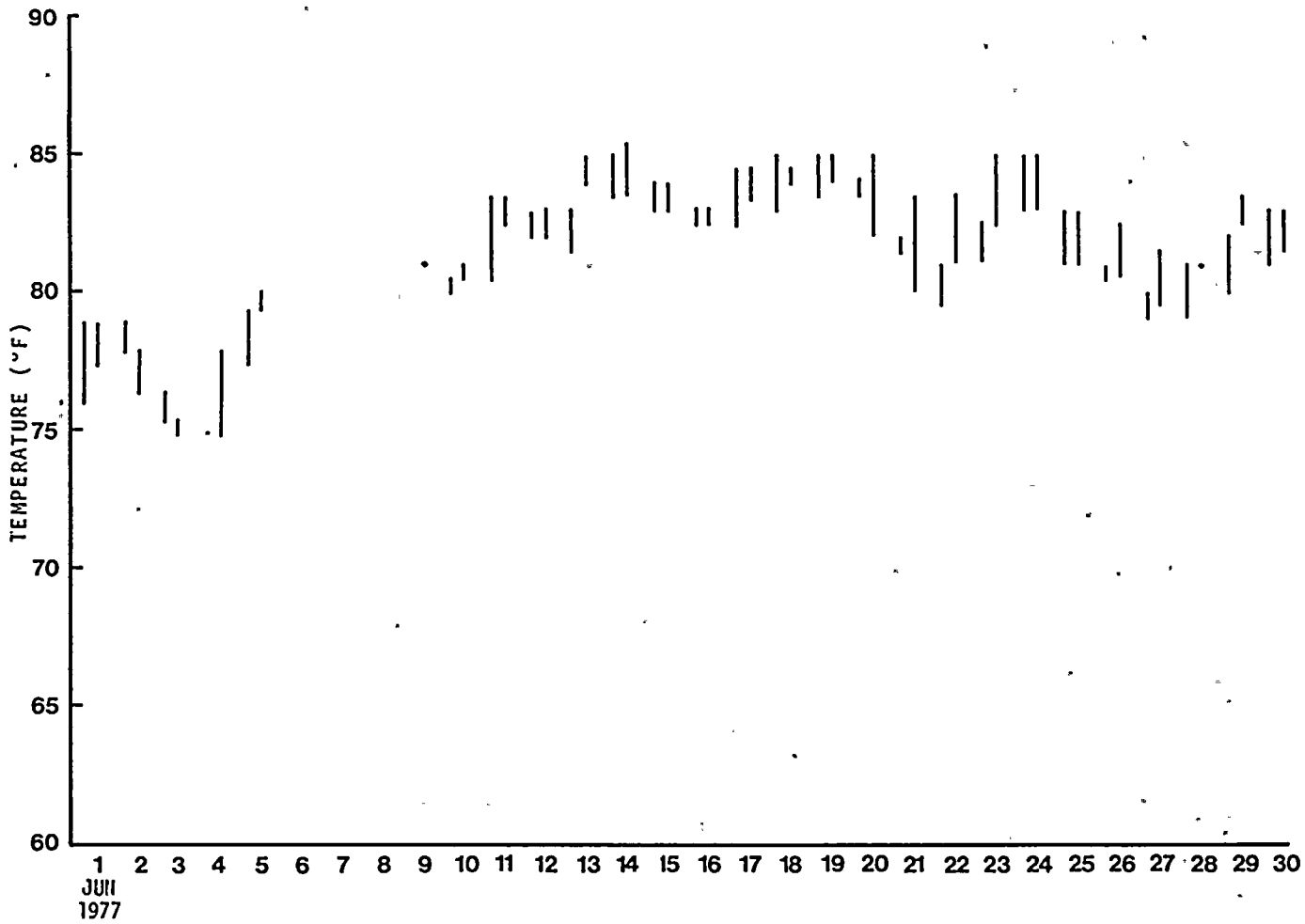


Figure 0-1 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant intake structure, 1977.

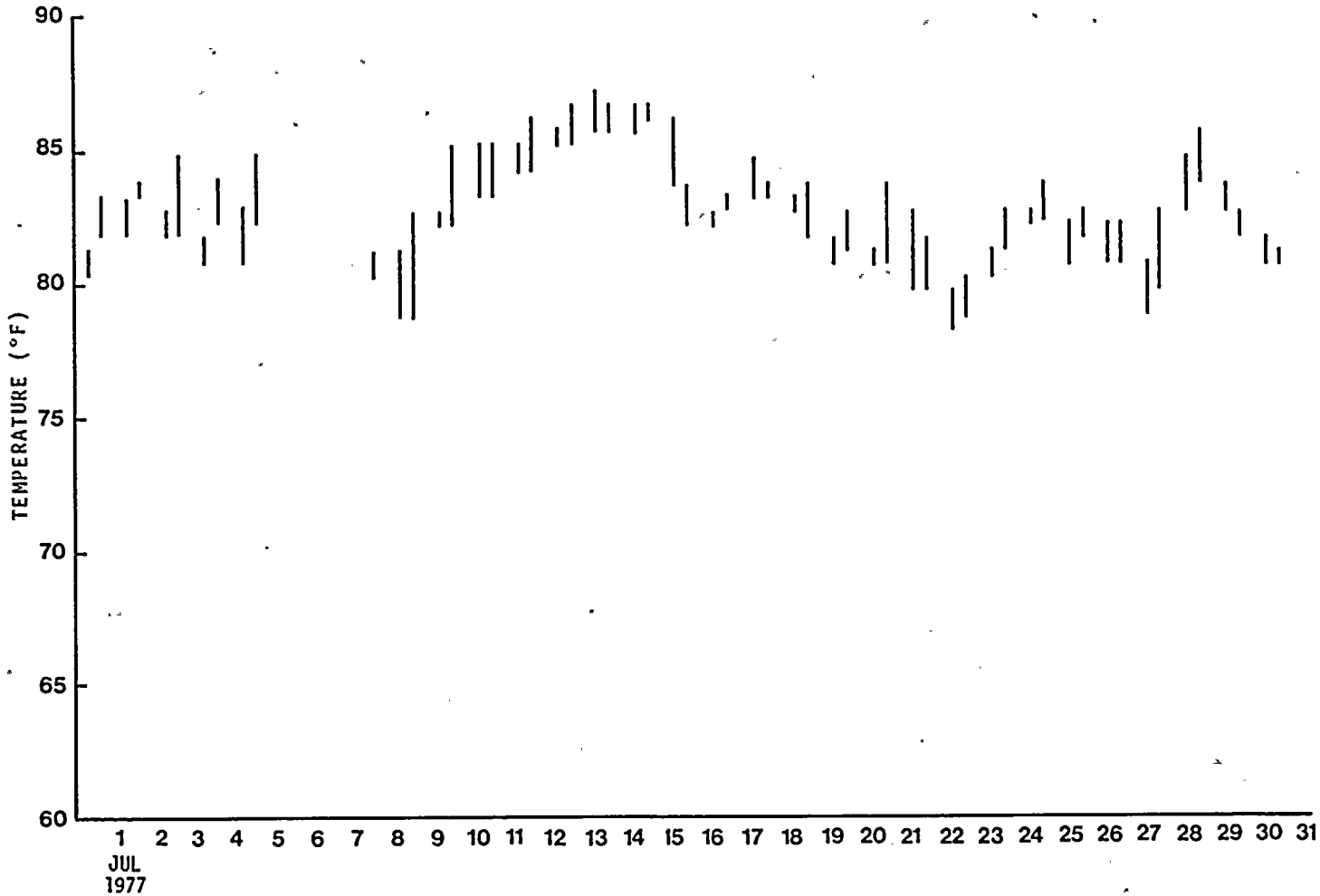


Figure 0-1 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant intake structure, 1977.

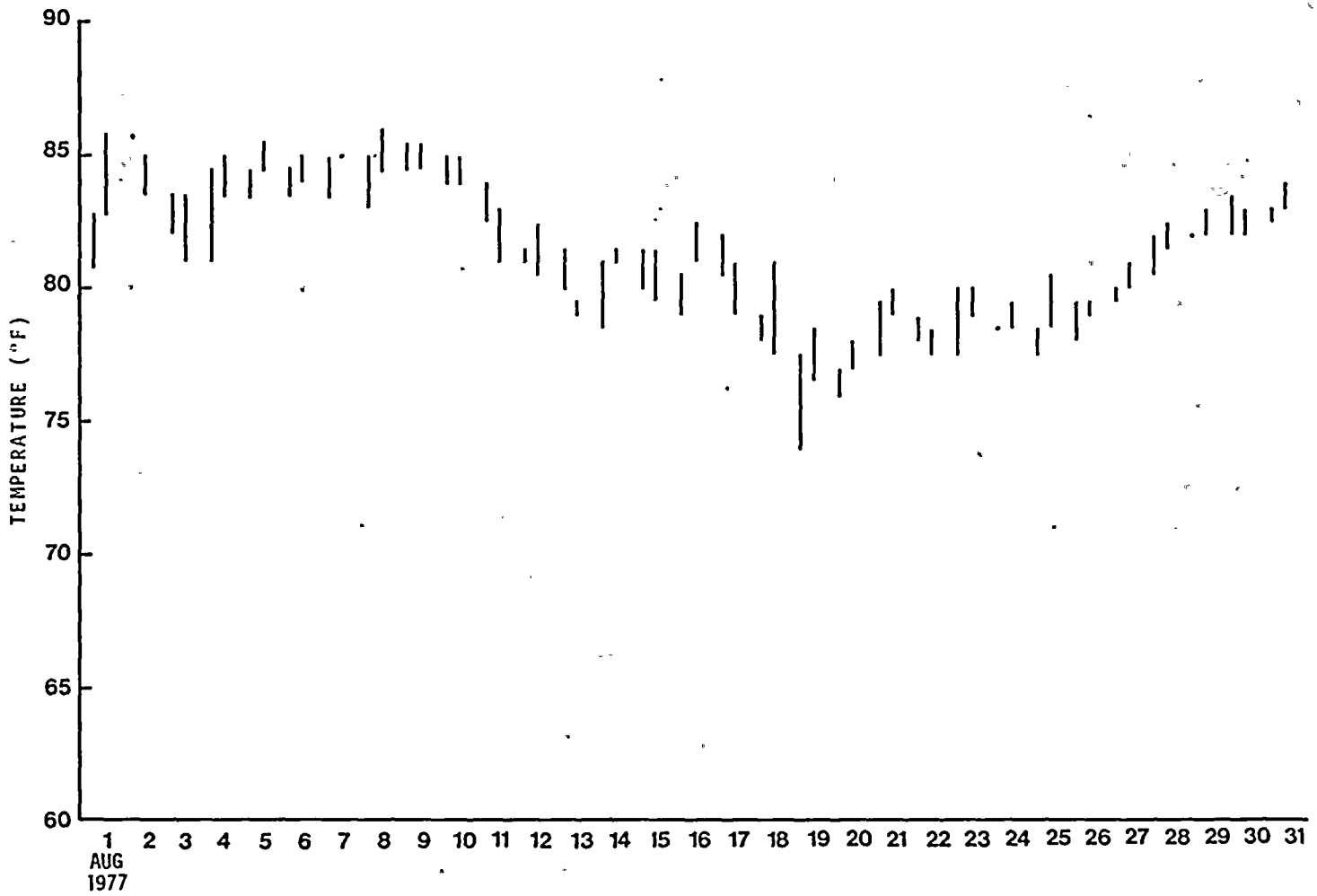


Figure O-1 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant intake structure, 1977.

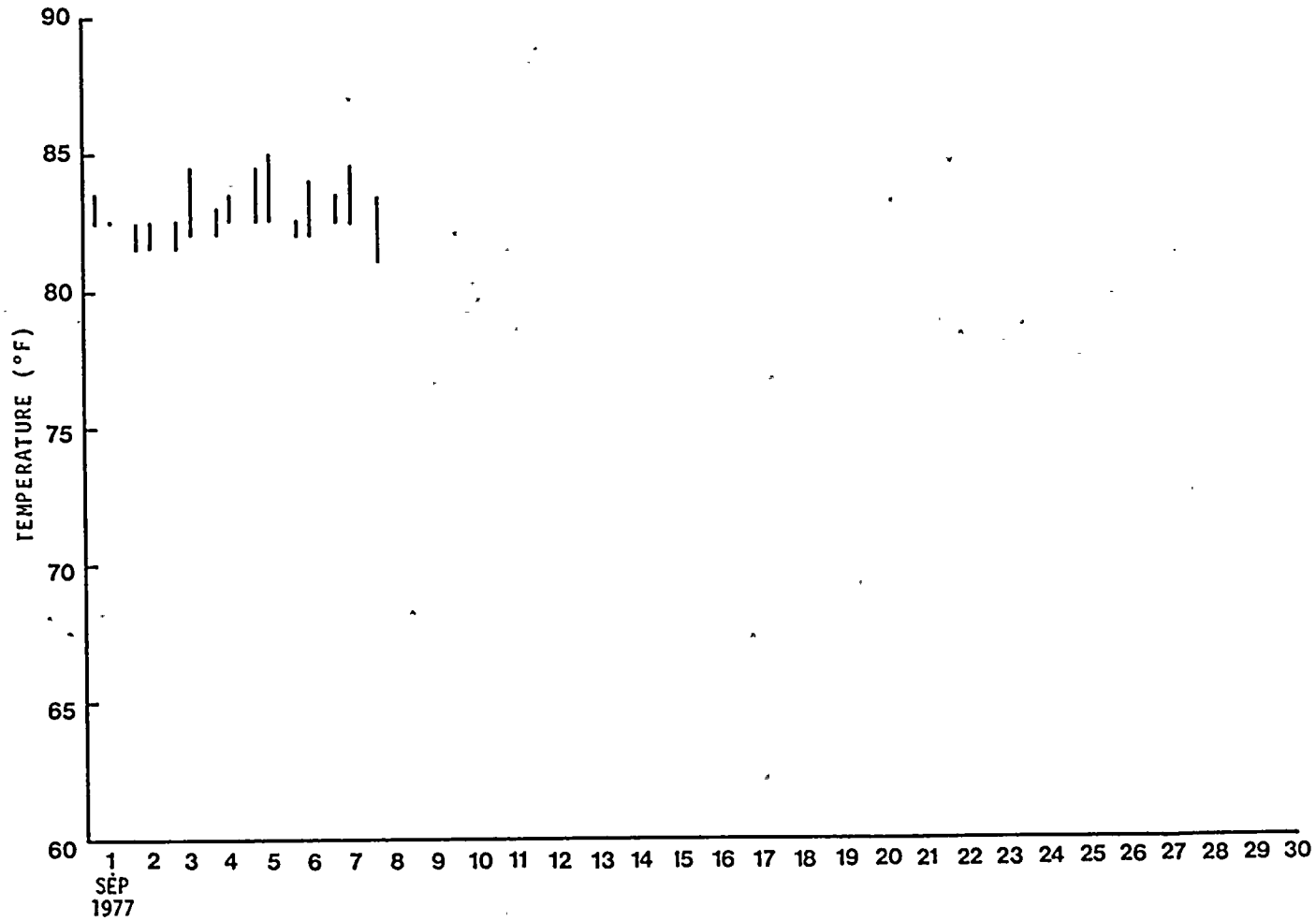


Figure 0-1 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant intake structure, 1977.

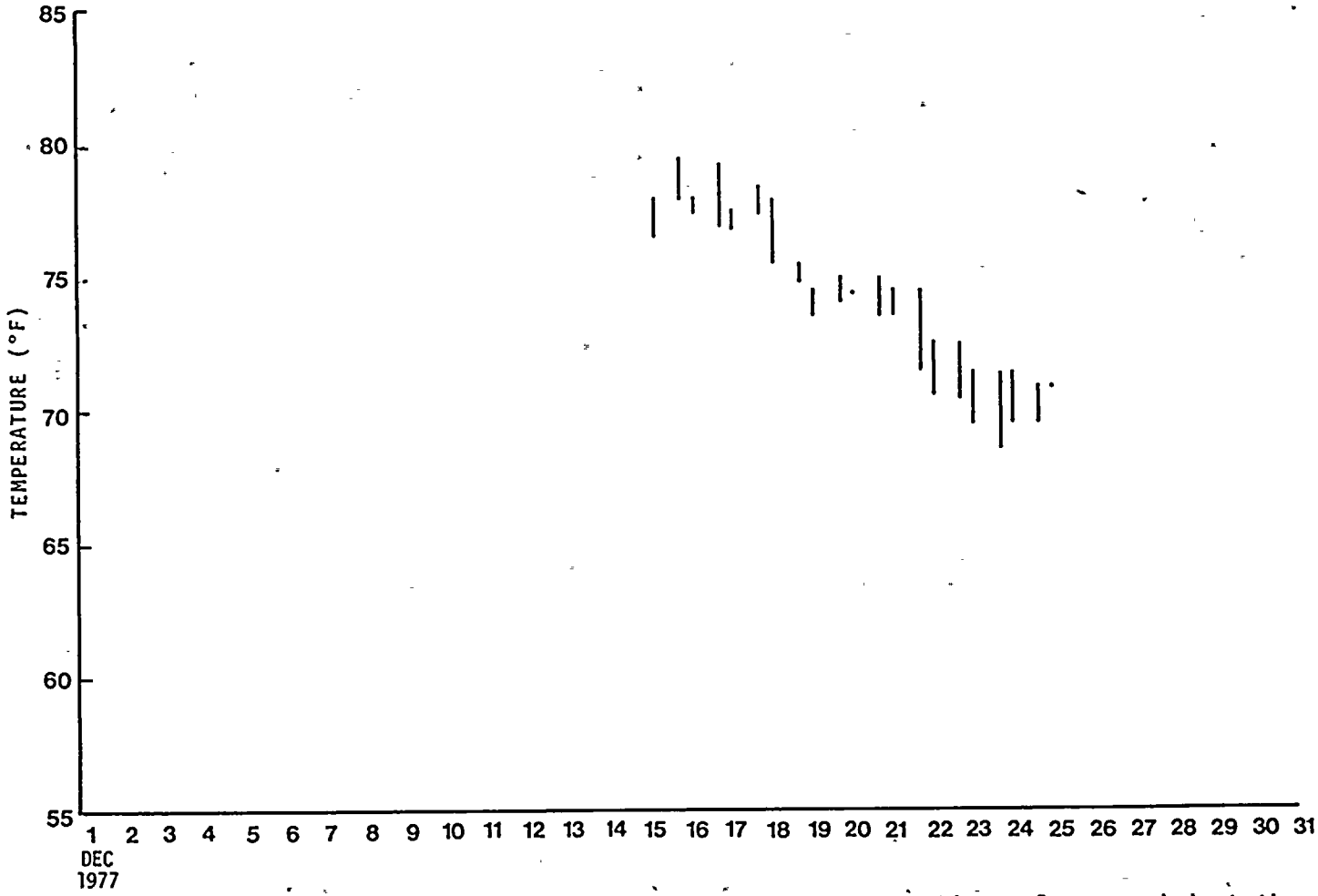


Figure O-1 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant intake structure, 1977.

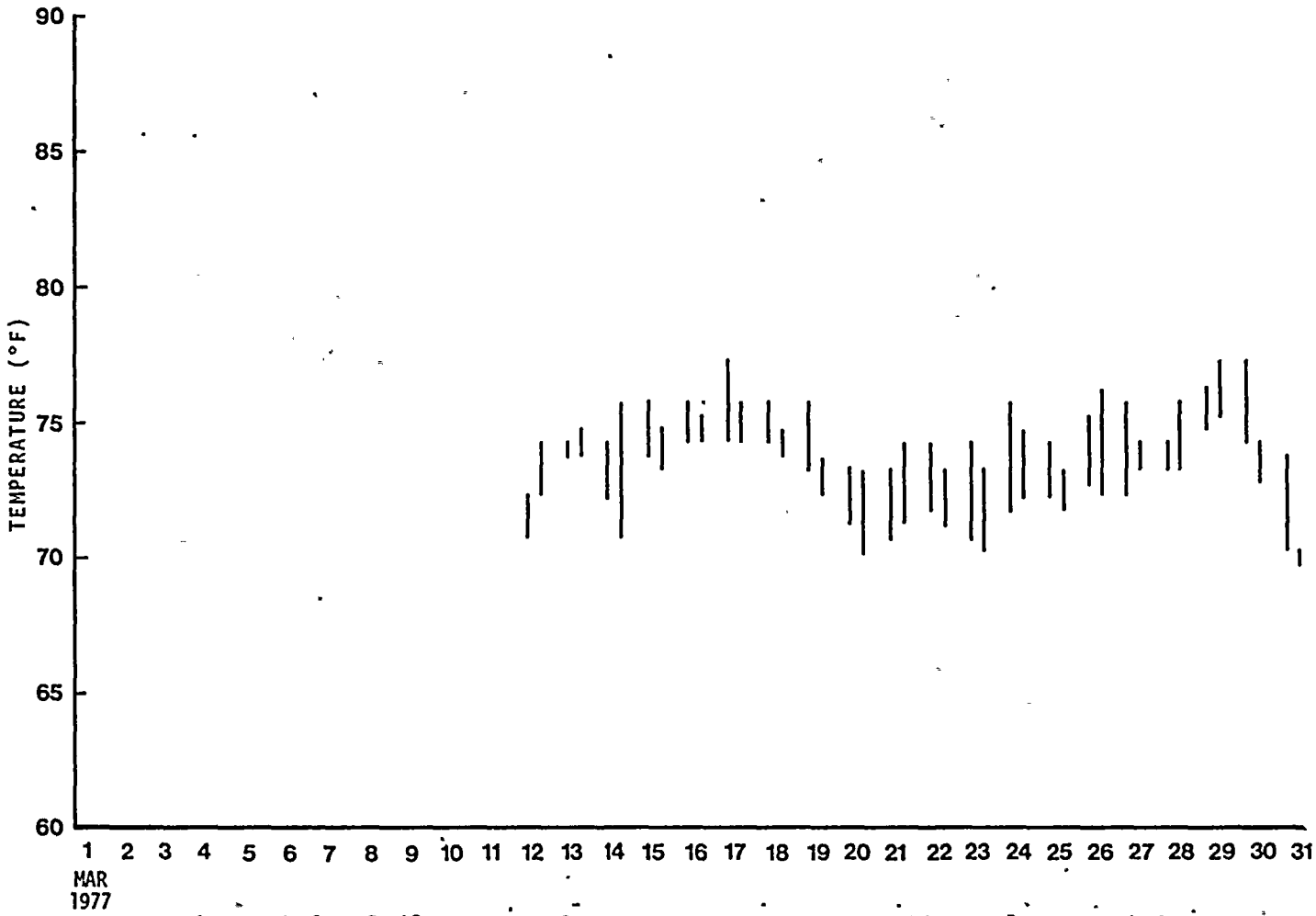


Figure 0-2. Daily range of water temperatures continuously recorded at the St. Lucie Plant discharge structure, 1977.

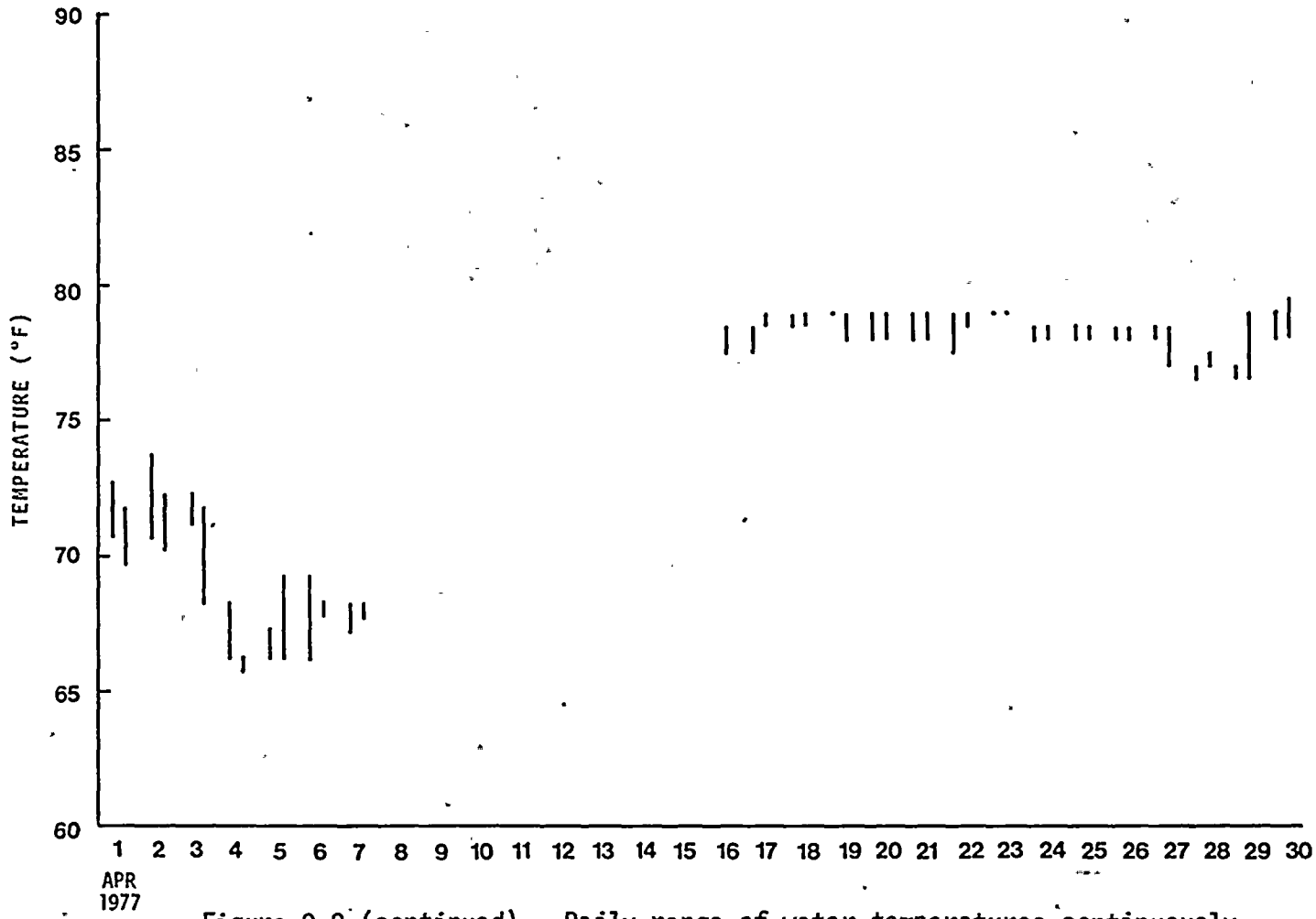


Figure 0-2 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant discharge structure, 1977.

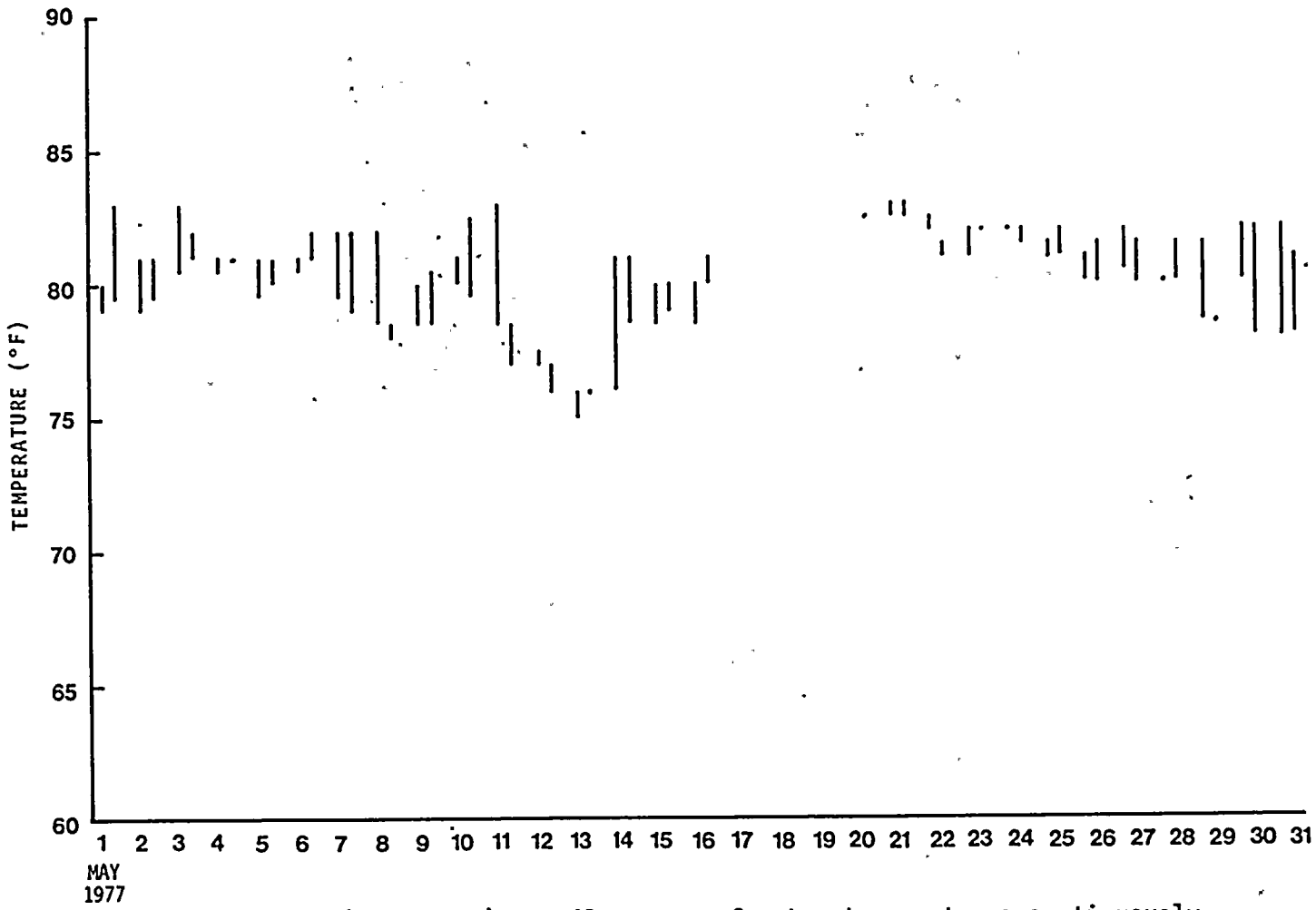


Figure 0-2 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant discharge structure, 1977.

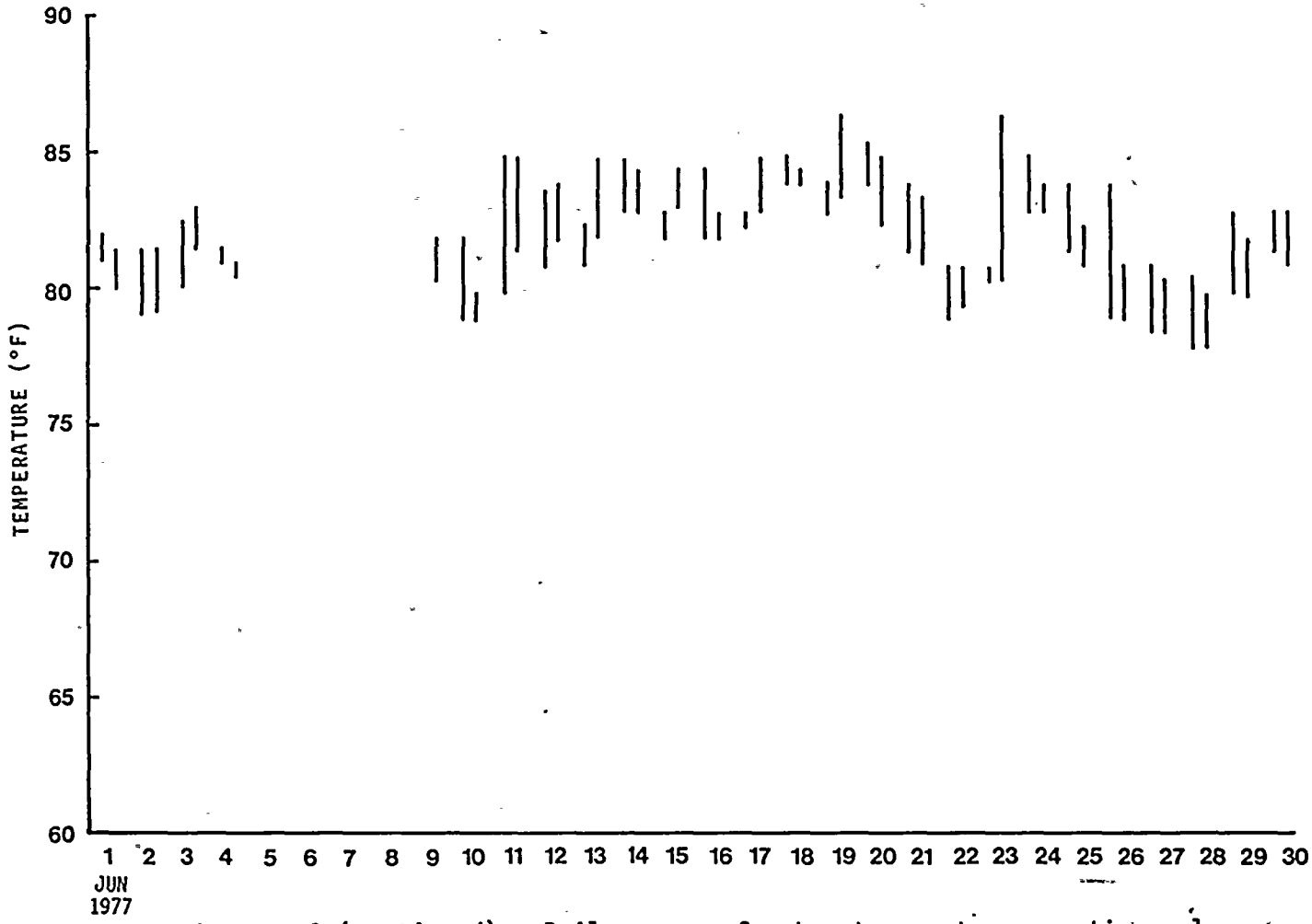


Figure 0-2 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant discharge structure, 1977.

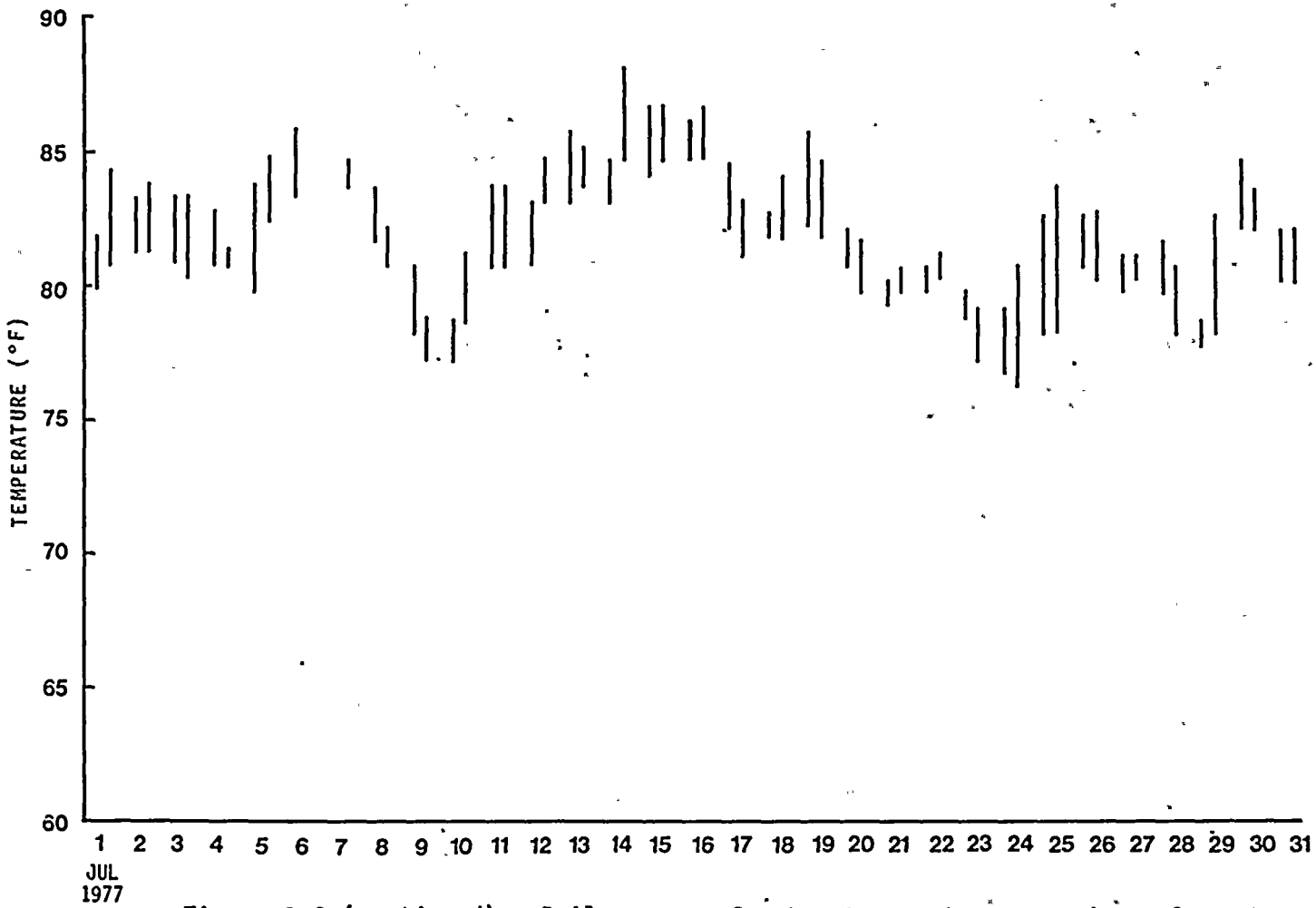


Figure O-2 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant discharge structure, 1977.

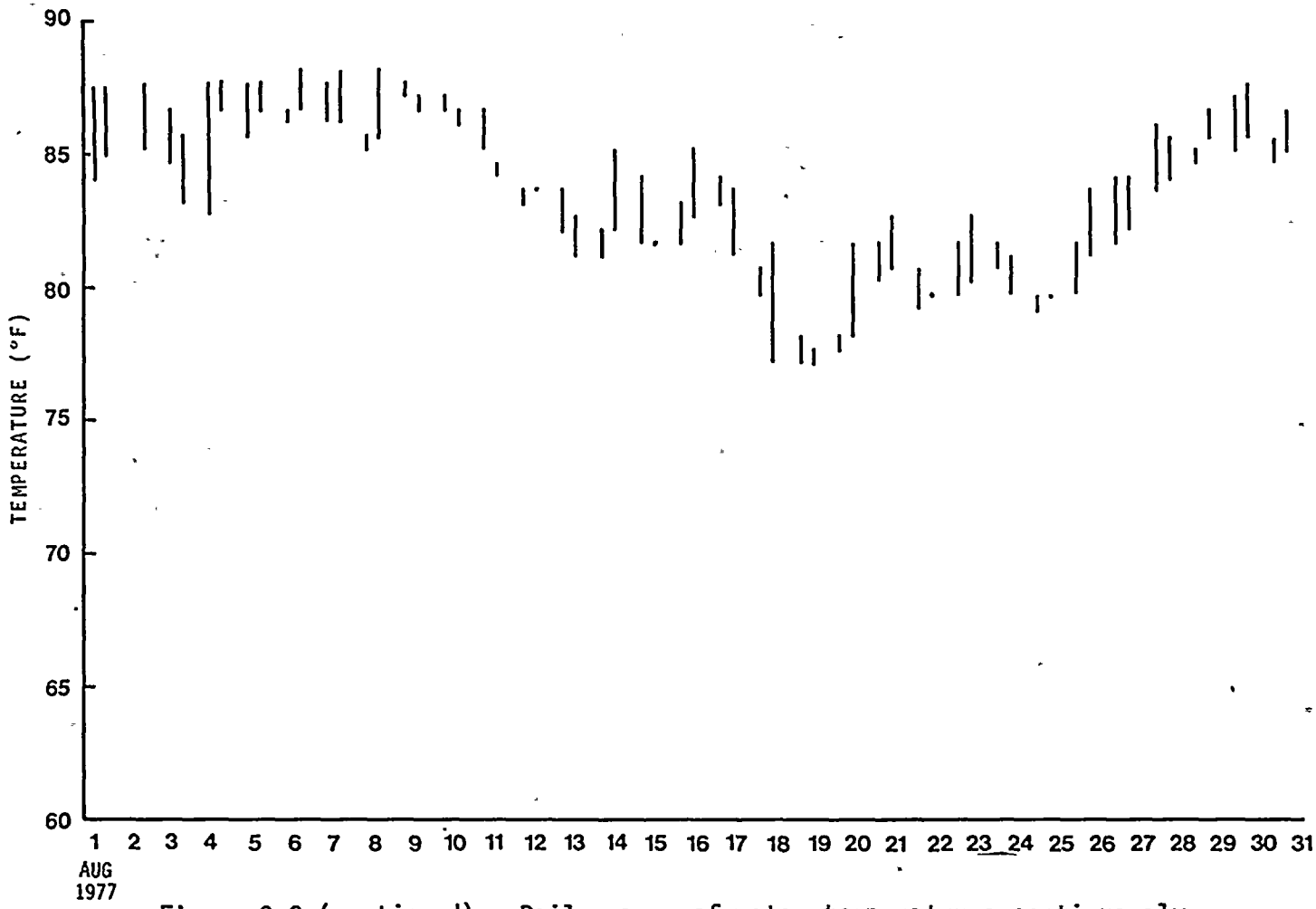


Figure O-2 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant discharge structure, 1977.

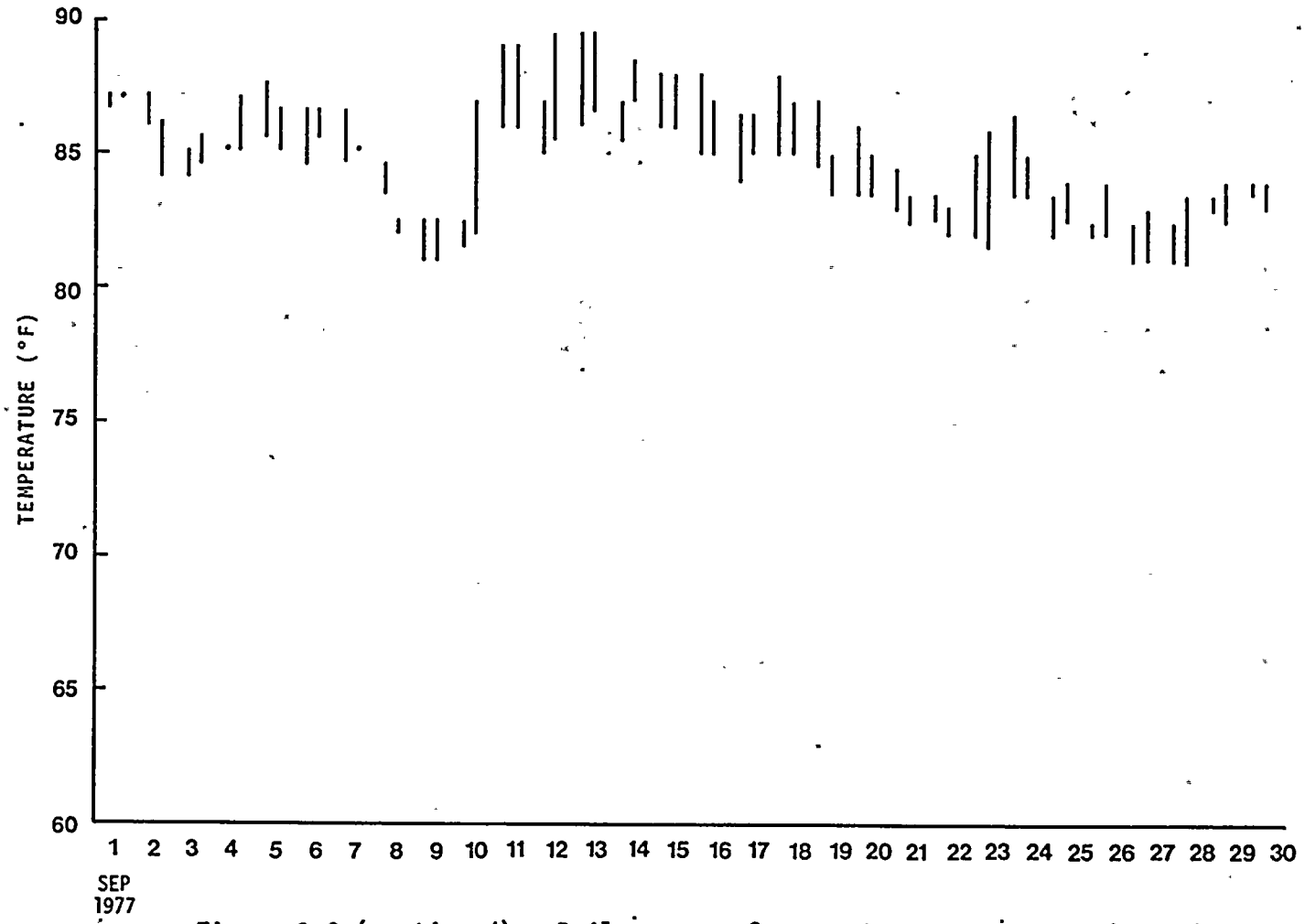


Figure 0-2 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant discharge structure, 1977.

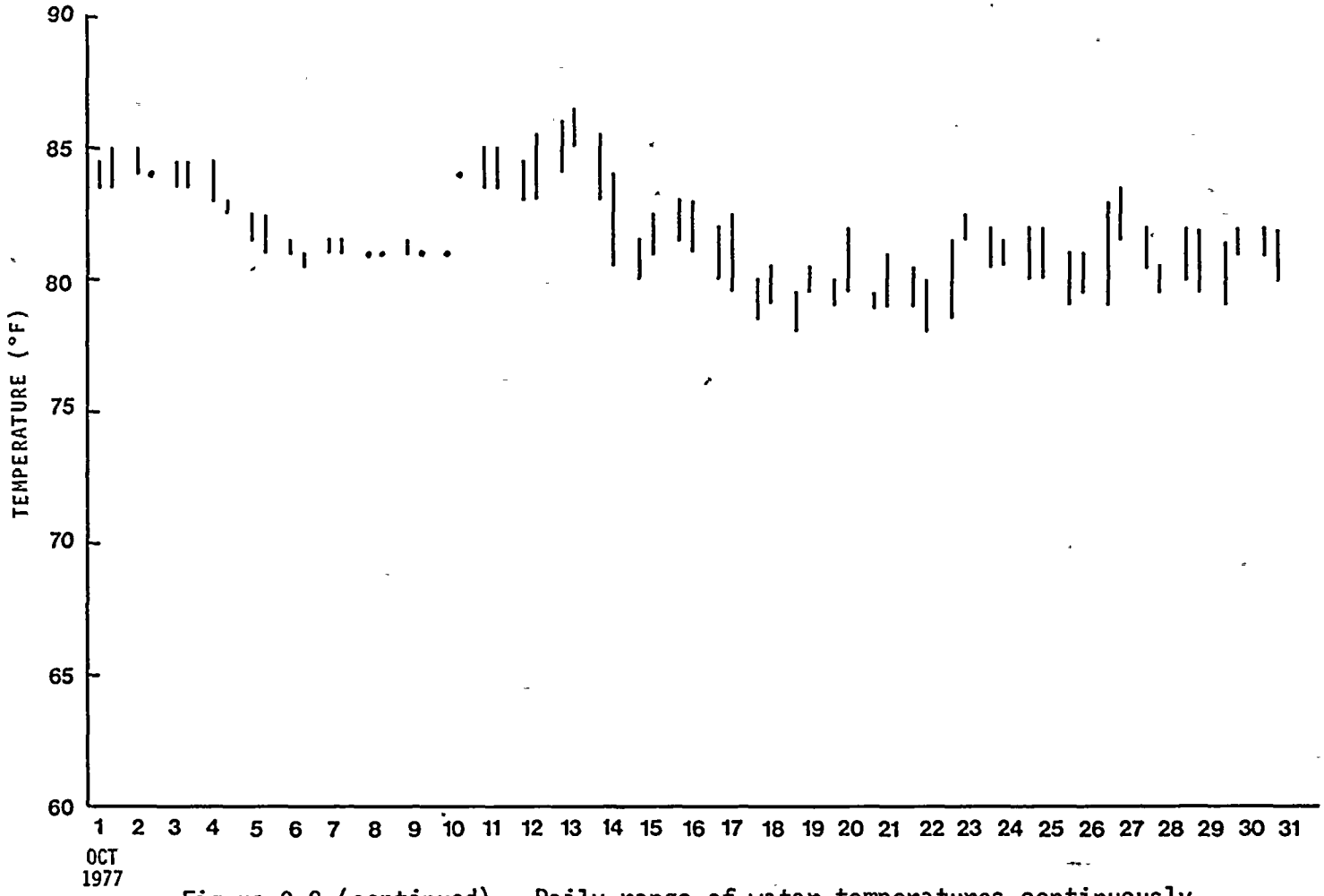


Figure 0-2 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant discharge structure, 1977.

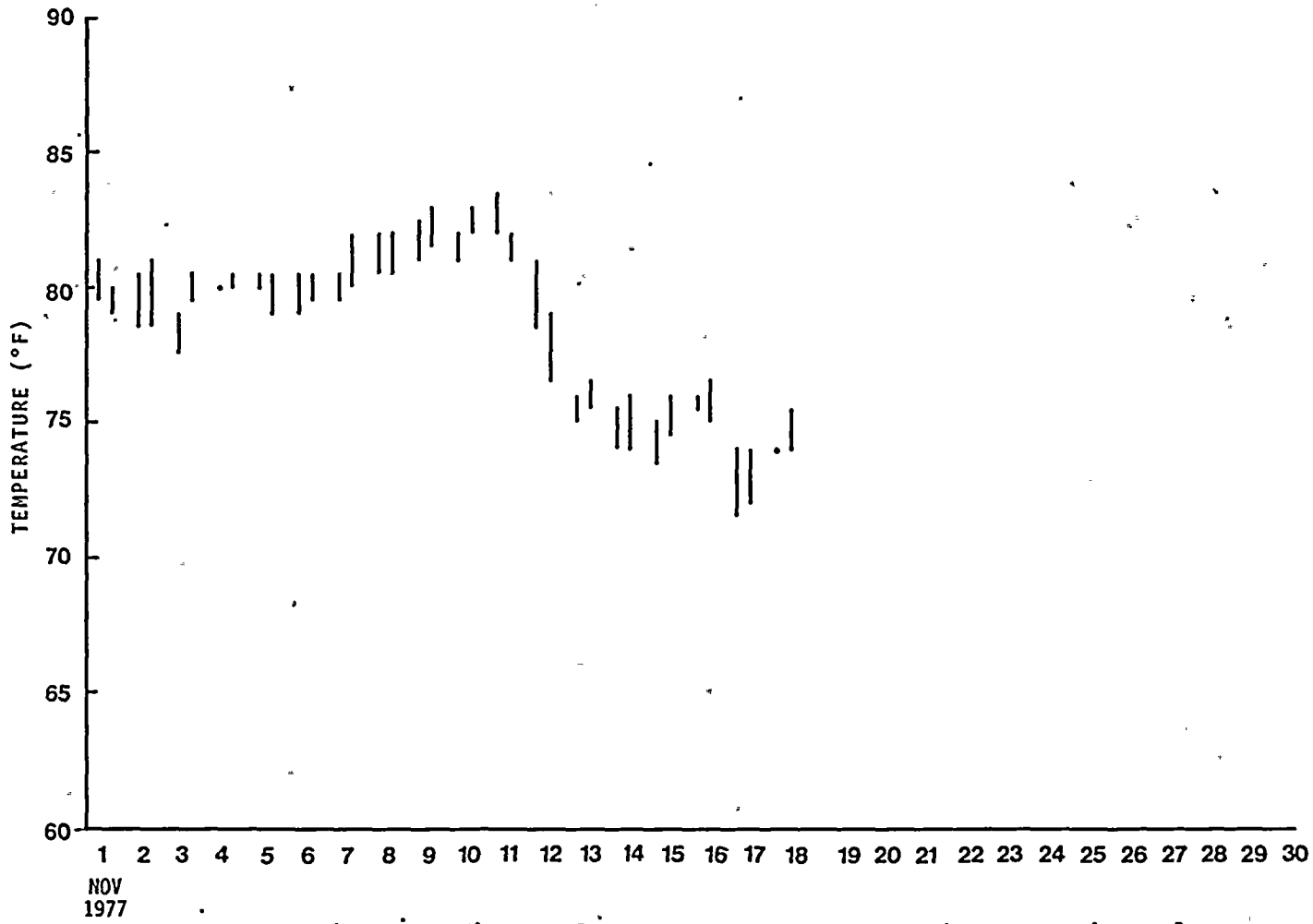


Figure 0-2 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant discharge structure, 1977.

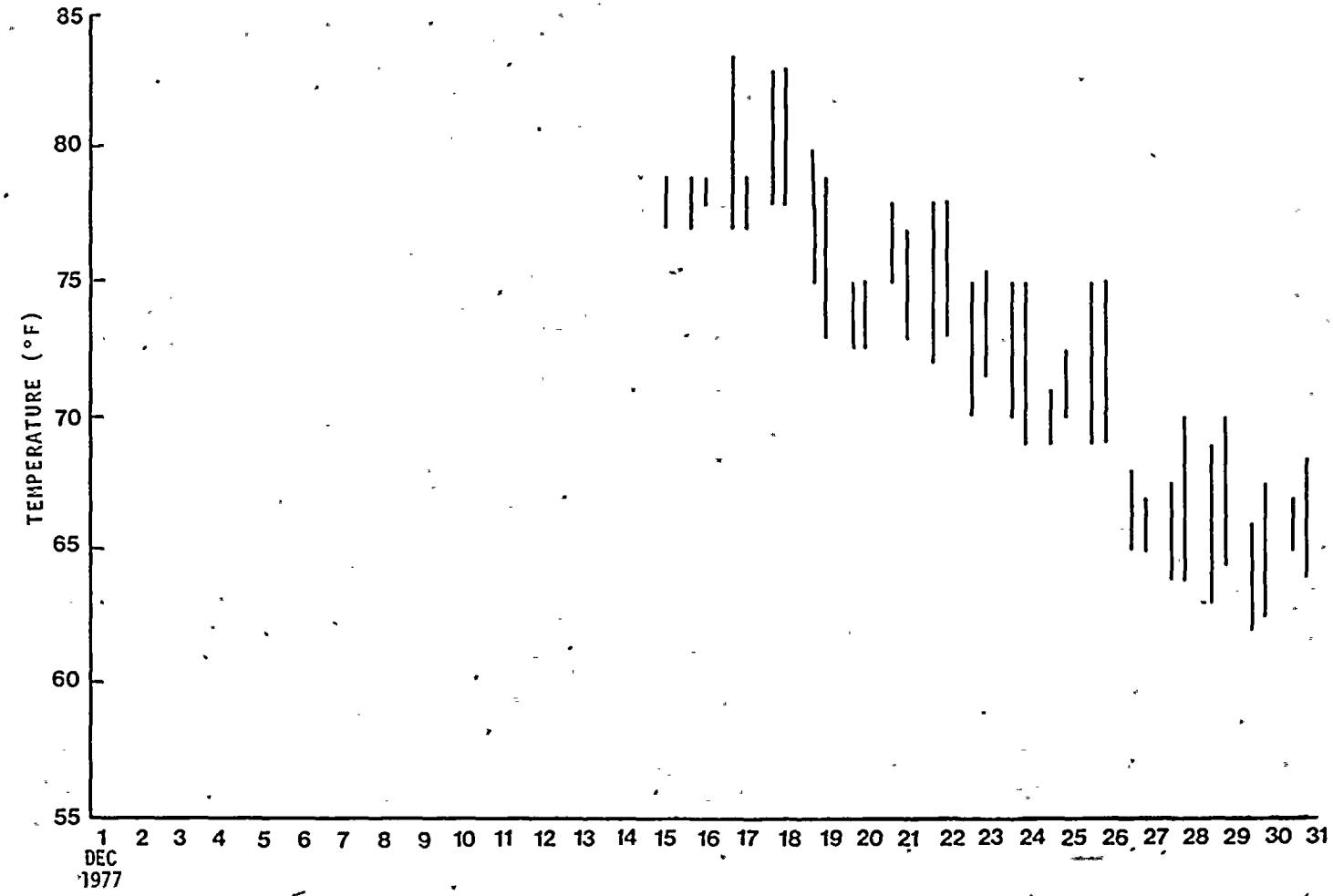


Figure 0-2 (continued). Daily range of water temperatures continuously recorded at the St. Lucie Plant discharge structure, 1977.

TABLE 0-1

WATER TEMPERATURE (°C) RECORDED DURING PHYTOPLANKTON AND NUTRIENT SAMPLING
ST. LUCIE PLANT
JANUARY - DECEMBER 1977

Station	Depth[a]	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
0	S	16.3	21.7	21.3	24.9	24.2	28.0	29.1	24.8	28.5	27.0	23.3	24.0
	M	16.3	21.5	21.1	24.6	23.8	27.8	28.4	24.3	28.8	26.9	23.3	23.7
	B	16.3	21.3	20.5	24.3	23.8	27.3	27.6	24.3	28.4	27.1	23.3	23.9
1	S	17.3	20.8	22.0	25.1	25.6	29.0	30.5	26.3	28.1	28.0	24.6	24.0
	M	16.6	21.1	21.5	24.5	24.1	29.0	30.3	25.5	28.0	27.4	24.1	23.1
	B	16.5	20.4	20.0	24.7	23.9	28.5	30.1	25.0	28.0	26.9	23.6	22.0
2	S	18.5	20.7	22.0	24.0	24.1	28.3	29.4	24.6	28.1	27.1	23.2	23.9
	M	18.1	21.1	21.8	24.0	24.1	27.2	27.8	24.3	27.9	27.1	23.2	23.9
	B	18.3	21.2	21.5	24.1	23.8	26.8	27.5	23.9	27.5	27.0	23.2	23.1
3	S	18.1	20.6	22.5	24.0	24.3	28.2	28.6	24.5	28.0	27.0	23.2	24.2
	M	18.1	21.1	22.2	24.0	24.2	27.2	28.0	24.3	27.2	27.0	23.2	24.1
	B	18.1	21.2	22.0	24.0	24.2	27.0	27.4	23.8	27.0	27.0	23.2	24.1
4	S	17.5	21.1	21.2	24.2	24.8	28.0	28.2	25.2	28.9	27.0	23.5	24.0
	M	17.5	21.2	21.0	24.4	24.4	27.0	27.4	24.3	27.6	27.2	23.2	24.2
	B	17.4	21.2	19.8	24.6	24.3	27.1	27.3	24.2	27.0	27.1	23.2	23.9
5	S	17.2	20.4	22.1	24.3	25.3	27.5	27.4	24.5	27.9	26.6	24.1	23.0
	M	17.1	20.9	21.5	24.3	24.2	27.5	27.4	24.3	27.5	26.8	24.0	21.1
	B	17.1	20.9	20.5	24.3	23.5	27.5	26.8	23.5	26.5	26.9	24.0	22.2

TABLE O-1
(continued)
WATER TEMPERATURE (°C) RECORDED DURING PHYTOPLANKTON AND NUTRIENT SAMPLING
ST. LUCIE PLANT
JANUARY - DECEMBER 1977

Station	Depth[a]	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
11	S	15.5	21.0	21.5	24.9	24.0	27.4	24.9	25.0	29.2	27.2	24.3	24.1
	B	15.5	21.0	21.3	24.5	24.0	27.2	24.8	24.6	28.5	27.0	24.0	24.0
12	S	26.2	32.0	34.4	25.3	34.6	38.1	36.5	37.5	42.0	39.5	35.5	37.1
	B	26.0	32.5	-	-	35.2	38.5	-	-	42.0	-	-	-

[a] S = Surface; M = Mid-depth; B = Bottom.

TABLE 0-2

SALINITIES (‰) RECORDED DURING PHYTOPLANKTON AND NUTRIENT SAMPLING
ST. LUCIE PLANT
JANUARY - DECEMBER 1977

Station	Depth[a]	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
0	S	36.62	35.54	36.00	36.08	35.54	35.54	35.54	35.54	35.00	36.08	35.54	35.54
	M	36.62	ND[b]	36.00	36.08	35.54	36.08	35.54	35.54	35.00	36.08	35.54	35.54
	B	36.00	35.54	36.00	36.08	35.54	36.08	35.54	35.54	35.00	35.54	35.54	35.54
1	S	36.62	35.54	36.00	36.08	35.54	36.08	35.54	35.54	35.00	35.54	35.54	35.54
	M	36.62	ND[b]	36.00	36.08	35.54	36.08	35.54	35.54	35.00	36.08	36.08	35.54
	B	36.62	35.54	36.00	36.08	35.54	36.08	35.54	35.54	35.00	36.08	35.54	35.54
2	S	36.62	35.54	35.50	36.08	35.54	35.54	35.54	35.54	35.00	35.54	35.54	35.54
	M	36.62	ND[b]	36.00	36.62	35.54	36.08	35.54	35.54	35.54	35.54	35.54	35.54
	B	36.62	35.54	36.00	36.08	35.54	36.08	35.54	35.54	35.54	36.08	36.08	35.54
3	S	36.62	35.54	36.00	36.08	35.54	35.54	35.54	35.54	35.00	35.54	36.08	35.54
	M	36.62	ND[b]	ND	36.62	35.54	36.08	35.54	35.54	35.54	35.54	35.54	35.54
	B	36.62	35.54	36.00	36.08	35.54	36.08	35.54	35.54	35.54	35.54	35.54	35.54
4	S	36.62	35.54	36.00	36.08	35.54	35.54	35.54	35.54	35.00	35.54	35.54	35.54
	M	36.62	ND[b]	36.00	36.62	35.54	35.54	35.54	35.54	35.00	36.08	35.54	35.54
	B	36.00	35.54	36.00	36.08	35.54	35.54	35.54	35.54	35.00	36.08	35.54	35.54
5	S	36.00	35.54	36.00	36.62	35.54	35.54	35.54	35.54	35.00	36.08	36.08	35.54
	M	36.00	ND[b]	36.00	36.08	35.54	35.54	35.54	35.54	35.00	36.08	36.08	35.54
	B	36.62	35.54	36.00	36.08	35.54	35.54	35.54	35.54	35.54	35.54	35.54	35.54

TABLE 0-2
(continued)
SALINITIES (‰) RECORDED DURING PHYTOPLANKTON AND NUTRIENT SAMPLING
ST. LUCIE PLANT
JANUARY - DECEMBER 1977

Station	Depth[a]	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
11	S	35.54	35.50	36.00	36.08	35.54	35.54	35.54	35.54	35.00	35.54	35.54	35.00
	B	35.54	35.50	36.00	35.54	35.54	36.08	35.54	35.54	35.00	35.54	35.54	35.54
12	S	35.54	35.00	35.50	36.08	35.54	35.54	35.00	35.27	ND[b]	35.54	35.00	35.54
	B	35.54	35.00	35.50	-	-	-	-	-	-	-	-	-

[a] S = Surface; M = Mid-depth; B = Bottom.
[b] ND = No data.

TABLE 0-3

DISSOLVED OXYGEN MEASUREMENTS (mg/l) RECORDED DURING PHYTOPLANKTON AND NUTRIENT SAMPLING
ST. LUCIE PLANT
JANUARY - DECEMBER 1977

Station	Depth[d]	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
0	S	7.3	7.0	7.0	7.9	6.4	5.6	4.9	6.1	7.2	5.8	6.7	6.8
	M	7.3	6.9	7.0	7.5	6.3	5.8	4.8	5.9	7.1	5.7	6.6	6.7
	B	7.2	6.9	6.7	7.4	5.8	5.7	4.8	5.9	6.9	5.7	6.5	6.6
1	S	7.6	7.1	6.9	7.4	6.3	6.3	4.9	6.1	7.2	5.6	6.6	6.6
	M	7.5	7.1	7.0	7.4	6.2	6.0	4.8	6.0	6.9	5.7	6.6	6.5
	B	7.2	6.9	6.6	7.4	6.0	6.2	4.8	6.0	6.9	5.9	6.6	6.6
2	S	7.5	7.4	6.8	7.5	6.6	6.4	5.1	6.1	7.3	5.7	6.6	6.6
	M	7.3	7.1	6.9	7.6	6.2	5.9	5.1	5.9	7.2	5.9	6.7	6.6
	B	7.4	7.1	6.8	7.5	6.0	5.9	4.7	5.5	6.9	6.1	6.6	6.5
3	S	7.1	7.5	6.6	7.8	6.2	6.2	4.9	6.3	7.5	5.9	6.9	6.6
	M	7.1	7.2	6.6	7.6	6.1	6.1	4.8	5.8	7.1	5.9	6.7	6.5
	B	7.1	7.2	6.7	7.6	6.0	6.0	5.1	5.7	6.7	6.0	6.7	6.4
4	S	7.9	7.2	7.8	7.6	6.3	5.7	4.8	6.1	7.2	5.7	6.7	6.6
	M	7.1	7.1	7.2	7.6	6.2	5.8	5.1	5.8	7.1	6.0	6.6	6.5
	B	7.4	7.1	7.4	7.9	6.0	5.8	4.6	5.7	6.8	5.9	6.7	6.5
5	S	7.5	7.3	6.6	7.4	6.5	6.1	4.9	6.0	7.2	5.7	6.6	6.4
	M	7.4	7.1	7.4	7.4	6.4	6.7	4.6	5.9	7.2	5.8	6.6	6.4
	B	7.6	7.1	7.4	7.5	6.4	6.6	5.1	5.7	6.7	5.6	6.4	6.4

TABLE O-3
(continued)
DISSOLVED OXYGEN MEASUREMENTS (mg/l) RECORDED DURING PHYTOPLANKTON AND NUTRIENT SAMPLING
ST. LUCIE PLANT
JANUARY - DECEMBER 1977

Station	Depth[a]	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
11	S	7.2	6.2	6.6	6.2	6.0	6.1	6.7	5.9	6.0	5.4	5.7	6.6
	B	6.0	5.8	6.4	6.1	6.0	6.2	6.4	5.7	5.8	5.3	4.9	6.6
12	S	6.1	5.7	5.8	6.3	6.8	5.3	9.2	5.9	5.9	5.3	5.1	4.8
	B	5.3	5.3	-	-	6.0	4.6	-	-	5.8	-	-	-

[a] S = Surface; M = Mid-depth; B = Bottom.

TABLE 0-4

TURBIDITY MEASUREMENTS (FTU) MEASURED DURING PHYTOPLANKTON AND NUTRIENT SAMPLING
ST. LUCIE PLANT
JANUARY - DECEMBER 1977

Station	Depth[a]	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
0	S	1.5	1.5	1.5	0.7	0.3	0.3	0.0	0.2	0.1	0.5	2.4	0.3
	M	1.5	1.5	1.1	0.7	0.6	0.2	0.1	0.1	0.2	0.7	6.2	0.3
	B	1.7	2.3	4.0	0.9	0.4	0.2	0.0	0.1	0.6	0.9	9.3	0.3
1	S	4.0	ND[b]	1.9	0.7	0.3	0.0	0.0	0.2	0.5	0.5	6.0	0.3
	M	3.6	ND[b]	1.1	0.7	ND	0.0	0.1	0.2	0.6	0.7	9.6	0.3
	B	2.7	ND[b]	2.3	0.9	0.4	0.0	0.0	0.2	0.6	0.7	8.0	0.3
2	S	1.3	ND[b]	1.5	0.3	0.3	0.1	0.1	0.1	0.1	0.3	4.8	0.3
	M	0.9	ND[b]	1.1	0.3	ND	0.0	0.1	0.1	0.1	0.3	9.3	0.3
	B	0.9	ND[b]	1.9	0.3	0.3	0.0	0.1	0.2	0.3	0.5	10.3	0.3
3	S	0.5	ND[b]	1.5	0.5	0.2	0.0	0.0	0.1	0.3	0.5	2.0	0.2
	M	0.1	ND[b]	0.7	0.5	0.2	0.0	0.1	0.0	0.0	0.3	4.6	0.2
	B	0.1	ND[b]	0.7	0.5	0.2	0.0	0.1	0.0	0.1	0:3	4.1	0.2
4	S	0.7	ND[b]	1.5	0.5	0.2	0.3	0.0	0.2	0.4	0.3	2.6	0.2
	M	0.7	ND[b]	1.1	0.5	0.3	0.1	0.0	0.2	0.3	0.5	6.8	0.3
	B	0.7	ND[b]	1.5	0.5	0.3	0.0	0.1	0.1	0.3	0.5	8.1	0.3
5	S	1.1	ND[b]	1.9	0.5	0.2	0.1	0.2	0.1	0.3	0.5	2.6	0.2
	M	0.7	ND[b]	1.1	0.5	0.1	0.1	0.2	0.0	0.1	0.7	7.5	0.3
	B	0.7	ND[b]	1.9	0.7	0.2	0.3	0.3	0.1	0.9	0.5	7.5	0.3

TABLE 0-4
(continued)
TURBIDITY MEASUREMENTS (FTU) MEASURED DURING PHYTOPLANKTON AND NUTRIENT SAMPLING
ST. LUCIE PLANT
JANUARY - DECEMBER 1977

Station	Depth[a]	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
11	S	9.2	2.6	1.0	1.5	8.5	0.3	0.0	0.1	0.3	0.7	3.8	0.2
	B	20.7	4.5	1.3	1.5	10.0	0.3	0.2	0.3	0.3	0.9	5.4	7.7
12	S	33.1	4.0	2.2	1.9	10.0	0.4	0.5	0.7	ND[b]	1.1	6.0	0.7
	B	13.4	4.5	-	-	6.0	-	-	-	-	-	-	-

[a] S = Surface; M = Mid-depth; B = Bottom.

[b] ND = No data.

TABLE 0-5

LIGHT TRANSMITTANCE (LUX VALUES) RECORDED DURING PHYTOPLANKTON AND NUTRIENT SAMPLING
ST. LUCIE PLANT
JANUARY - DECEMBER 1977

Station	Depth[a]	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
0	S	700	128	328	3700	700	2700	1500	1180	2860	1220	8400	920
	M	390	43	148	1760	520	1600	1250	750	505	640	560	480
	B	100	11	104	1420	360	1150	1050	580	355	244	0	220
	D	525	245	600	10200	1400	1300	3900	2450	3250	3900	2800	2200
1	S	980	330	760	24	880	1600	3100	620	42	540	480	70
	M	440	200	360	22	740	1150	2350	370	35	296	0.4	16
	B	145	34	280	20	190	800	1700	39	23	43	0	16
	D	1820	520	136	4050	1000	4400	5400	355	1250	560	480	4200
2	S	1580	750	820	2000	8900	2250	3000	680	1020	620	700	330
	M	940	470	520	2700	600	1200	2400	440	295	184	3.8	990
	B	610	230	380	840	300	1000	1600	245	136	100	0	380
	D	2580	1580	1960	5600	1940	4750	4750	128	1120	880	920	5200
3	S	850	620	390	2600	840	2400	2750	730	1190	2360	760	490
	M	440	500	350	1760	720	1900	2400	540	520	470	48	260
	B	415	345	330	1420	580	1600	1900	360	330	310	6	240
	D	2200	265	2100	8600	1960	5600	4500	1420	1500	1730	1350	6400
4	S	850	525	640	3400	600	2700	1600	920	1230	490	720	680
	M	455	340	264	3240	400	1900	1550	570	455	420	3	310
	B	410	130	142	960	220	1500	1100	410	194	212	0	420
	D	1900	78	1220	1240	1100	6100	4400	2020	2300	2160	188	6200

TABLE 0-5
(continued)
LIGHT TRANSMITTANCE (LUX VALUES) RECORDED DURING PHYTOPLANKTON AND NUTRIENT SAMPLING
ST. LUCIE PLANT
JANUARY - DECEMBER 1977

Station	Depth[a]	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
5	S	1720	790	340	8	480	1600	1750	490	196	296	110	1620
	M	760	440	280	7	270	1000	760	260	78	124	2	580
	B	500	190	220	6	140	600	400	134	30	21	0	420
	D	120	2100	2100	-	600	3600	1400	445	305	290	210	2400

[a] S = Surface; M = Mid-depth; B = Bottom; D = Deck.

TABLE 0-6

SEAWATER NUTRIENT ANALYSIS
ST. LUCIE PLANT
JANUARY 1977

Station	Depth[a]	Nutrients (ppm)					
		PO_4-P	SiO_2	NH_3-N	NO_3-N	NO_2-N	TOC
0	S	0.02	0.15	0.02	<0.1	<0.001	6.39
	M	0.02	0.02	0.02	<0.1	0.001	6.06
	B	0.02	0.03	0.02	<0.1	<0.001	10.30
1	S	0.02	0.12	0.01	<0.1	0.001	7.03
	M	0.03	0.04	0.01	<0.1	<0.001	7.25
	B	0.02	0.07	0.01	<0.1	<0.001	6.19
2	S	0.02	0.03	0.01	<0.1	0.001	8.53
	M	0.02	0.02	0.01	<0.1	0.001	7.14
	B	0.02	0.06	0.01	<0.1	0.001	7.36
3	S	0.03	0.04	<0.01	<0.1	<0.001	8.15
	M	0.03	<0.01	0.02	<0.1	<0.001	7.14
	B	<0.01	0.03	0.02	<0.1	0.001	7.09
4	S	0.02	0.05	0.02	<0.1	<0.001	8.44
	M	0.03	0.06	0.01	<0.1	<0.001	7.68
	B	0.07	<0.01	0.01	<0.1	0.001	8.44
5	S	0.01	0.03	0.02	<0.1	<0.001	9.09
	M	0.02	0.06	0.01	<0.1	<0.001	7.57
	B	0.02	0.03	0.01	<0.1	0.001	6.06
11	S	0.02	0.08	0.02	<0.1	<0.001	7.47
	B	0.03	0.13	0.02	<0.1	0.001	7.90
12	S	0.03	0.21	0.02	<0.1	0.001	7.85
	B	0.03	0.19	0.02	<0.1	<0.001	9.09

[a] S = Surface; M = Middle; B = Bottom.

TABLE 0-7

SEAWATER NUTRIENT ANALYSIS
ST. LUCIE PLANT
FEBRUARY 1977

Station	Depth[a]	Nutrients (ppm)					
		PO_4-P	SiO_2	NH_3-N	NO_3-N	NO_2-N	TOC
0	S	0.02	0.30	<0.01	<0.1	<0.001	14.50
	M	0.02	0.26	<0.01	<0.1	<0.001	16.35
	B	0.02	0.32	<0.01	<0.1	<0.001	15.90
1	S	0.03	0.26	<0.01	<0.1	<0.001	14.35
	M	0.02	0.25	<0.01	<0.1	<0.001	14.20
	B	0.02	0.33	<0.01	<0.1	<0.001	15.75
2	S	0.02	0.34	<0.01	<0.1	<0.001	13.65
	M	0.02	0.40	<0.01	<0.1	<0.001	13.80
	B	0.01	0.33	<0.01	<0.1	<0.001	14.95
3	S	0.02	0.30	<0.01	<0.1	<0.001	16.60
	M	0.02	0.32	<0.01	<0.1	<0.001	15.00
	B	0.01	0.32	<0.01	<0.1	<0.001	16.70
4	S	0.02	0.27	<0.01	<0.1	<0.001	12.35
	M	0.02	0.31	<0.01	<0.1	<0.001	14.30
	B	0.02	0.36	<0.01	<0.1	<0.001	14.95
5	S	0.02	0.28	<0.01	<0.1	<0.001	10.06
	M	0.02	0.27	<0.01	<0.1	<0.001	9.25
	B	0.02	0.37	<0.01	<0.1	<0.001	10.41
11	S	0.02	0.31	0.01	<0.1	<0.001	12.80
	B	0.02	0.32	0.08	<0.1	<0.001	15.05
12	S	0.03	0.48	0.02	<0.1	<0.001	13.15
	B	0.02	0.45	0.01	<0.1	<0.001	9.01

[a] S = Surface; M = Middle; B = Bottom.

TABLE 0-8

SEAWATER NUTRIENT ANALYSIS
ST. LUCIE PLANT
MARCH 1977

Station	Depth[a]	Nutrients (ppm)					
		PO_4-P	SiO_2	NH_3-N	NO_3-N	NO_2-N	TOC
0	S	0.01	<0.02	0.03	<0.1	<0.001	12.70
	M	0.01	<0.02	0.04	<0.1	<0.001	16.75
	B	0.01	<0.02	0.02	<0.1	<0.001	14.40
1	S	0.01	<0.02	0.02	<0.1	<0.001	13.35
	M	0.01	<0.02	0.02	<0.1	<0.001	14.45
	B	0.01	<0.02	0.01	<0.1	<0.001	13.95
2	S	0.01	<0.02	0.05	<0.1	<0.001	15.45
	M	0.01	<0.02	0.02	<0.1	<0.001	14.75
	B	0.01	<0.02	0.02	<0.1	<0.001	14.90
3	S	0.01	<0.02	0.05	<0.1	<0.001	13.55
	M	0.01	<0.02	0.02	<0.1	<0.001	15.35
	B	0.01	<0.02	0.03	<0.1	<0.001	15.10
4	S	0.01	<0.02	0.03	<0.1	<0.001	13.95
	M	0.01	<0.02	0.04	<0.1	<0.001	15.95
	B	0.01	<0.02	0.03	<0.1	<0.001	14.90
5	S	0.01	<0.02	0.03	<0.1	<0.001	16.25
	M	0.01	<0.02	0.02	<0.1	<0.001	15.45
	B	0.01	<0.02	0.01	<0.1	<0.001	16.20
11	S	0.01	<0.02	0.04	<0.1	<0.001	10.86
	B	0.01	<0.02	0.06	<0.1	<0.001	12.25
12	S	0.01	0.03	0.07	<0.1	<0.001	13.65

[a] S = Surface; M = Middle; B = Bottom.

TABLE 0-9

SEAWATER NUTRIENT ANALYSIS
ST. LUCIE PLANT
APRIL 1977

Station	Depth[a]	Nutrients (ppm)					
		PO_4-P	SiO_2	NH_3-N	NO_3-N	NO_2-N	TOC
0	S	<0.01	0.12	<0.01	0.002	<0.001	8.65
	M	<0.01	<0.02	<0.01	0.003	<0.001	7.77
	B	0.02	<0.02	<0.01	0.004	<0.001	5.92
1	S	<0.01	0.08	<0.01	0.005	<0.001	11.75
	M	<0.01	0.02	0.01	0.004	<0.001	8.02
	B	<0.01	<0.02	<0.01	0.004	<0.001	8.28
2	S	<0.01	0.03	0.01	0.005	<0.001	8.02
	M	<0.01	0.11	<0.01	0.003	<0.001	9.64
	B	<0.01	0.21	0.02	0.004	<0.001	14.85
3	S	<0.01	0.10	<0.01	0.003	<0.001	8.78
	M	<0.01	0.10	<0.01	0.002	<0.001	9.27
	B	<0.01	0.12	0.01	0.004	<0.001	9.03
4	S	<0.01	0.17	0.01	0.002	<0.001	9.86
	M	<0.01	0.04	<0.01	0.003	<0.001	9.46
	B	<0.01	0.13	<0.01	0.003	<0.001	10.10
5	S	<0.01	0.06	<0.01	0.004	<0.001	10.02
	M	<0.01	0.05	<0.01	0.003	<0.001	9.82
	B	<0.01	0.11	<0.01	0.003	<0.001	24.70
11	S	<0.01	0.05	0.02	0.004	<0.001	8.47
	B	<0.01	0.07	0.02	0.006	<0.001	8.61
12	S	<0.01	0.11	0.02	0.006	<0.001	9.68

[a]S = Surface; M = Middle; B = Bottom.

TABLE 0-10

SEAWATER NUTRIENT ANALYSIS
ST. LUCIE PLANT
MAY 1977

Station	Depth[a]	Nutrients (ppm)					
		PO_4-P	SiO_2	NH_3-N	NO_3-N	NO_2-N	TOC
0	S	<0.01	0.17	0.01	0.001	0.001	3.42
	M	<0.01	0.13	0.01	<0.001	<0.001	3.61
	B	<0.01	0.14	<0.01	0.001	<0.001	3.31
1	S	<0.01	0.13	<0.01	0.003	<0.001	3.42
	M	<0.01	0.12	0.01	0.002	<0.001	3.38
	B	<0.01	0.10	0.01	0.002	<0.001	3.00
2	S	<0.01	0.06	<0.01	0.001	0.001	3.63
	M	<0.01	0.07	0.01	0.001	0.001	3.65
	B	<0.01	0.08	0.01	0.002	<0.001	3.74
3	S	<0.01	0.04	<0.01	0.002	<0.001	5.06
	M	<0.01	0.05	0.01	<0.001	0.001	5.02
	B	<0.01	0.05	<0.01	0.001	<0.001	5.14
4	S	<0.01	0.06	<0.01	<0.001	<0.001	3.88
	M	<0.01	0.11	0.01	0.002	0.001	3.99
	B	<0.01	0.12	<0.01	0.002	<0.001	3.38
5	S	<0.01	0.09	0.01	0.002	<0.001	4.83
	M	<0.01	0.07	0.02	0.001	0.001	4.14
	B	<0.01	0.19	0.01	0.002	<0.001	4.07
11	S	<0.01	0.09	0.03	0.002	<0.001	3.23
	B	<0.01	0.22	0.02	0.002	0.001	2.64
12	S	<0.01	0.20	0.03	0.003	<0.001	2.82

[a] S = Surface; M = Middle; B = Bottom.

TABLE 0-11

SEAWATER NUTRIENT ANALYSIS
ST. LUCIE PLANT
JUNE 1977

Station	Depth[a]	Nutrients (ppm)					
		PO_4-P	SiO_2	NH_3-N	NO_3-N	NO_2-N	TOC
0	S	<0.01	0.25	0.01	<0.001	<0.001	3.96
	M	<0.01	0.09	0.01	<0.001	<0.001	5.32
	B	<0.01	0.12	0.01	<0.001	<0.001	4.58
1	S	<0.01	0.30	0.01	0.001	<0.001	4.82
	M	<0.01	0.31	0.01	0.002	<0.001	3.81
	B	<0.01	0.27	0.01	<0.001	<0.001	4.54
2	S	<0.01	0.26	0.01	<0.001	<0.001	4.39
	M	<0.01	0.26	0.01	<0.001	<0.001	4.93
	B	<0.01	0.29	0.02	<0.001	<0.001	4.33
3	S	<0.01	0.26	0.02	<0.001	<0.001	5.72
	M	<0.01	0.25	0.02	0.001	<0.001	4.16
	B	<0.01	0.20	0.01	<0.001	<0.001	3.97
4	S	<0.01	0.18	0.01	<0.001	<0.001	5.79
	M	<0.01	0.14	0.01	0.001	<0.001	7.30
	B	<0.01	0.23	0.01	<0.001	<0.001	4.46
5	S	<0.01	0.20	0.01	0.001	<0.001	4.46
	M	<0.01	0.32	0.02	0.001	<0.001	4.83
	B	<0.01	0.36	0.02	0.001	<0.001	3.92
11	S	<0.01	0.19	0.02	0.004	<0.001	5.15
	B	<0.01	0.28	0.02	0.003	<0.001	4.01
12	S	<0.01	0.33	0.03	0.006	<0.001	5.79

[a] S = Surface; M = Middle; B = Bottom.

TABLE 0-12

SEAWATER NUTRIENT ANALYSIS
ST. LUCIE PLANT
JULY 1977

Station	Depth[a]	Nutrients (ppm)					
		PO_4-P	SiO_2	NH_3-N	NO_3-N	NO_2-N	TOC
0	S	<0.01	0.16	0.01	<0.001	<0.001	4.84
	M	<0.01	0.19	0.02	<0.001	<0.001	2.33
	B	<0.01	0.28	0.01	0.001	<0.001	3.51
1	S	<0.01	0.23	0.02	<0.001	<0.001	3.78
	M	<0.01	0.23	0.02	<0.001	<0.001	2.46
	B	<0.01	0.07	0.01	<0.001	<0.001	2.19
2	S	<0.01	0.16	0.02	0.002	<0.001	1.56
	M	<0.01	0.11	0.01	<0.001	<0.001	2.42
	B	<0.01	0.09	0.03	<0.001	<0.001	2.78
3	S	<0.01	0.16	0.03	<0.001	<0.001	2.94
	M	<0.01	0.18	0.02	0.001	<0.001	2.69
	B	<0.01	0.13	0.02	<0.001	<0.001	3.31
4	S	<0.01	0.21	0.02	<0.001	<0.001	2.51
	M	<0.01	0.22	0.02	0.001	<0.001	3.05
	B	<0.01	0.23	0.01	<0.001	<0.001	2.76
5	S	<0.01	0.21	0.01	0.001	<0.001	5.00
	M	<0.01	0.15	0.01	<0.001	<0.001	4.32
	B	<0.01	0.32	0.03	0.002	<0.001	3.19
11	S	<0.01	0.15	0.02	<0.002	0.002	5.54
	B	<0.01	0.16	0.04	0.003	<0.001	4.05
12	S	<0.01	0.19	0.07	0.003	<0.001	6.31

S = Surface; M = Middle; B = Bottom.

TABLE 0-13

SEAWATER NUTRIENT ANALYSIS
ST. LUCIE PLANT
AUGUST 1977

Station	Depth[a]	Nutrients (ppm)					
		PO_4-P	SiO_2	NH_3-N	NO_3-N	NO_2-N	TOC
0	S	<0.01	0.42	0.02	0.001	<0.001	4.13
	M	<0.01	0.41	0.02	0.001	<0.001	2.29
	B	<0.01	0.43	0.02	0.002	<0.001	2.32
1	S	<0.01	0.52	0.03	0.003	<0.001	2.79
	M	<0.01	0.45	0.03	0.001	<0.001	2.64
	B	<0.01	0.37	0.02	0.001	<0.001	2.94
2	S	<0.01	0.46	0.03	0.001	<0.001	2.36
	M	<0.01	0.50	0.03	0.001	<0.001	2.69
	B	<0.01	0.47	0.02	0.003	<0.001	2.30
3	S	<0.01	0.40	0.02	0.006	<0.001	2.89
	M	<0.01	0.46	0.02	0.001	<0.001	3.19
	B	<0.01	0.47	0.02	0.002	<0.001	2.05
4	S	<0.01	0.46	0.02	0.001	<0.001	3.65
	M	<0.01	0.49	0.02	0.002	<0.001	1.98
	B	<0.01	0.48	0.02	0.002	<0.001	2.03
5	S	<0.01	0.46	0.06	0.001	<0.001	4.76
	M	<0.01	0.49	0.04	0.001	<0.001	1.87
	B	<0.01	0.56	0.08	0.002	<0.001	3.88
11	S	<0.01	0.36	0.03	0.003	<0.001	2.77
	B	<0.01	0.35	0.04	0.002	<0.001	2.51
12	S	<0.01	0.44	0.03	0.002	<0.001	6.18

[a] S = Surface; M = Middle; B = Bottom.

TABLE 0-14

SEAWATER NUTRIENT ANALYSIS
ST. LUCIE PLANT
SEPTEMBER 1977

Station	Depth[a]	Nutrients (ppm)					
		PO_4-P	SiO_2	NH_3-N	NO_3-N	NO_2-N	TOC
0	S	<0.01	0.15	<0.01	0.001	0.001	18.18
	M	<0.01	0.24	0.01	0.002	0.001	4.42
	B	<0.01	0.22	0.01	0.002	0.001	5.23
1	S	<0.01	0.24	0.01	0.002	0.001	4.06
	M	<0.01	0.23	0.01	0.002	0.001	0.72
	B	<0.01	0.22	<0.01	0.003	0.001	0.59
2	S	<0.01	0.21	0.02	0.002	0.001	1.17
	M	<0.01	0.18	<0.01	0.002	0.001	1.40
	B	<0.01	0.25	0.01	0.002	0.002	8.12
3	S	<0.01	0.27	<0.01	0.002	0.001	3.38
	M	<0.01	0.21	0.01	0.002	0.001	0.72
	B	<0.01	0.24	0.01	0.003	0.001	2.08
4	S	<0.01	0.26	0.01	0.001	0.001	5.35
	M	<0.01	0.18	0.01	0.002	0.001	2.38
	B	<0.01	0.21	0.01	0.002	0.001	1.79
5	S	<0.01	0.21	0.01	0.003	<0.001	4.52
	M	<0.01	0.21	0.03	0.003	<0.001	7.19
	B	<0.01	0.38	0.02	0.003	<0.001	16.50
11	S	<0.01	0.34	0.02	0.003	0.001	3.58
	B	<0.01	0.19	0.02	0.003	0.001	4.16
12	S	<0.01	0.26	0.02	0.004	0.001	3.12

[a] S = Surface; M = Middle; B = Bottom.

TABLE 0-15

SEAWATER NUTRIENT ANALYSIS
ST. LUCIE PLANT
OCTOBER 1977

Station	Depth[a]	Nutrients (ppm)					
		PO_4-P	SiO_2	NH_3-N	NO_3-N	NO_2-N	TOC
0	S	0.01	0.24	0.03	< 0.001	0.002	3.08
	M	0.01	0.38	0.04	0.002	0.001	2.22
	B	0.01	0.30	0.07	0.005	0.002	3.08
1	S	0.01	0.22	0.06	0.005	0.001	4.08
	M	0.01	0.34	0.07	0.004	0.001	9.23
	B	0.01	0.34	0.06	0.005	0.001	2.43
2	S	0.01	0.31	0.04	0.002	0.001	1.82
	M	0.01	0.24	0.06	0.004	0.001	2.86
	B	0.01	0.35	0.07	0.004	0.001	2.93
3	S	0.01	0.61	0.05	0.003	0.001	3.83
	M	< 0.01	0.43	0.05	0.004	0.001	6.10
	B	0.01	0.36	0.05	0.004	0.001	2.86
4	S	< 0.01	0.31	0.03	0.001	0.002	4.62
	M	0.01	0.37	0.07	0.005	0.001	4.87
	B	0.01	0.44	0.06	0.004	0.002	6.94
5	S	0.01	0.30	0.07	0.004	0.001	3.79
	M	0.01	0.60	0.07	0.004	0.001	3.68
	B	0.01	0.51	0.07	0.005	0.001	3.51
11	S	< 0.01	0.59	0.07	0.003	0.001	2.61
	B	0.01	0.55	0.06	0.004	0.002	1.22
12	S	0.01	0.48	0.06	0.003	0.002	10.49

[a] S = Surface; M = Middle; B = Bottom.

TABLE 0-16

SEAWATER NUTRIENT ANALYSIS
ST. LUCIE PLANT
NOVEMBER 1977

Station	Depth[a]	Nutrients (ppm)					
		PO_4-P	SiO_2	NH_3-N	NO_3-N	NO_2-N	TOC
0	S	<0.01	0.17	0.02	0.004	<0.001	3.29
	M	<0.01	0.20	0.03	0.006	<0.001	6.95
	B	<0.01	0.24	0.09	0.006	<0.001	7.18
1	S	<0.01	0.18	0.02	0.004	<0.001	3.31
	M	<0.01	0.21	0.02	0.003	0.001	3.46
	B	<0.01	0.26	0.02	0.005	0.001	4.65
2	S	<0.01	0.22	0.03	0.005	<0.001	2.58
	M	<0.01	0.20	0.03	0.004	0.001	3.66
	B	<0.01	0.27	0.05	0.006	0.001	3.28
3	S	<0.01	0.19	0.02	0.004	<0.001	2.73
	M	<0.01	0.25	0.03	0.004	0.001	2.44
	B	<0.01	0.21	0.03	0.006	<0.001	3.75
4	S	<0.01	0.21	0.02	0.006	<0.001	2.47
	M	<0.01	0.26	0.01	0.006	0.001	3.17
	B	<0.01	0.27	0.03	0.007	0.001	2.88
5	S	<0.01	0.27	0.02	0.004	<0.001	2.47
	M	<0.01	0.27	0.05	0.006	0.001	2.35
	B	<0.01	0.37	0.03	0.006	0.001	3.23
11	S	<0.01	0.14	0.05	0.007	0.002	3.29
	B	0.01	0.15	0.04	0.007	0.002	3.93
12	S	<0.01	0.24	0.06	0.028	0.001	3.75

[a]S = Surface; M = Middle; B = Bottom.

TABLE 0-17

SEAWATER NUTRIENT ANALYSIS
ST. LUCIE PLANT
DECEMBER 1977

Station	Depth[a]	Nutrients (ppm)					
		PO_4-P	SiO_2	NH_3-N	NO_3-N	NO_2-N	TOC
0	S	<0.01	0.10	0.06	0.024	0.001	2.25
	M	<0.01	0.18	0.07	0.008	0.001	4.52
	B	<0.01	0.16	0.05	0.011	0.001	4.59
1	S	<0.01	0.11	0.06	0.007	0.001	2.77
	M	<0.01	0.18	0.07	0.009	<0.001	3.49
	B	<0.01	0.07	0.06	0.009	0.001	5.11
2	S	<0.01	0.10	0.07	0.009	<0.001	2.58
	M	<0.01	0.17	0.09	0.010	<0.001	1.55
	B	<0.01	0.07	0.06	0.009	0.001	1.36
3	S	<0.01	0.13	0.06	0.005	0.001	3.22
	M	<0.01	0.29	0.08	0.017	0.001	8.54
	B	<0.01	0.06	0.08	0.008	<0.001	2.56
4	S	<0.01	0.12	0.08	0.008	<0.001	6.27
	M	<0.01	0.19	0.07	0.007	<0.001	4.98
	B	<0.01	0.05	0.06	0.008	0.001	11.49
5	S	<0.01	0.16	0.08	0.012	0.001	9.45
	M	<0.01	0.26	0.08	0.008	0.001	3.58
	B	<0.01	0.19	0.12	0.028	0.002	2.52
11	S	<0.01	0.19	0.08	0.006	0.002	3.94
	B	<0.01	0.16	0.14	0.012	<0.001	10.13
12	S	<0.01	0.25	0.08	0.011	0.001	3.75

[a]S = Surface; M = Middle; B = Bottom.