1995 Summary Report for:

CRYSTAL RIVER 3 YEAR NPDES MONITORING PROJECT

FPC Contract S01100

Work Authorization 501 (Addendum 1)

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EXECUTIVE SUMMARY

Florida Power Corporation (FPC) and federal and state regulatory agencies seek to demonstrate that the operation of new helper cooling towers at the FPC Crystal River Station will lead to an expansion in the area of benthic habitat occupied by submerged aquatic vegetation (SAV: seagrasses and rhizophytic macroalgae). A monitoring program was begun in the Fall of 1993 and was completed in the Fall of 1995. The monitoring program emphasized near-shore waters within a two mile radius from the point of discharge (POD) of the Crystal River Station.

The major questions to be answered by the monitoring plan were 1) Are barren areas being colonized by SAV?, and 2) Are existing areas of SAV expanding? To answer Question 1, it was necessary to design and implement a robust survey program in barren areas. To answer Question 2, selected SAV beds were surveyed at a very fine scale and results were compared between years. Important corollary questions included: 3) Changes in SAV cover outside of the designated study area (control sites); 4) Changes in the relative abundance of macroalgae, compared to seagrasses; and 5) Changes in the biomass or productivity of existing SAV beds. We addressed Question 3 by occupying barren and vegetated sites in control sites. We addressed Question 4 by measuring percent cover by species, and percent barren area, at stations within the SAV beds selected for more intensive surveys. Changes in SAV biomass or productivity (Question 5) were determined by sampling the intensive survey beds during August of each year.

Professional aerial photography was to be used to backstop the field measurements. We did not recommend using aerial imagery as a primary source of SAV dispersion data because past experience has shown that turbidity, color, tide, sea surface conditions, and weather are significant impediments to successful photography at this site. Aerial photography scheduled for 1993 was not completed until spring of 1994 because of unsuitable weather and water conditions. Usefulness of 1994 images was marginal due to turbidity fronts in Basins 1 and 2, equivalent to the study area within a 2 mile POD radius. Photography authorized for fall 1994 was not completed despite extended readiness through 1995. Flight conditions were hampered during winter 1994-95, and unusual tropical storm conditions reduced water clarity during summer and fall, 1995.

Our plans for field sampling were informed by the record of poor conditions for aerial photography at the site. Lack of contemporaneous aerial photographs prevented the production of digitized SAV maps but did not hamper our ability to monitor barren and vegetated areas throughout the study area, in order to answer project questions. Future attempts at aerial photography should be made, with or without collateral field sampling, as opportunities arise.

Results

Exhibit I summarizes all results from the 3 year monitoring program. In 1993, barren area transects encountered few SAV beds, and these were

previously known. The 1993 survey established that most of Basins 1-3 were barren of seagrasses. By 1994, 3 new beds had developed, all north of the Discharge Canal. Two of the 1994 beds could not be found in 1995, but 3 other beds were discovered. These also were north of the Discharge Canal. The gross increase in new seagrass areas during the 3 year survey period was 6 beds. Two failed to persist to 1995. Compared to 1993 conditions, 4 new beds were added to Basins 1 and 2. There were, in general, no signs of bed development in the middle or southern areas of the 2 basins closest to the POD. However, one new 1994 Halodule bed was only a few hundred meters from the POD. There was some minor coverage of new seagrass and rhizophytic algae in the southern part of Basin 3.

Twelve of fifteen beds selected for intensive monitoring expanded beyond their 1993 perimeters, by 1994. Eight expanded between 1993 and 1995. The majority of intensively studied beds also showed increases in percent cover, both along their edges and within their interiors, from 1993 to 1994. The 1994 to 1995 period saw fewer beds with increased cover, perhaps owing to the wet summer of 1995. Biomass measurements also depicted declines from 1994 to 1995, although 14 of the 15 intensively studied beds showed increases in daily productivity rates. These responses are consistent with the effects of tropical storm activity and above-average rainfall and river discharges.

Based on data from 1993, 1994, and 1995, the following points are offered.

1. "New" SAV beds appeared along barren-area transects.
2. Recruitment of new beds into barren areas has not been extensive.
3. All of the new beds have formed north of the point of discharge, in Basins 1 and 2.
4. The seaward edges of SAV beds have expanded at 8 of 15 intensively monitored SAV stations.
5. Patterns of change in percent cover, from 1993 to 1995, showed decreased coverages (by total vegetation) at 10 of 15 sites.
6. Biomass distribution patterns showed a general decline from 1993 to 1995 at 10 of 15 sites irrespective of distance from the POD.
7. Shoot densities increased by 1995 for Halodule at 8 of the 10 stations where it was present in 1994.
8. SAV production rates showed large increases from 1994 to 1995 in Basins 1, 2 and 3, closest to the point of discharge.

Overall, monitoring revealed spatial as well as temporal patterns in the distribution of sea grasses and rhizophytic algae. Most patterns depicted a system of bed recruitment and expansion that promoted persistence, and for several parameters (Exhibit I), improvements in SAV cover and condition during the three years. No abiotic parameters were measured in this program, so it is not possible to assign causes for the SAV changes observed during the past 3 years. Changes in transects and beds within the 2 mile POD radius were mirrored by changes at more distant sites, indicating the extent of the 1995 wet season on the region, as well as the study area.

Exhibit 1. 1993-1995 Summary data, Crystal River NPDES Monitoring Project.

Basin/SAV[1]	I-HW	II-HW	III-SF	IV-Mixed	V-SF/Other	Total
Barren Area Results						
No. Transects	3	3	5	2	2	15
No. New Beds						
1993-1994	1	1	1	0	0	3
1994-1995	1	2	0	0	0	3
Net New Beds						
1993-1995	1	2	1	0	0	4
Intensive Seagrass Bed Results						
No. of beds/area	3	3	3	3	3	15
No. Beds Expanding						
1993-1994	2	2	3	2	3	12
1993-1995	2	1	1[2]	3	1	8
No. Beds Increasing						
% Cover						
Interiors						
1993-1994	2	1	2	0	3	8
1994-1995	1	0	0[2]	0	0	1
Perimeters						
1993-1994	1	0	2	2	3	8
1994-1995	1	0	0[2]	0	1	2
No. Beds Increasing						
Biomass						
1994-1995	0	2	0	1	0	3
No. Beds Increasing						
Productivity						
1994-1995	3	3	3	3	2	14

[1] HW, Halodule wrightii; SF, Syringodium filiforme; mixed, more than one species was abundant
[2] Of two remaining marked beds in this area.

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INTRODUCTION

Florida Power Corporation (FPC) and federal and state regulatory agencies seek to demonstrate that the operation of new helper cooling towers at the FPC Crystal River Station will lead to an expansion in the area of benthic habitat occupied by submerged aquatic vegetation (SAV: seagrasses and rhizophytic macroalgae). A monitoring program was begun in the Fall of 1993 and was completed in the Fall of 1995. The monitoring program emphasizes near-shore waters within a two mile radius from the point of discharge (POD) of the Crystal River Station (Figure 1).

Available Information

Early surveys and aerials are described in the 316 Demonstration Report and the 1986 MML report, "Submerged Aquatic Vegetation in the Vicinity of the FPC Crystal River Power Station."

Studies performed in the 1970s by the University of Florida contained a single map by Martin Van Tine of "approximate attached macrophyte standing crop" during the summer of an unknown year (Florida Power Corporation, 1975). The map depicted areas of high and low standing crop, including barren areas. Nothing is known of sampling methods or effort.

Two SAV surveys were performed in the vicinity of the Crystal River Station during the 1980s. The first was conducted under MML supervision as part of the 316 Demonstration Study, in 1983 and 1984. The second was sponsored by FPC and conducted by MML in 1986, to determine the nature of offshore SAV beds closer to the influence of the Withlacoochee River.

The 316 Demonstration Study occupied 50 survey stations. "Thermal" stations fell along four transects between the Barge and Intake Canals. "Control" stations fell along three transects north of the Barge Canal and three transects south of the Intake Canal. (Thirteen of the 50 stations fall within a 2 mile radius from POD, north of the intake canal.) Ten square-meter quadrats were deployed at each station and percent cover of seagrass and algae was determined in each. Nine "intensive" stations were equally divided among Halodule, Thalassia, and Syringodium sites in thermal and control areas. Intensive stations were visited on 6 week intervals. Biomass and productivity (2-week clip method) was measured at each station.

No intensive stations were sampled in November of either year. Aerial photographs were taken in February of 1983 and 1984, and in October/November of 1983. Only three of eight planned, quarterly overflights produced successful aerial images due to poor water quality. Later ground-truthing resulted in SAV maps drawn at a scale of 1:18,000 on stable acetate.

Dense SAV was mapped south of the Intake Canal and between the Intake and Discharge Canals. Sparse SAV beds were mapped in Basins 1 and 3. SAV near Fisherman's Cut was seasonally variable. A large area of SAV in Basin 4 was more persistent. Most of these areas fall within a 2-mile POD radius. Barren areas were most widespread in Basins 1, 2 and 3. Other results are presented in the 316 Demonstration Report.

In November 1986, MML surveyed 177 stations between the Barge and Intake Canals, west of the POD. Station density was determined through a statistical analysis of previous SAV bed distribution. (Twenty-five stations fell within a 2-mile POD radius.) Original LORAN positions of all stations are still available. At each station, 120 meter dive lines were surveyed for dispersion and abundance of SAV.

The survey found that most stations west of the 1983-84 study area contained SAV. SAV (especially sparse macroalgae) was also found at areas mapped as barren in the earlier studies. Caulerpa species were ubiquitous, but other rhizophytic algae were more common in the southern half of the survey area. Overall, there were declines in SAV richness and cover toward the north and toward the west, within the 1986 survey area. Extensive areas of drift and lithophytic Sargassum were also observed.

Rationale

The major questions to be answered by the monitoring plan were:

1) Are barren areas being colonized by SAV?

2) Are existing areas of SAV expanding?

To answer Question 1, it was necessary to design and implement a robust survey program in barren areas. To answer Question 2, selected SAV beds were surveyed at a very fine scale and results were compared between years.

Professional aerial photography was to be used to backstop the field measurements. We did not recommend using aerial imagery as a primary source of SAV dispersion data because past experience has shown that turbidity, color, tide, sea surface conditions, and weather are significant impediments to successful photography at this site. On the other hand, when it is successful, aerial photography can reveal changes in SAV that fixed-station methods might miss. Consequently, we sought to fly the site and examine each year's new imagery prior to commencing field work, where possible.

Important corollary questions included:

3) Changes in SAV cover outside of the designated study area (control sites);

4) Changes in the relative abundance of macroalgae, compared to seagrasses; and

5) Changes in the biomass or productivity of existing SAV beds.

We addressed Question 3 by occupying barren and vegetated sites in control sites, and by including these areas in the flight lines for aerial photography. Where possible, control stations were selected at a variety of depths comparable to stations within the 2-mile POD radius.

We addressed Question 4 by measuring percent cover by species, and percent barren area, at stations within the SAV beds selected for more intensive surveys.

Changes in SAV biomass or productivity (Question 5) were determined by sampling the intensive survey beds during August of each year. The 316 Demonstration Study reported a strong dependence of variation in these parameters, on time. Seagrass biomass and productivity during the Fall are transitional between maxima in August and September, and minima in December and January. Consequently, difficulty was expected in identifying statistically significant differences between years, using November data. Interannual differences are particularly difficult to detect in beds of mixed species, which are more common than single-species beds near Crystal River Station.

This report summarizes findings for barren area surveys, "perimeter" studies at intensive SAV beds, and the August 1994-95 condition assessment.

METHODS

Positioning

Several independent systems were employed. Approximate station locations were mapped onto charts carried in the field, to depict the orientation of a station to creeks, islands, day marks, levees, and other land marks. LORAN and GPS coordinates of all stations and transects, measured in 1993 and 1994, were also taken into the field. As needed, the end points of transects that were marked on land or in marshes with steel bars, stones, colored paint, or other permanent material were replaced.

In 1995, transect end points and station locations were again measured using a Voyager LORAN Navigator and a Magellan NAVPRO global positioning system. Electronic positions also were measured for NOS benchmarks at the mouth of the discharge canal, and at the U.S. Geological Survey "Knott" benchmark on Drum Island. Analysis of the electronic data indicates high field accuracy (reproducibility) but relatively low map precision (see Discussion).

Barren Area Transects

Barren area transects established in 1993 were visited in October 1994 and October 1995. As shown in Figure 2, most effort was directed to Basins 1, 2 and 3, with some effort in the areas of Basins 4 and 5, closest to the POD (e.g, inside the 2-mile radius).

Transects 1N, 1W and 2W covered Basin 1, the shallowest basin in the study area (-0.3 m relative to chart datum). Transects crossed level bottom comprised of variously-sized sediment overlying an irregular limestone platform. Sediments to the north and east, near Juncus marshes, have an organic component found lacking in sediments to the west and south, where shelly sands dominate. This basin is utilized heavily by the west indian manatee.

Basin 2 is crossed by Transects 3W, 4W, and the northern half of 5W. Basin 2 is deeper than Basin 1 (mean depth -0.9 m) and has minor tidal channels as deep as 1.8 m. Basin 2 transects run close by or over oyster reefs and

mapped SAV beds 1, 6 and 7. Sediments are heterogeneous, and bare limestone occurs on Transects 4W and 5W. The influence of Withlacoochee River discharge is evident in this basin.

Basin 3 is crossed by Transects 6W through 10W. This circular basin has a bowl-shaped profile, deepest near the center (-1.9 m). The basin is ringed by oyster reefs to the east and west, and by the Intake Canal Levee to the south. Perimeter beds 14 and 15 are located on 2 shelly shoals that have accumulated atop limestone steppes within the basin. This basin presents the most exposed limestone bottom in the study area, as well as the most sediment with a high silt and mud content. Tidal currents are strong near Transect 10W (adjacent to Dog Head Reef).

Basin 4 contains 2 transects, 2N and 11W. The transects begin near ends of the middle bar in the English Shoals, and meet in waters 2.1 m deep. This bottom is shelly and supports Caulerpa, calcareous algae, and the sea-whip, Leptogorgia. Basin 5 has 1 transect, 12W, that begins on the levee and ends in 2.5 m of water. Solitary corals are present in this basin, which opens directly to the Gulf of Mexico.

Transects 10W, 12 W, and 2N are beyond the 2 mile POD radius, and are treated as background or control sites. Another control site, Transect 13W, lies between the Barge Canal and Withlacoochee River channel. Transect 13W is in 2 m of water over muddy sand. Appendix Table I describes all transect locations.

Barren areas were surveyed by a diver towed behind a shallow draft vessel. Most transects ran due north or south to pre-determined landmarks. For long transects, tows followed transect lines marked in advance with temporary buoys. Buoys marked end points and way points, as needed. Beginning and end points were permanently positioned and marked. Where needed, tows were made into the current to reduce drift.

If the diver encountered seagrass or rhizophytic algae in barren areas the vessel stopped and marked the site(s). The immediate area was reconnoitered to determine the extent of SAV. If it corresponded to a previously-mapped SAV bed, it was recorded as "mapped" and was discounted as barren area. If new, the area, centroid position, species composition, and percent cover (see below) of the SAV was to be recorded, unless the vegetation was found to be Sargassum attached to rock outcrops. SAV markers were then recovered, and the survey of the transect continued.

Yearly barren area transect surveys were begun on November 9, 1993, October 13, 1994, and October 16, 1995.

Intensive SAV BED Surveys

In October 1994, GPS and LORAN coordinates and compass sightings were used to relocate the seagrass beds selected for study. All beds were marked by crab trap buoys anchored with screw-in tie down anchors to facilitate site recovery in 1995.

Within each bed, the position of a "center" marker was determined in 1993 by GPS, LORAN, and compass bearings. Center markers are hemispherical concrete parking lot markers. Each marker was painted with blue anti-fouling paint and anchored to the bottom with screw-in anchors. Center markers were tied to the anchors with 1" diameter nylon rope.

Edges of all 15 sites were marked during November 1993 in order to determine whether the seagrass beds expanded, contracted, or remain unchanged during the duration of the three year study.

Seagrass bed edges were marked with short (<1.0 m) sections of 3/8" steel reinforcement rods driven into the bottom with a small sledge hammer. Each steel stake was allowed to extend about 10 cm upward from the sediment surface. Seagrass bed edges were usually very easy to define, based on the sharp delineations between bare bottom and vegetated bottom.

A surveyor's tape was strung out along the set of edge markers at each site. In 1993, distances between edge markers and the distance from the center marker to each edge marker were recorded.

In 1994, bed markers were found by wading, snorkeling, or pulling a weighted polypropylene line across the bottom. Center markers and edge markers were relocated or replaced as needed. The majority of markers was relocated, so that only a few needed to be replaced. PVC poles were installed next to each edge marker to simplify working in turbid water. The distance of the actual SAV bed edge was tape-measured from the edge marker. Seaward changes were recorded as expansions. Changes toward the central bed marker were recorded as contractions.

The same methods were used to re-locate bed markers in August and October 1995 and the same measurements from edge markers and the center stone were repeated. All markers, including the center stone and bed edge stakes, were missing at Station 4. All other sites were found although various numbers of stakes were missing at several of the 14 re-located sites.

Physical Features

To document that bottom profiles or sediment depths did not vary so much near the edges of SAV beds that future lateral growth might be inhibited, additional data were collected at each site in 1993. These measurements were repeated in October 1995 to follow possible changes in physical characteristics of the bottom. Water depth and sediment thickness were measured on the edge of each SAV bed and at 1.0 and 2.0 m distances into the barren zone. A marked measuring stick was used to measure water depth. Sediment thickness was determined by pushing a 1.5 m long, 3/8" diameter iron rod into the bottom. The rod was pushed in to its full length or to the point of refusal. The rod was then withdrawn and the depth of penetration was measured. Measurements of each type were made adjacent to alternate stake markers along the edges of each of the 15 seagrass beds.

Seagrass Observations

In 1993, 1994, and 1995 the percentage of bottom covered by SAV on the edge of each bed (from 0.0 to 1.0 m into each bed) and deeper into the bed (at a distance of 2.0 to 3.0 m) was measured. Ten 1.0 m^2 quadrat-based estimates of bottom cover were taken along the vegetated edge of each SAV bed. The quadrats were positioned on the vegetated side of a randomly selected subset of the 15 edge markers at each site. Ten 1.0 m^2 additional cover estimates were made by flipping the quadrat frame over twice away from the perimeter of each seagrass bed.

Subdivisions (100 cm2) of the 1.0 m2 quadrat were used as the units for the cover estimates. SAV coverage was determined by counting the number of units in which various species of SAV were actually rooted. A barren square was defined as being devoid of any rooted vegetation. Seagrass blades from plants rooted in other units were not counted as cover in the otherwise completely barren units. Four seagrasses (Halodule, Syringodium, Thalassia, and Halophila) were encountered in the study sites. Two species of the rhizophytic algal genus, Caulerpa, were found at several of the sites.

Divers recorded data on slates and the data were transferred to log books for later use.

SAV Condition

Condition was defined as SAV shoot count, above-ground biomass, and productivity. Methods and effort followed the 316 Demonstration Study (Mattson et al.,1986[1]) with some variations as noted below. SAV condition was measured at the 15 intensive beds that are used for perimeter measurements in the 1993-95 monitoring program.

At each station, 6 samples for biomass of seagrasses and rhizophytic macroalgae were collected with a 25x25 cm sampler. The sampler was a PVC frame partially covered by a dive bag. Macrophytes clipped at the sediment surface floated into the upturned bag, which was labelled and closed. Its contents were then transferred to a labelled plastic bag and stored on ice. Contents of 6 samples were sorted into seagrasses (by species) and algae (pooled). Sorted samples were dried to constant weight at 105° C and weighed.

Seagrass productivity was determined as 14 day regrowth. Six clip rings were deployed at each seagrass bed study site. Losses of one or two rings occurred between deployment and retrieval at a few sites. At least 4, and usually 5 or 6, replicate measurements were made in each bed, using 11.3 cm diameter clip rings for Halodule, or 16.7 cm diameter clip rings for other seagrasses. After clip rings were installed, all SAV was clipped level with the surface of the ring, and discarded. Two weeks later, new growth was harvested, sorted, preserved, and labelled. Samples were dried to constant weight at 105° C and weighed. Seagrass shoot densities were measured by counting the shoots collected in the clip rings after 14 days of regrowth.

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[1]/ Mattson, R., J.A. Derrenbacker, Jr. and R.R. Lewis. 1986. Effects of thermal addition from the Crystal River generating complex on the submerged macrophytic communities in Crystal Bay, Florida, pp. 11-67 in K. Mahadevan et al. (eds.), Proceedings, Southeastern Workshop on Aquatic Ecological Effects of Power Generation, Mote Marine Laboratory Technical Report Number 124. Sarasota FL.

Seagrass Bed Designations

Seagrass bed designations were changed for the final report (Figure 3) in order to indicate basin locations and dominant vegetation types. Codes for the new groupings are given in Table 1. Area I-HW, for example, includes the nearly monospecific Halodule beds in Basin I. Area IV-Mix beds contain more than one species of seagrass and algae. Figures for all seagrass bed observations are arranged within each group based on distances from the point of discharge (POD). In Areas I-HW and II-HW and at Station 13 this is a straight-line distance from the POD to the center marker at each station. For all other stations distances were measured from the POD to the tip of the southern discharge dike and then to the station centers.

RESULTS

All data collected from the 1995 sampling effort appear in the tables and appendix tables that follow. Data from 1993 and 1994 were included for comparison to the 1995 data.

BARREN AREA STUDIES

Transect Completeness

All transects were surveyed in 1993. In 1994, the Withlacoochee control transect (13W) was not run due to the riverine discharge of highly colored waters. In 1995, the northern half of the Basin 5 control transect (12W) was not surveyed due to a layer of mineral turbidity near the bottom. The shallower, southern half of this transect was surveyed. Overall completeness by transect-effort for the 3 year study was 97%.

Barren Area Transects in 1994

Three SAV beds were encountered in 1994 that were not seen when the transects were established in 1993 (Table 2; Figure 2). Two were Halodule

beds and the third was a mixed Halodule-Syringodium bed with small amounts of the green alga, Caulerpa.

One of the "new" beds was found on Transect 1N, which is Basin 1. It was a small (7x10 m), sparse (5% mean cover) Halodule bed with short (<5 cm) blades. The bed was growing in a silty sand underlain by rock. Many large (10-20 cm) burrows were found in the rock near the bed and elsewhere on the Basin 1 flats crossed by Transects 1N, 1W and 2W. The burrows were not seen in 1993.

Another Halodule bed was found on Transect 3W, in Basin 2. The bed covered 40 m of transect on flats southwest of Thumb Island. The north end of the bed was characterized by sparse calcareous green algae and Halodule was the principal SAV at the bed's southern end. Average percent cover of Halodule near the south end of the bed was 48%.

A third novel bed was found on Transect 5W, which crosses from Basin 2 into Basin 3. The bed was found in the Basin 2 portion of the transect, south of Drum Island. The bed was a mixture of small, dense patches of either Caulerpa (4% mean cover) or Halodule (14% mean cover), with the two sometimes combined. Syringodium was present but rare (30% cover in 1 of 10 replicates.

Barren Area Transects in 1995

In 1995, four SAV beds were encountered in 1994 that were not seen when the transects were established in 1993 (Table 3). Three of the 1995 beds were not encountered in 1994. All of the new beds in 1995 were in Basins 1 and 2, and were dominated by Halodule.

The smallest of the new beds was found on Transect 1W, in Basin 1. It was a irregular (1x1 m), sparse (<5% mean cover, estimated) Halodule bed with short (<5 cm) blades. The bed was growing in a silty sand.

Another Halodule bed was found on Transect 3W, in Basin 2. The bed covered 35 m of transect on flats northeast of Thumb Island. The bed covered 12 m, east to west. Average percent cover of Halodule near the center of the bed was 72%, and a single Halophila rosette was found in one quadrat.

The third new bed in 1995 was on Transect 4W (Basin 2), close by the southeast corner of Drum Island and an adjacent oyster reef. The bed measured 110 m on a north-south axis. Its east-west borders were irregular and the fringes were dissected by courses of barren bottom, but the east-west width of the bed at its center was 22 m. Halodule was the dominant species (34% mean cover) although 1 quadrat contained 6% Halophila and 2% Caulerpa.

The fourth bed was found on Transect 5W, which crosses from Basin 2 into Basin 3. The bed was found in the Basin 2 portion of the transect, south of Drum Island, at the site of its first discovery in 1994. In 1995 the bed was dominated by Syringodium (17% mean cover) with a trace of Caulerpa. This condition differs from 1994, when the bed was a mixture of small, dense patches of either Caulerpa (4% mean cover) or Halodule (14% mean cover), with the two sometimes combined. Syringodium was present in 1994 but rare (30% cover in 1 of 10 replicates).

Finally, small and sparse amounts of new vegetation were encountered on the southern reaches of Transects 6W and 9W, in Basin 3. On Transect 6W, tufts of Syringodium were found among Caulerpa and Sargassum. Caulerpa, alone, was crossed by Transect 9W.

Net SAV Changes in Barren Areas, 1993 - 1995

In 1993, barren area transects encountered few SAV beds, and these were previously known. The 1993 survey established that most of Basins 1-3 were barren of seagrasses. By 1994, 3 new beds had developed, all north of the Discharge Canal. Two of the 1994 beds could not be found in 1995, but 3 other beds were discovered. These also were north of the Discharge Canal.

The gross increase in new seagrass areas during the 3 year survey period was 6 beds. Two failed to persist to 1995. Compared to 1993 conditions, 4 new beds were added to Basins 1 and 2. There were, in general, no signs of bed development in the middle or southern areas of the 2 basins closest to the POD. However, one new 1994 Halodule bed on Transect 1W was only a few hundred meters from the POD. There was some minor coverage of new seagrass and rhizophytic algae in the southern part of Basin 3.

Other Changes Observed on Barren Area Transects

In 1994, many large (10-20 cm) burrows were found in exposed rock and in sand on the Basin 1 flats crossed by Transects 1N, 1W and 2W. The burrows were not seen in 1993, or in 1995. A similar appearance in 1994, of solitary sponges and tunicates, was observed in Basin 3 (Transects 6W and 7W). These filter feeding animals were abundant in deeper Basin 3 waters, but were absent in 1995.

SEAGRASS BED INTENSIVE STUDIES

General characteristics, derived from field observations made during the 3-year duration of this project, of each of the 15 seagrass stations included in the intensive studies are described in Table 4. Table 1 lists the GPS and LORAN determined latitudes and longitudes of the center markers at each of the 15 seagrass stations. The seagrass species present at a site seemed to be highly dependent on the site's degree of exposure to the open Gulf, turbidity at each site, and on sediment thickness as judged from perceptions based on walking across each seagrass bed. In general Halodule was found adjacent to Juncus marshes and Syringodium was found in open bays adjacent to protective offshore oyster bars.

Physical Features

Measurements of water depth at the marked edges of the seagrass beds and at 1.0 and 2.0 m beyond the edges (Figures 4 to 8; Appendix Table II) indicated gradually sloping bottoms at all stations in Area 1-HW, in Area II-HW, in Area III-SF, and in Area V-SF. Stations 14 and 13 in Area IV-Mix contours were less uniform with more rapid changes in depth from the perimeter to 2 m outside of each bed.

In general there was no evidence that changes in bottom topography limited seagrass growth at any of the study sites.

Sediment depth profiles (Figures 9 to 13; Appendix Table II) show an interesting pattern in that most Halodule wrightii beds are situated on soft mud banks with sediment depths reaching 100 cm at 5 of the 6 Halodule beds

(Figures 9 and 10). Station 3 was an exception to this pattern. At Station 3 soft sediments were less deep because the site runs closely parallel to an oyster bar on its shoreward side. Limestone rock outcroppings were also scattered throughout this bed.

Syringodium filiforme beds were typically found rooted in shallow-sediment deposits over rocky substrata (Figures 11 and 13). Surface soft sediment layers rarely reached 100 cm depth with the exception of Station 10.

The mixed species beds (Figure 12) were underlain by a complex mosaic of shallow rock and deep soft sediments. Sediments at Station 14 and 15 were soft while rock was encountered at less than 20 cm at Station 15. All of the Syringodium beds seemed to be limited by exposed rock along at least parts of their borders.

Seagrass Bed Expansion and Contraction

Mean changes in grass bed edge positions ranged from -2.06 m to +6.81 m. Standard deviations usually exceeded means because considerable variation was measured at each site. All data for this effort are presented in Appendix Table III. In general more beds expanded or remained unchanged at distances greater than 1.6 miles from the POD while more beds contracted at locations closer to the POD. All bed edge markers and the center stone were lost at Station 4 during the summer of 1995.

Area-wide Bed Expansions

No completely consistent basin-wide patterns were seen with the exception of Area IV-Mix where all beds expanded from 1993 to 1995 (Table 5; Figure 14). In this area, mean bed expansion ranged from 0.58 to 2.07 m. Stations in all other areas showed a mix of expansion and contraction over the study period. Trends toward expansion seen in 1994 were sometimes drastically reversed by 1995. Two of the three stations in this area consistently expanded from 1993 to 1994. Station 13 remained unchanged in 1994 but expanded by 1995. Stations in this group range from 1.77 to 2.05 miles from the POD.

Bed Changes in Other Areas

Five of the remaining 11 intensively studied SAV beds had positive growth along their margins since 1993, based on the mean change observed at 10 to 16 reference markers per bed (Table 5). Halodule beds in Area I-HW (Figure 15) expanded at two stations, following the pattern seen between 1993 to 1994, and contracted at one station. The I-HW stations are located within 0.63 to 0.73 statute miles of the point of discharge (POD).

Halodule beds in Area II-HW (Figure 16) expanded at Station 7 and contracted at Stations 5 and 6 (Table 5). The grassbed at Station 5 virtually disappeared as will be described in later sections of this report. Grassbeds in this area range from 1.23 to 1.67 statute miles from the POD. Station 5 is the most distant from the POD of these three stations.

Syringodium beds in Areas III-SF (Figure 17) and V-SF (Figure 18) expanded at two stations, remained unchanged at two stations, and contracted at one station. No distance to edge measurements were possible in 1995 at Station 4 because all markers were lost by the time of the 1995 visits. Area III-SF stations range from 1.63 to 1.82 miles to the POD while Area V-SF stations are located from 2.25 to 2.95 miles from the POD.

Percent Cover

The majority of cases in 1993, 1994, and 1995 were such that percent cover measurements were made on algae-free SAV beds (Appendix Table IV). Although algae were present in some cases, the cover and changes in cover of seagrass generally represent the same values as data for "total vegetation".

Percent coverage by all vegetation in area I-HW decreased from a high of 86.1% in 1993 to a low of 56.4% in 1995. Decreases of the same approximate magnitude were seen in all other areas from 1993 to 1995 with the exception of area V-SF (Table 6). A large decrease in percent coverage occurred in these areas between August 1995 and October 1995.

All measurements of percent cover from 1993 to 1995 were combined to produce a series of figures (Figures 19 to 25) which show how bottom coverage by individual seagrass species, algae, and total vegetation (SAV) changed from year to year.

Halodule wrightii

Halodule followed similar patterns in bed edges and interiors at each of the nine stations where this seagrass was abundant. All but one of these stations showed decreased coverages on their perimeters and within the beds' interiors from 1993 to 1995. The patterns followed between 1994 and 1995 show a mixture of changes that included both increased and decreased coverage. Halodule (Figure 19) percent coverage fell from nearly 90% in 1993 to less than 10% in 1995 at Station 5 and to 0% at Station 8. Station 5 changed from a nearly uniform carpet of Halodule to a mud flat with only a few tufts of living grass while Station 8 changed from a mixed species bed to a Syringodium bed. The changes seen at other stations were much less pronounced.

Syringodium filiforme

Syringodium (Figure 20) coverage remained approximately constant or increased at stations where it was the only seagrass species. Syringodium increased coverage at Station 8 from 0% coverage in 1993 to much higher levels in 1995 as described above. Stations 9, 10, and 11 (in group V-SF), all control stations, showed no consistent patterns of change. Syringodium within bed interiors was usually more dense than on bed perimeters but interior percent coverages paralleled perimeter fluctuations at most stations.

Halophila engelmannii

Halophila (Figure 21), never abundant, virtually disappeared at all 15 stations by October 1995. It was present in August 1995 biomass samples and in quadrat surveys for percent cover at 4 sites. Its greatest percent coverage, nearly 25% within perimeter quadrats, was seen at Station 9, south of the intake canal, in 1994. By 1995 all traces of this species disappeared. It was never found at 7 stations and never exceeded 10% coverage at the remaining 7 sites.

Thalassia testudinum

Thalassia (Figure 22) was only found within Area IV-Mix's three stations. Its coverage fluctuated from year to year in patterns unique to each of the three stations.

Total Seagrass Coverage

Total seagrass coverage (Figure 23) decreased at 9 of the 15 grassbed station study sites, increased at 2 stations, and remained approximately constant at 4 stations. The largest decline in coverage, from 80% to 3% coverage, was seen at Station 5. Station 3 also showed a large drop in coverage from 1993 to 1994 but recovered some of the loss by October 1995.

Attached Algae

Attached algae (Figure 24), usually Caulerpa prolifera or C. mexicana, were abundant at only 3 of the 15 stations. No long-term trends were seen at these stations.

Total SAV Coverage

Trends in total vegetation coverage (Figure 25) closely followed the site-specific patterns seen in Figure 23 (total seagrass coverage) because of the sporadic algal coverage. Completely barren bottom, with no seagrass or algae for interiors and perimeters of the 15 seagrass stations, can be read in Figure 25 as the white space above the cross-hatched bars. Cross-hatching represents the area covered by SAV. Interiors and exteriors of most sites were very similar in the percent of bottom area covered by SAV.

The largest decrease in SAV coverage was seen at Station 5. This decrease represents the loss of nearly all of the Halodule found at the station in 1993.

Biomass

Biomass was evaluated for each seagrass species, all seagrass, and all vegetation (Appendix Table V; Table 7).

Halodule wrightii

Halodule biomass declined at 7 of the 12 stations where it was found in 1994 (Figure 26). A general trend of increasing biomass with increased distance from the POD can be seen in Areas I-HW and II-HW with the exception of

Station 5. Halodule disappeared completely in the clip box samples taken at Stations 8 and 12 by 1995. It was replaced by Syringodium.

Syringodium filiforme

Syringodium was never collected in Areas I-HW or in II-HW (Figure 27). Syringodium biomass declined at all 7 stations where it was seen in 1994. The declines were most pronounced in Area V-SF and at Station 12 in Area III-SF. The Area V-SF stations were considered to be controls because Stations 9 and 10 are located south of the intake canal (Figure 3). Station 11 is between the intake and discharge canals well behind the last series of oyster bars in Rocky Cove.

Halophila engelmannii

Halophila occurred sporadically at 7 stations over the 2 years in which biomass was monitored (Figure 28). It never occurred in area I-HW but it was collected in all other areas but not at all stations.

Thalassia testudinum

Thalassia occurred in the clip box samples at only 2 stations (Figure 29). It was more abundant in 1994 than in 1995 at both of these stations.

Total Seagrass Biomass

Combining the biomass of all seagrass species obscured the biomass density distribution patterns seen for individual species biomass (Figure 30), although it is evident that stations closest to the POD had much lower mean biomass values than more distant stations. Mean seagrass biomass values for the six stations closest to the POD were considerably lower than mean biomass values for the three more distant stations (9,11, and 12).

Seagrass biomass (Figure 30) declined at 12 of the 15 seagrass stations from 1994 to 1995. The largest declines were seen at Stations 11 and 12. Small increases in seagrass biomass were seen at Stations 6 and 7 in Basin II. Biomass also increased at Station 14. The overall decline in seagrass biomass was seen both at hot-water impacted and at control stations and was not seagrass species specific.

Attached Algal Biomass

Attached algal biomass (Figure 31) was distributed across sites in similar patterns in 1994 and 1995. The two stations where algal biomass was greatest in 1994 showed a decline in biomass in 1995.

Total SAV Biomass

All vegetation (seagrass plus rhizophytic macroalgae) biomass accentuated the spatial pattern seen for all seagrass species combined (Figure 32). Distant stations north of the Intake Canal had greater mean biomass values than stations closer to the POD, due largely to the increased abundance of macroalgae.

Shoot Density

Mean numbers of Halodule shoots per square meter (Table 8) were generally greater in 1995 at all sites where this seagrass was collected in 1994 (Figure 33). The only exception was Station 8 where Halodule disappeared. Syringodium (Figure 34) shoot densities increased greatly in III-SF from 1994 but showed smaller changes in area V-SF. Shoot density data are presented in Appendix Table VI.

Productivity

Clip data (Table 8; Appendix Table VI) were normalized for regrowth period and sample size to calculate productivity as mg dry weight per square meter per day.

Halodule productivity increased in areas I-HW and II-HW from 1994 to 1995 (Figure 35). All Halodule disappeared at Station 8. Halodule in area IV-Mix beds exceeded 1994 growth rates at two of the three stations. The growth rate increases seen in Areas I-HW and II-HW suggest that presumed declines in water temperature following the start-up of the helper cooling towers may have been a factor.

Syringodium growth was also accelerated from 1994 to 1995 in area III-SF (Figure 36). Growth rate differences in area V-SF, at distances exceeding 2.2 miles from the POD, were not as noticeable between years.

DISCUSSION

Photography

Aerial photography scheduled for 1993 was not completed until spring of 1994 because of unsuitable weather and water conditions. Usefulness of 1994 images was marginal due to turbidity fronts in Basins 1 and 2, equivalent to the study area within a 2 mile POD radius. Photography authorized for fall 1994 was not completed despite extended readiness through 1995. Flight conditions were hampered during winter 1994-95, and unusual tropical storm conditions reduced water clarity during summer and fall, 1995.

Conditions suited for aerial photography of SAV in the vicinity of the FPC power station are less common than elsewhere on the west Florida coast. For example, aerial photography of SAV during favorable conditions in Tampa Bay, by Geonex for the Southwest Florida Water Management District, prompted reconnaissance flights to Crystal River. Transparency at Crystal River was judged unsuitable during the same week that optimal conditions existed in Tampa Bay.

Our plans for field sampling were informed by the record of poor conditions for aerial photography at the site. Lack of contemporaneous aerial photographs prevented the production of digitized SAV maps but did not hamper our ability to monitor barren and vegetated areas throughout the study area. Future attempts at aerial photography should be made, with or without collateral field sampling, as opportunities arise.

Weather in 1995

Effects of 2 hurricanes and a tropical storm were felt along the coasts of Citrus and Levy counties. Storm surges completely inundated coastal Juncus marshes adjacent to the study area. Organic marsh sediments were deposited along the coastal marsh-front --northern and eastern edges of Basins 1 and 2 were fringed with subtidal deposits of fine organic matter, from August through October, 1995. Inorganic sands also were reworked in parts of every basin. Sand and shell was eroded from levees and islands, and deposited along intertidal oyster reefs.

Rainfall and freshwater (Withlacoochee River) discharge also were above average during summer 1995, although 12 month totals matched long-term averages (SWFWMD, 1995). Highly colored water from the Withlacoochee River, Barge Canal, and coastal runoff reduced local transparency to less than 0.5 m during low tides, and colored freshwater plumes were discernable 6 km from shore. Compared to 1993 and 1994 survey periods, August and October 1995 had more wind, more westerly onshore wind, rougher seas, and reduced visibility in all basins.

Halophila engelmannii's disappearance, from August 1995 to October 1995, was probably due to reduced salinities from rainfall and freshwater discharges throughout the study area. Halophila is reported to discolor and to eventually die when exposed to salinities below 10 ppt[2].

Growth rates (0.15 to 0.91 g dry weight m^{-2} d^{-1}) determined for Halodule during 1995 within the study site fall into the range of growth rates (0.1 g in January to 1.7 g dry weight m^{-2} d^{-1}) reported from the Laguna Madre, Texas[3]. In 1994 several of the growth rate determinations for this species fell below this range. Production rates measured at station 5 in Area II-HW and station 3 in Area I-HW, during August 1994, were 0.073 and 0.083 g dry weight m^{-2} d^{-1}, respectively. The considerable increase in production rates seen at sites closest to the POD may have been due to presumably decreased water temperatures at the POD. The highest shoot production rates in the Laguna Madre study occurred when water temperatures ranged from 28 to 29°C. Temperatures above and below that level caused decreased shoot production rates.

Principal Findings

Based on data from 1993, 1994, and 1995, the following points are offered.

1. "New" SAV beds appeared along barren-area transects.

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[2]Dawes, C., M. Chan, R. Chinn, E.W. Koch, A. Lazar, and D. Tomasko (1987). Proximate composition, photosynthetic and respiratory responses of the seagrass Halophila engelmannii from Florida. Aquat. Bot., 27: 195-201.

[3]Tomasko, D.A. and K.H. Dunton (1995). Primary productivity in Halodule wrightii: a comparison of techniques based on daily carbon budgets. Estuaries 18: 271-278.

Three beds were found in 1994 that were not seen in 1993. Two were small Halodule beds in relatively close proximity (Basins 1 and 2) to the point of discharge. The apparent recruitment of beds into barren areas could have been an artifact of sampling dates (November-December 1993 versus October 1994), especially for the multiple species bed on Transect 5 near Drum Island. Beds on transects closer to the point of discharge are more likely to be genuine additions, because the tidal flats in that area are shallow, easily surveyed, and frequently visited.

In 1995, four SAV beds were encountered in 1994 that were not seen when the transects were established in 1993. Three of the 1995 beds were not encountered in 1994. All of the new beds in 1995 were in Basins 1 and 2, and were dominated by Halodule. The largest new bed (110 m by 22 m) in 1995 was on Transect 4W (Basin 2), near Drum Island. Another bed found near Drum Island in 1994 was found again in 1995. In 1995 the bed was dominated by Syringodium with a trace of Caulerpa, which condition differs from 1994 when the bed was a mixture of small, dense patches of either Caulerpa or Halodule.

2. Recruitment of new beds into barren areas has not been extensive.

During the 3 years of monitoring, there was no evidence that SAV was colonizing extensive areas of barren sediment. All of the new beds were found in the northern parts of Basins 1 and 2, north of the discharge canal. In the 3 years of this study, no new beds were found in any part of Basin 3, although in 1995 small and sparse amounts of new vegetation were encountered on the southern reaches of Transects 6W (tufts of Syringodium in Caulerpa and Sargassum) and 9W (Caulerpa only). Historical data indicate that losses of SAV along the southern side of Basin 3 were considerable.

3. All of the new beds have formed north of the POD, in Basins 1 and 2.

Two of the new beds did not persist, but their appearance conformed with locations of other new beds. Without data on abiotic parameters we cannot attribute this pattern to physical or chemical gradients across the study area. It can be noted, however, that all of the new beds were in the vicinity of stable, persistent beds, and tidal marshes.

4. The seaward edges of SAV beds have expanded at 7 of 15 SAV stations. Expansion was seen at 13 of the 15 beds through 1994. All SAV beds in Area IV-Mix expanded over the study period. No basin-wide contractions of seagrass beds were seen from 1993 to 1995. SAV beds in Areas I-HW and II-HW, in the areas most strongly influenced by thermal discharges, expanded at 3 stations and contracted at 3 stations. Stations in Areas III-SF and V-SF expanded at 2 sites, contracted at 1 site, and remained unchanged at 2 sites.

5. Patterns of change in percent cover, from 1993 to 1995, showed decreased coverages (by total vegetation) at 10 of 15 sites. Five of the six Halodule beds in Areas I-HW and II-HW declined in coverage by total vegetation. Syringodium beds in Areas III-SF and V-SF showed increased coverage at 3 of 6 sites, decreased coverage at 2 sites, and no change at one site.

6. Biomass distribution patterns showed a general decline from 1993 to 1995 at 10 of 15 sites irrespective of distance from the POD.

7. Shoot densities increased by 1995 for Halodule at 8 of the 10 stations where it was present in 1994. Syringodium shoot densities increased by 1995 at 4 of 6 stations where it was seen in 1994.

8. SAV production rates showed large rate increases from 1994 to 1995 in Areas I-HW, II-HW, and III-SF. All of these sites are within the path of historical thermal discharges from the POD. Smaller production increases were measured at stations in Areas IV-Mix and Area V-SF. A decrease in discharge water temperatures may explain part of the increased growth rates seen near the POD, and decreased transparency during the summer of 1995 may also have been a factor.

CONCLUSIONS

Visits in 1994 and 1995 to transects and seagrass beds selected for monitoring in 1993 revealed spatial as well as temporal patterns in the distribution of sea grasses and rhizophytic algae. Most patterns depicted a system of bed recruitment and expansion that promoted persistence, and for several parameters (Table 9), improvements in SAV cover and condition during the three years. Six new beds appeared in barren areas, and 3 persisted

into 1995. More than half of the intensively monitored beds had net increases in perimeter. Until the wet summer of 1995, 8 of 15 beds also increased with respect to cover.

Halodule and Syringodium were the dominant seagrass species in the vicinity of the study area. Halophila, and to a lesser extent, Thalassia, were affected adversely by the wet summer, causing shifts in species dominance within beds, and some declines in percent cover. Halodule demonstrated the greatest potential for recruitment into barren areas, having twice colonized Basin 1, the basin closes to the point of thermal discharge.

No abiotic parameters were measured in this program, so it is not possible to assign causes for the SAV changes observed during the past 3 years. Changes in transects and beds within the 2 mile POD radius were mirrored by changes at more distant sites, indicating the extent of the 1995 wet season on the region, as well as the study area. Biomass was lower and productivity was higher in 1995, than in 1994, consistent with effects of storms and heavy rains.

Table 1. Station codes and locations for all seagrass bed intensive studies. The dominant seagrass species is listed for each station.

Area Codes	Station	Dominant Seagrass	Latitude	Longitude	Loran (45)	Loran (62)	Miles from POD
I-HW							
	3	Halodule wrightii	28 58 03.88	82 43 41.91	45233.61	62882.21	0.63
	2	Halodule wrightii	28 58 00.79	82 43 50.00	45234.06	62883.08	0.68
	1	Halodule wrightii	28 57 58.39	82 43 56.35	45234.56	62883.88	0.73
II-HW							
	7	Halodule wrightii	28 58 25 00	82 44 09 00	45237.91	62884.67	1.23
	6	Halodule wrightii	28 58 24.30	82 44 10.28	45240.33	62885.49	1.29
	5	Halodule wrightii	28 58 35.81	82 44 33.48	45244.78	62888.00	1.67
III-SF							
	4	Syringodium filiforme	28 57 17.67	82 44 21.52	45232.47	62887.19	1.63
	8	Syringodium filiforme	28 57 07.30	82 44 19.26	45230.70	62887.06	1.82
	12	Syringodium filiforme	28 57 10.49	82 44 17.21	45230.03	62886.80	1.79
IV-MIX							
	14	Mixed Species	28 57 04.40	82 44 35.00	45232.39	67889.09	1.79
	15	Mixed Species	28 57 05.90	82 44 39.40	45232.91	62889.56	1.77
	13	Mixed Species	28 58 12.34	82 45 15.62	45274.30	67893.40	2.03
V-SF							
	11	Syringodium filiforme	28 57 23.73	82 43 38.31	45227.68	62882.13	2.23
	9	Syringodium filiforme	28 56 49.65	82 43 25.10	45220.91	62880.80	2.71*
	10	Syringodium filiforme	28 56 41.19	82 43 14.31	45218.47	62879.68	2.95*

* Located south of the intake canal levees.

Table 2. SAV beds found in October 1994 on 1993 barren area transects.

	Bed 1	Bed 2	Bed 3
Transect No.	1N	3W	5W
Basin No.	1	2	2/3
LORAN			
45-	229.16	236.00	240.85
62-	880.75	885.49	888.81
Near to:	POD	Thumb I.	Drum I.
Length, m	7	40	30
Max. Width, m	10	19	31
Mean % Cover			
Halodule	5	48	14
Syringodium	0	0	3
Caulerpa	0	0	4
Bare	95	52	85
N	10	9	10

Table 3. SAV beds found in October 1995 on 1993 barren area transects.

	Bed 3	Bed 4	Bed 5	Bed 6
Transect No.	5W	4W	3W	1W
Basin No.	2/3	2	2	1
LORAN				
45-	240.85	240.13	238.21	230.23
62-	888.81	887.22	885.14	881.30
Near to:	Drum I.	Thumb I.	no name	POD
Length, m	20	110	35	1
Max. Width, m	10	45	12	1
Mean % Cover				
Halodule	0	34	72	<5
Syringodium	17	0	0	0
Caulerpa	t	t	0	0
Halophila	0	t	t	0
Bare	83	66	28	95+
N	10	10	10	10

t, trace record.

Table 4. Brief descriptions of the 15 seagrass stations included in seagrass bed intensive surveys.

Area I-HW Stations:

1) Adjacent to saltmarsh (Juncus sp); very soft bottom; Halodule was only species present; offshore area bordered by oyster bars at varying distances from the study site.

2) same as above

3) same as above except that bottom was rocky in some areas; oyster bar limits grassbed growth on shoreward side; station closest to end of discharge canal

Area II-HW Stations:

5) Saltmarsh bordered by well developed oyster bar at this site. Halodule grassbed reduced to very widely dispersed, small clumps and patches.

6) Site in middle of small embayment away from Juncus marsh; bed bordered by oyster bar on one side.

7) Same as #6 except that original grassbed has grown and merged with other grassbeds. Thalassia seen in the area where the grassbeds merged. Very soft bottom except along edge of oyster bar.

Area III-SF Stations:

4) Bed on seaward edge of Rocky Cove oyster bars. Very exposed to wind and waves; hard bottom with Sargassum attached to rocky bottom at the seaward edge of the seagrass beds. Lost all station markers in 1995. Observations on bottom cover, productivity, biomass all done within GPS and LORAN determined station boundaries

8) Syringodium bed on seaward edge of Rocky Cove oyster bars; very exposed to wind and waves; hard bottom with Sargassum attached to rocky bottom at the seaward edge of the seagrass beds.

12) Syringodium in area between parallel oyster bars at south side of Rocky Cove; good current flow throughout area as tides change.

Area IV-Mix Stations:

13) Very mixed mosaic of seagrasses (Thalassia/ Syringodium/ Halophila/ Halodule) with Caulerpa mexicana and C. prolifera. Oyster bar to west protects this site from heavy chop and waves.

14) Site located on rocky bottom near north edge of intake canal. Open to sea and chop = not protected by bars, mix of Syringodium, Halodule, and Thalassia. This bar drops off to deeper water fairly rapidly

15) same as #14.

Area V-SF Stations:

9) Control site south of the intake canal; soft bottom with luxuriant beds of Syringodium; Lots of drift algae and attached algae outside of bed.

10) Same as #10 except that in October 95 the grassbed was covered with a thick layer of drift algae....made it impossible to find stakes; algal layer was 1 m thick over parts of the bed.

11) Luxuriant Syringodium growth over a thin layer of very soft sediment; easily disturbed. Site in protected water between intake and discharge canals.

Table 5. Seagrass bed expansion or contraction (m) between years.

		1993-1994	1993-1995
I-HW			
Station 3	Mean	-.38	-1.64
	S.D.	.93	2.50
Station 2	Mean	.98	1.63
	S.D.	1.58	1.42
Station 1	Mean	1.90	2.75
	S.D.	1.42	2.43
II-HW			
Station 7	Mean	2.52	6.81
	S.D.	1.99	11.73
Station 6	Mean	.48	-.90
	S.D.	.99	1.89
Station 5	Mean	-.21	-2.06
	S.D.	.52	1.42
III-SF			
Station 4	Mean	.06	N/A
	S.D.	.41	N/A
Station 8	Mean	6.51	-.16
	S.D.	4.02	1.27
Station 12	Mean	.30	1.35
	S.D.	1.05	1.18
IV-MIX			
Station 14	Mean	.56	.58
	S.D.	.59	1.05
Station 15	Mean	.56	1.33
	S.D.	.75	.92
Station 13	Mean	.05	2.07
	S.D.	3.29	2.85
V-SF			
Station 11	Mean	.58	-.17
	S.D.	.27	1.48
Station 9	Mean	.83	1.26
	S.D.	.60	.77
Station 10	Mean	.71	-1.63
	S.D.	.79	2.09

Table 6. Mean percent cover of 1m2 quadrats by rhizophytic algae, seagrass and total vegetation for each station and sampling date. (P/I) indicates grassbed (P)erimeter or 2 meters (I)nside bed).

Year/Month			1993-12 Algae	1994-08 Algae	1994-10 Algae	1995-08 Algae	1995-10 Algae	1993-12 Seagrass	1994-08 Seagrass	1994-10 Seagrass	1995-08 Seagrass	1995-10 Seagrass	1993-12 Total	1994-08 Total	1994-10 Total	1995-08 Total	1995-10 Total
I-HW																	
Station	3	I	.0	.0	.0	.0	.0	93.7	36.9	45.3	19.5	51.6	93.7	36.9	45.3	19.5	51.6
		P	.0	.0	.0	.0	.0	80.1	42.0	34.7	11.1	40.8	80.1	42.0	34.7	11.1	40.8
Station	2	I	.0	.0	.0	.0	.0	96.4	98.9	97.1	94.9	47.1	96.4	98.9	97.1	94.9	47.1
		P	.0	.0	.0	.0	.0	87.1	99.0	81.5	89.3	44.0	87.1	99.0	81.5	89.3	44.0
Station	1	I	.0	.0	.0	.0	.0	80.0	100.0	92.5	99.3	76.5	80.0	100.0	92.5	99.3	76.5
		P	.0	.0	.0	.0	.0	79.6	100.0	96.1	100.0	78.4	79.6	100.0	96.1	100.0	78.4
II-HW																	
Station	7	I	.0	.2	.0	.0	.0	98.3	86.7	98.4	98.7	94.8	98.3	86.7	98.4	98.7	94.8
		P	.0	.0	.1	.0	.0	91.5	73.1	91.1	94.0	91.2	91.5	73.1	91.1	94.0	91.2
Station	6	I	.0	.0	.0	.0	.0	98.9	92.5	93.0	97.0	70.6	98.9	92.5	93.0	97.0	70.6
		P	.0	.0	.0	1.0	.1	91.7	85.3	75.1	83.4	56.3	91.7	85.3	75.1	83.8	56.3
Station	5	I	.0	.0	.0	.1	.0	83.2	49.7	42.6	6.2	5.7	83.2	49.7	42.7	6.3	5.7
		P	.0	.0	.0	.1	.0	90.4	58.6	26.1	8.7	3.1	90.4	58.6	26.1	8.8	3.1
III-SF																	
Station	4	I	.8	.0	1.3	.1	N/A	85.7	72.5	67.1	97.9	N/A	85.9	72.5	67.2	97.9	N/A
		P	.0	.0	2.8	.0	N/A	77.4	72.9	76.5	94.8	N/A	77.4	72.9	76.7	94.8	N/A
Station	8	I	.0	1.2	.0	.0	.0	91.7	93.7	96.3	64.6	63.9	91.7	93.7	96.3	64.6	63.9
		P	.2	.0	.0	.0	.0	93.8	95.8	93.2	48.3	55.0	93.8	95.8	93.2	48.3	55.0
Station	12	I	2.9	.0	.5	.0	.2	91.6	95.5	98.3	94.9	94.8	94.5	95.5	98.3	94.9	94.8
		P	1.4	.0	.5	.0	.1	87.9	98.9	91.0	95.2	86.6	90.3	98.9	91.0	95.2	86.6
IV-MIX																	
Station	14	I	.2	.4	.0	.0	.0	91.8	86.9	89.6	93.3	84.8	91.8	86.9	89.6	93.3	84.8
		P	.0	.0	.1	.0	.0	90.7	84.8	87.5	91.2	71.6	90.7	84.8	87.4	91.2	71.6
Station	15	I	.0	.0	12.3	.0	.0	97.7	98.0	91.2	83.9	67.0	97.7	98.0	95.1	83.9	67.0
		P	1.5	.3	17.5	.0	.0	84.8	85.7	91.1	84.7	85.0	84.8	85.7	93.8	84.7	85.0
Station	13	I	67.0	63.2	14.9	65.6	59.1	12.2	22.5	47.8	23.1	.7	77.7	82.9	59.4	82.3	59.4
		P	46.6	63.2	37.2	62.8	48.8	22.6	22.5	53.1	30.7	14.6	69.2	82.9	72.9	72.6	57.6
V-SF																	
Station	11	I	.0	.0	.0	.0	.0	98.3	100.0	100.0	98.8	98.4	98.3	100.0	100.0	98.8	98.4
		P	.0	.0	.0	.0	.0	98.3	99.8	99.8	99.8	97.3	98.3	99.8	99.8	99.8	97.3
Station	9	I	.0	.9	.2	.0	.0	78.6	95.5	98.5	98.8	96.5	78.6	95.5	98.5	98.8	96.5
		P	.1	7.1	.2	.0	.0	88.8	84.6	92.0	95.6	96.3	88.8	85.4	92.0	95.6	96.3
Station	10	I	1.2	34.3	N/A	9.7	.0	56.0	84.6	N/A	50.0	55.4	56.2	94.8	N/A	59.2	55.4
		P	3.3	76.0	N/A	2.9	.0	69.8	38.9	N/A	45.9	41.4	71.4	96.2	N/A	48.8	41.4

Table 7. Dry Weight biomass (g/m2) Means and standard deviations from six replicate 25x25cm Quadrats.

	Syringodium filiforme		Halophila englemannii		Halodule wrightii		Thalassia testudinum		Caulerpa prolifera		Caulerpa mexicana		Udotea		Drift Algae	
	94	95	94	95	94	95	94	95	94	95	94	95	94	95	94	95
I-HW																
Station 3																
Count (>0g)					6	6										
Mean					8.3	6.8										
S.D.					5.7	3.9										
Station 2																
Count (>0g)					6	6										
Mean					13.1	5.1										
S.D.					2.8	2.7										
Station 1																
Count (>0g)					6	6										
Mean					26.2	12.1										
S.D.					17.7	6.7										
II-HW																
Station 7																
Count (>0g)			2	1	6	6										3
Mean			2.3	.1	18.3	38.2										2.8
S.D.			4.4	.1	5.7	22.9										3.5
Station 6																
Count (>0g)				1	6	6									1	3
Mean				.4	15.1	32.9									5.2	4.1
S.D.				1.0	9.5	15.3									12.8	5.5
Station 5																
Count (>0g)					6	3					2					
Mean					8.5	.6					2.0	.				
S.D.					5.7	.7					1.0	.				
III-SF																
Station 4																
Count (>0g)	6	6		2											2	3
Mean	42.9	35.2		1.2											27.4	2.0
S.D.	15.9	13.1		2.8											42.4	4.0
Station 8																
Count (>0g)	5	5	4		5										5	4
Mean	33.4	12.1	1.8		19.9										24.3	56.4
S.D.	34.9	14.9	2.1		12.1										38.1	112.1

Table 7. Continued.

	Syringodium filiforme		Halophila englemannii		Halodule wrightii		Thalassia testudinum		Caulerpa prolifera		Caulerpa mexicana		Udotea		Drift Algae	
	94	95	94	95	94	95	94	95	94	95	94	95	94	95	94	95
Station 12																
Count (>0g)	6	6			1				5	3		1			4	5
Mean	109.2	21.4			13.3				1.6	.6		.1			182.4	15.7
S.D.	72.5	10.8			32.5				1.9	1.1		.3			198.4	12.7
IV-MIX																
Station 14																
Count (>0g)	4				6	6									5	
Mean	13.7				10.6	48.9									50.7	
S.D.	24.3				4.0	19.0									60.8	
Station 15																
Count (>0g)		2			6	6	2	2		1					3	4
Mean		.1			69.1	31.6	3.3	.1		.2					14.5	13.4
S.D.		.1			51.5	17.1	6.6	.3		.6					29.1	17.0
Station 13																
Count (>0g)				2		3	5	1	5	5	4	3			6	2
Mean				.9		8.6	38.4	.2	18.3	13.8	171.8	1.6			124.0	1.0
S.D.				1.7		14.7	42.3	.5	15.9	10.7	163.0	2.4			194.2	2.4
V-SF																
Station 11																
Count (>0g)	6	6														1
Mean	126.7	43.1														7.9
S.D.	34.0	23.2														19.3
Station 9																
Count (>0g)	6	6	4		1	1				3					3	4
Mean	71.8	34.5	3.4		.5	.6				.2					4.9	19.4
S.D.	14.8	16.6	3.6		1.1	1.6				.4					8.8	17.8
Station 10																
Count (>0g)	5	6	1	1					6	3				1	2	6
Mean	54.2	27.8	.6	1.3					23.4	8.8				1.6	76.2	346.9
S.D.	35.1	17.6	1.6	3.2					22.5	11.7				3.9	118.1	403.9

Table 8. Biomass data and productivity of grass clip samples.

	Calculated Productivity (mg/m2/day)		Calculated Shoots/m2		Wt./Shoot (μg)	
	1994	1995	1994	1995	1994	1995
I-HW						
Station 3						
Mean	83.46	907.04	259.22	1096.71	41.43	129.69
S.D.	72.96	210.12	151.20	471.87	13.27	46.60
Station 2						
Mean	205.38	596.35	378.86	1116.65	80.85	73.64
S.D.	88.71	197.37	191.78	310.52	28.86	6.93
Station 1						
Mean	529.36	858.85	465.27	1246.26	153.23	94.43
S.D.	208.60	386.31	102.97	511.30	34.45	15.84
II-HW						
Station 7						
Mean	207.38	908.81	378.86	977.07	87.40	117.30
S.D.	77.47	444.89	204.33	459.06	38.36	30.31
Station 6						
Mean	350.38	779.20	382.19	681.29	131.65	145.79
S.D.	149.76	581.42	116.55	298.55	68.40	88.22
Station 5						
Mean	73.22	150.70	199.40	332.34	63.26	N/A
S.D.	34.33	108.60	126.11	265.04	26.21	N/A
III-SF						
Station 4						
Mean	434.44	3417.38	228.31	2213.36	260.30	176.70
S.D.	201.37	900.92	72.20	826.38	86.26	25.03
Station 8						
Mean	515.95	1037.04	638.09	1080.09	108.69	105.32
S.D.	213.16	519.14	349.66	342.00	31.74	31.82
Station 12						
Mean	304.76	1078.28	246.58	951.29	170.07	160.92
S.D.	200.57	272.45	69.25	274.61	113.42	19.51
IV-MIX						
Station 14						
Mean	700.40	713.50	473.58	980.39	208.48	101.36
S.D.	240.72	151.37	274.55	277.85	81.66	33.05
Station 15						
Mean	522.27	665.85	638.09	867.58	124.78	112.67
S.D.	137.98	359.78	408.65	502.70	59.57	16.73
Station 13						
Mean	185.87	269.83	338.98	398.80	69.07	N/A
S.D.	149.19	195.32	166.83	209.13	43.35	N/A
V-SF						
Station 11						
Mean	375.76	666.12	136.99	266.36	354.75	N/A
S.D.	190.44	512.39	91.32	145.59	117.39	N/A
Station 9						
Mean	807.44	551.05	593.61	304.41	189.27	188.61
S.D.	386.26	700.66	258.30	128.07	44.93	140.21
Station 10						
Mean	433.14	670.25	575.34	520.55	105.27	168.45
S.D.	203.22	306.73	249.27	245.05	32.41	25.89

Table 9. 1993-1995 Summary data, Crystal River NPDES Monitoring Project.

Basin/SAV[1]	I-HW	II-HW	III-SF	IV-Mixed	V-SF	Total
Barren Area Results						
No. Transects	3	3	5	2	2	15
No. New Beds						
1993-1994	1	1	1	0	0	3
1994-1995	1	2	0	0	0	3
Net New Beds						
1993-1995	1	2	1	0	0	4
Intensive Seagrass Bed Results						
No. of beds/area	3	3	3	3	3	15
No. Beds Expanding						
1993-1994	2	2	3	2	3	12
1993-1995	2	1	1[2]	3	1	8
No. Beds Increasing						
% Cover						
Interiors						
1993-1994	2	1	2	0	3	8
1994-1995	1	0	0[2]	0	0	1
Perimeters						
1993-1994	1	0	2	2	3	8
1994-1995	1	0	0[2]	0	1	2
No. Beds Increasing						
Biomass						
1994-1995	0	2	0	1	0	3
No. Beds Increasing						
Productivity						
1994-1995	3	3	3	3	2	14

[1] HW, Halodule wrightii; SF, Syringodium filiforme; mixed, more than one species was abundant
[2] Of two remaining marked beds in this area.

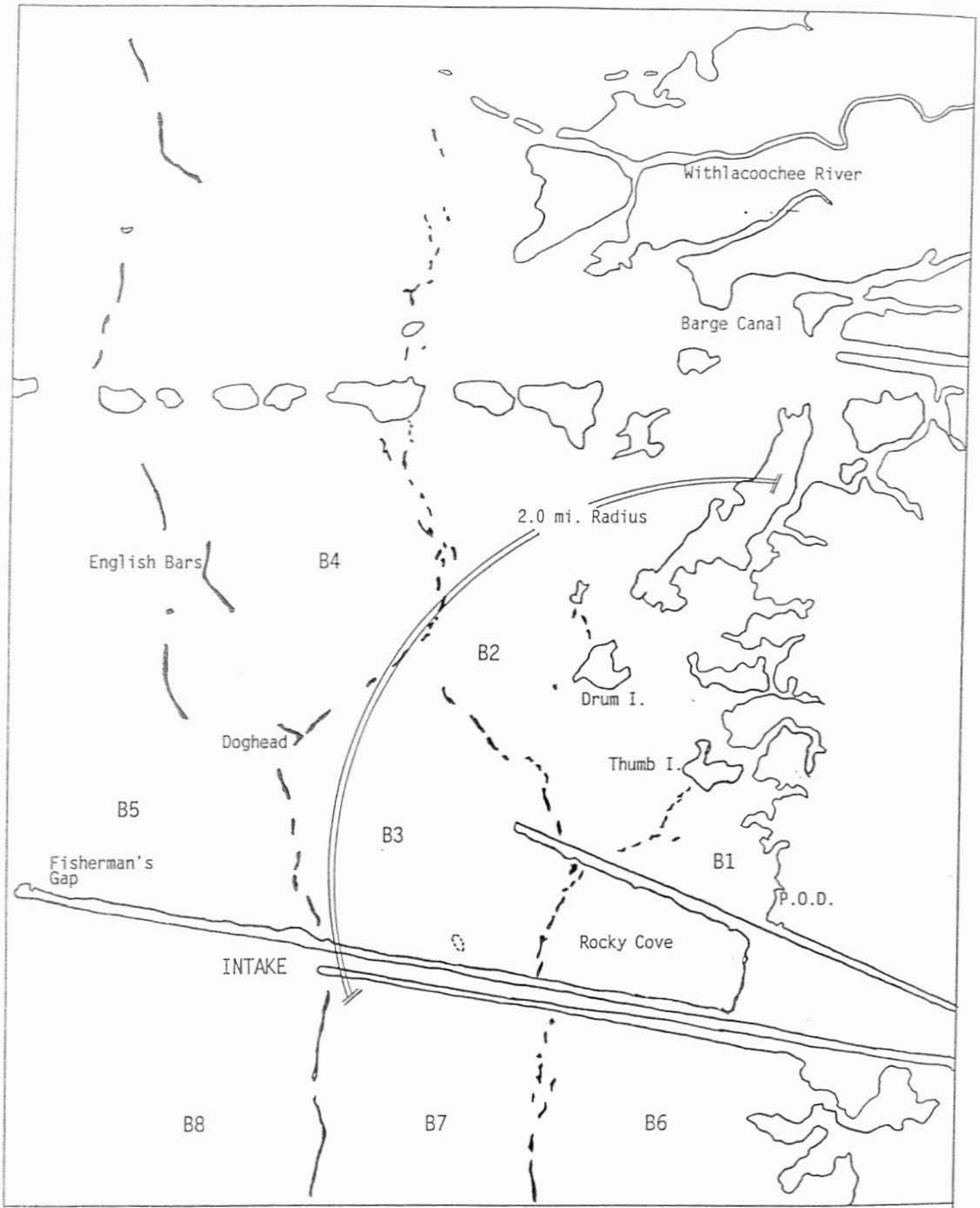

Figure 1. Crystal River SAV Monitoring Area. B1, Basin 1.

Figure 2. Crystal River SAV Monitoring-Barren Transects (1W) and New Beds (1).

Figure 3. Crystal River SAV Monitoring - Intensive Bed Locations.

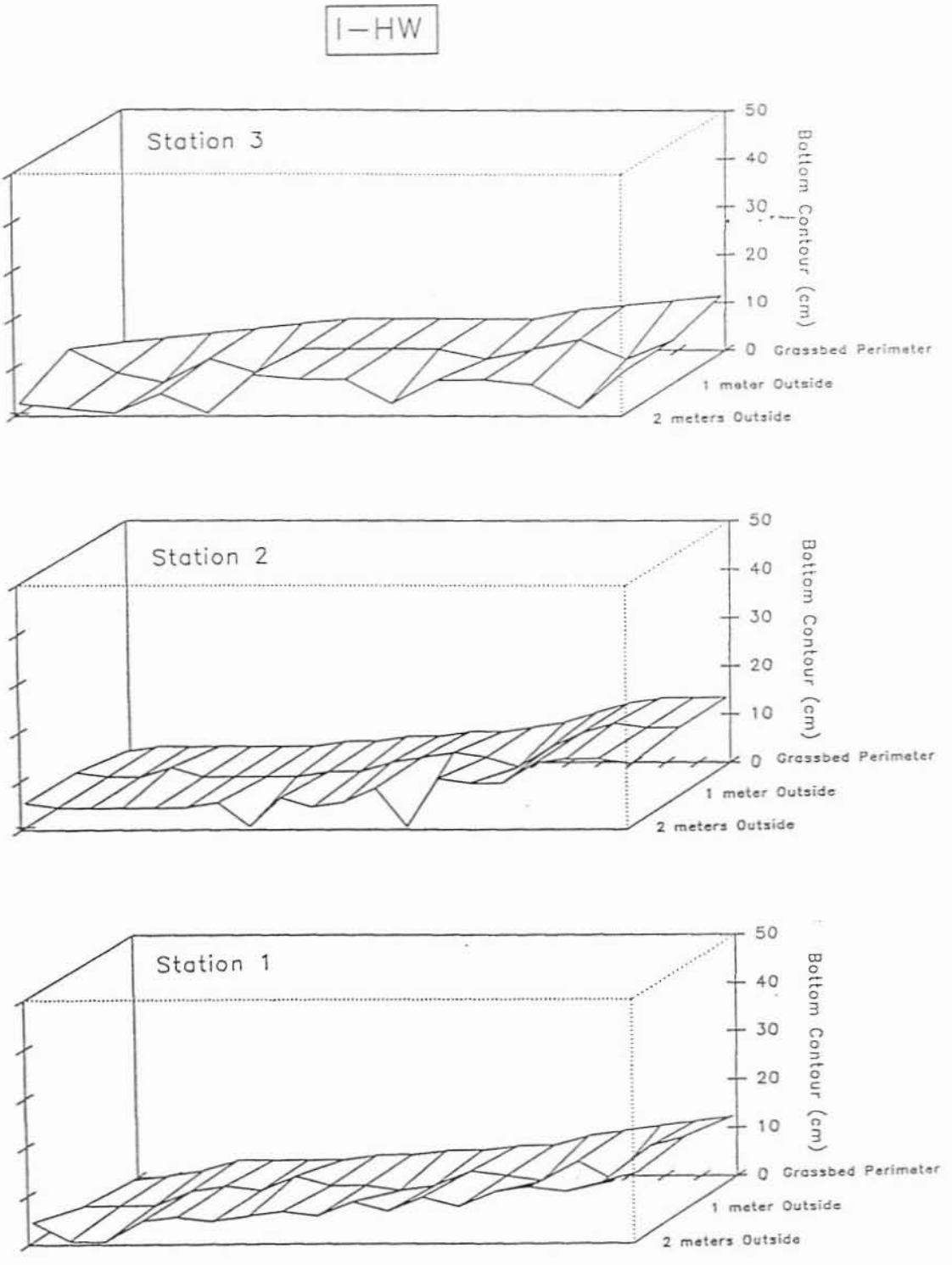

Figure 4. Bottom profiles at seagrass stations 1, 2, and 3, in area I-HW. Water depth measurements were taken on the seagrass bed perimeters and at 1 m and 2 m increments seaward of the seagrass bed edges.

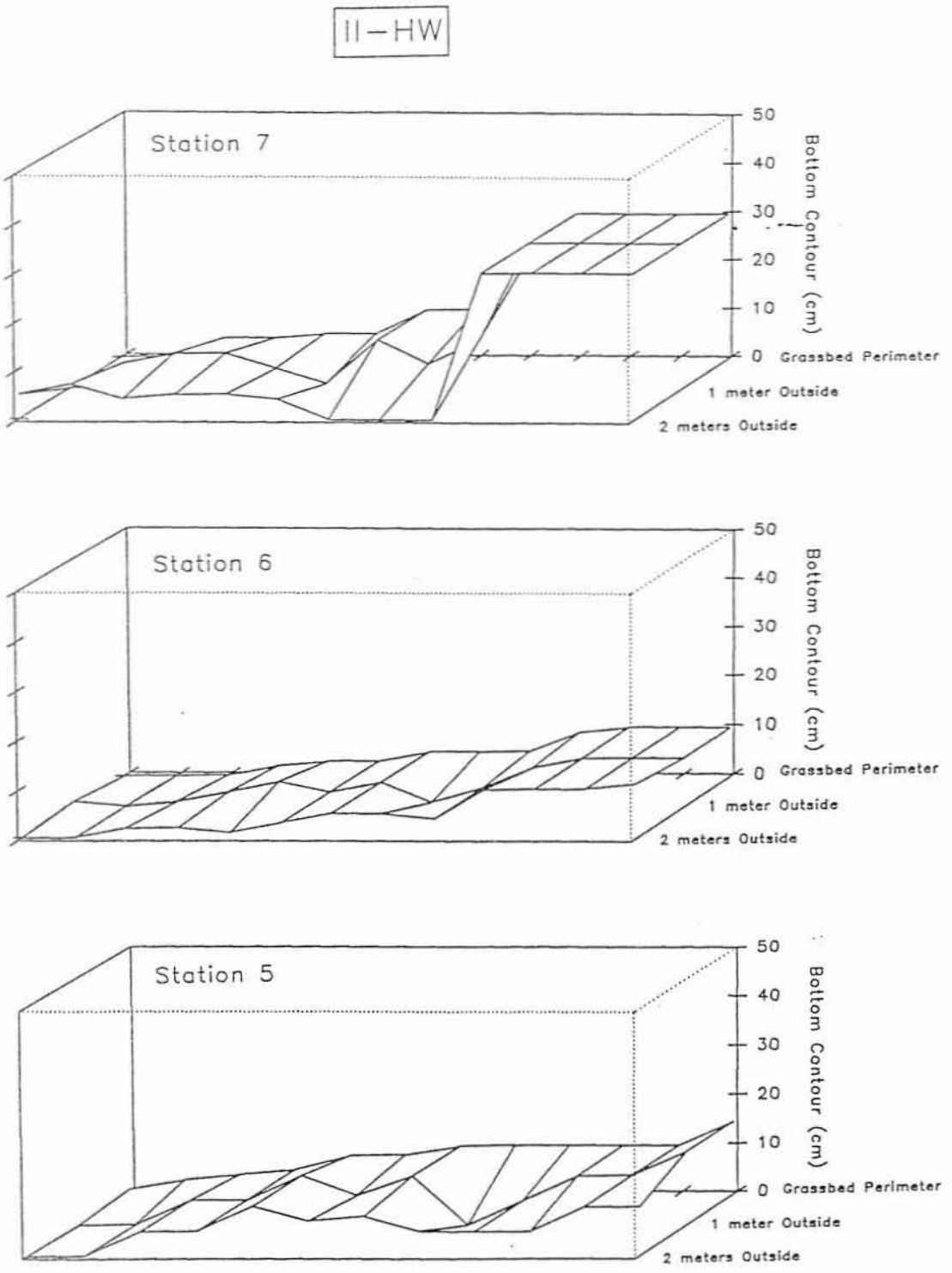

Figure 5. Bottom profiles at seagrass stations 5, 6, and 7, in area II-HW. Water depth measurements were taken on the seagrass bed perimeters and at 1 m and 2 m increments seaward of the seagrass bed edges.

III–SF

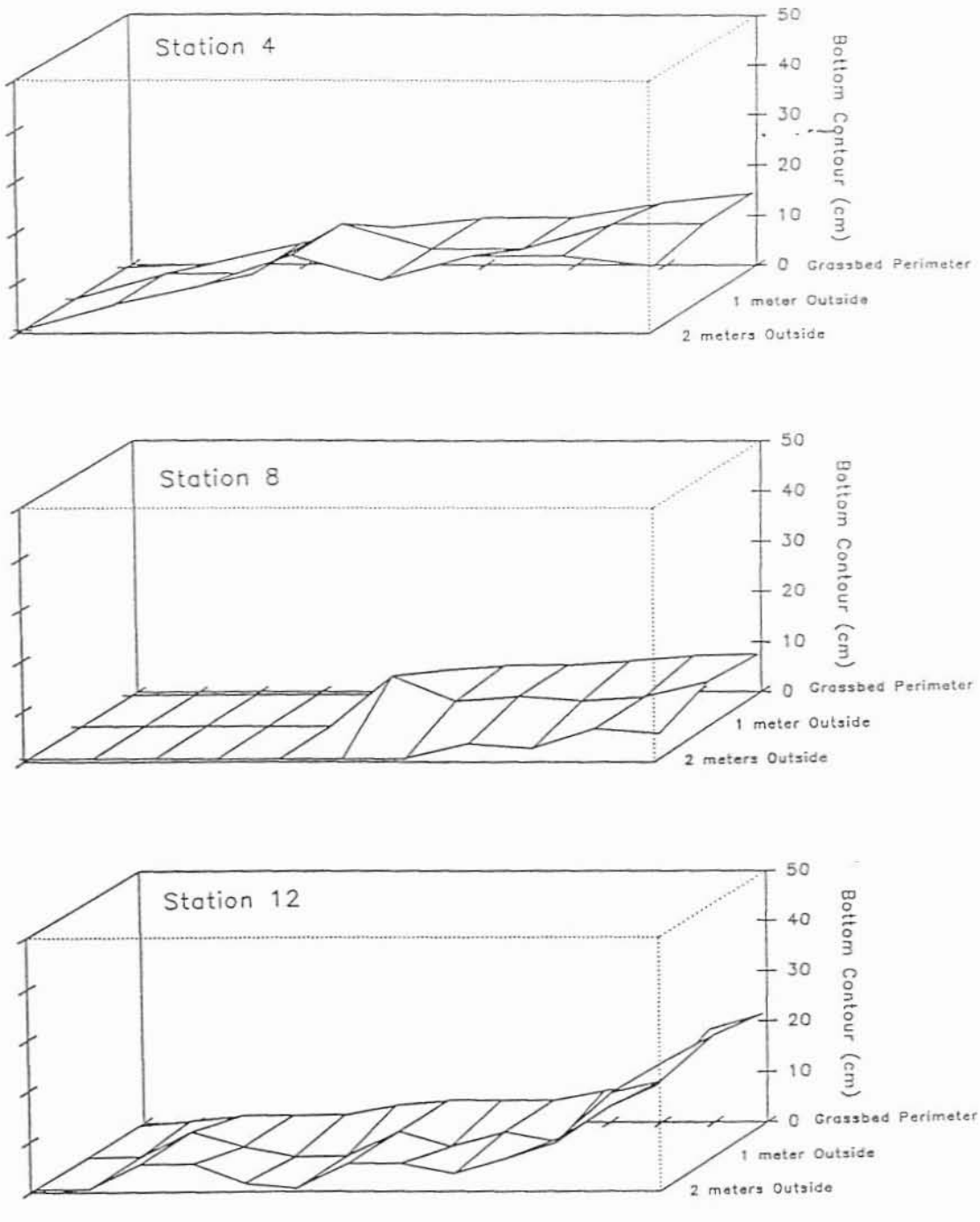

Figure 6. Bottom profiles at seagrass stations 4, 8, and 12, in area III-SF. Water depth measurements were taken on the seagrass bed perimeters and at 1 m and 2 m increments seaward of the seagrass bed edges.

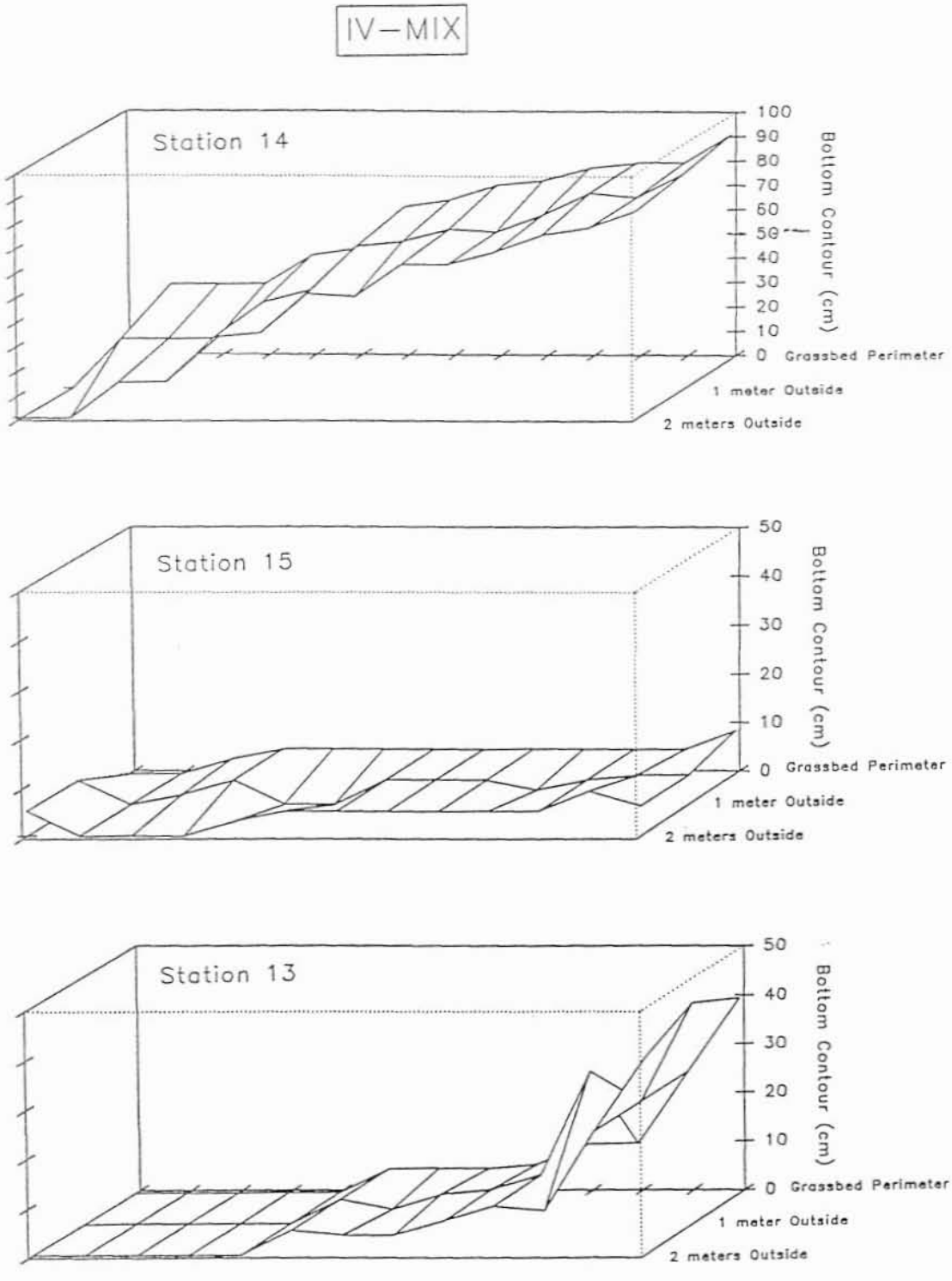

Figure 7. Bottom profiles at seagrass stations 13, 14, and 15, in area IV-Mix. Water depth measurements were taken on the seagrass bed perimeters and at 1 m and 2 m increments seaward of the seagrass bed edges.

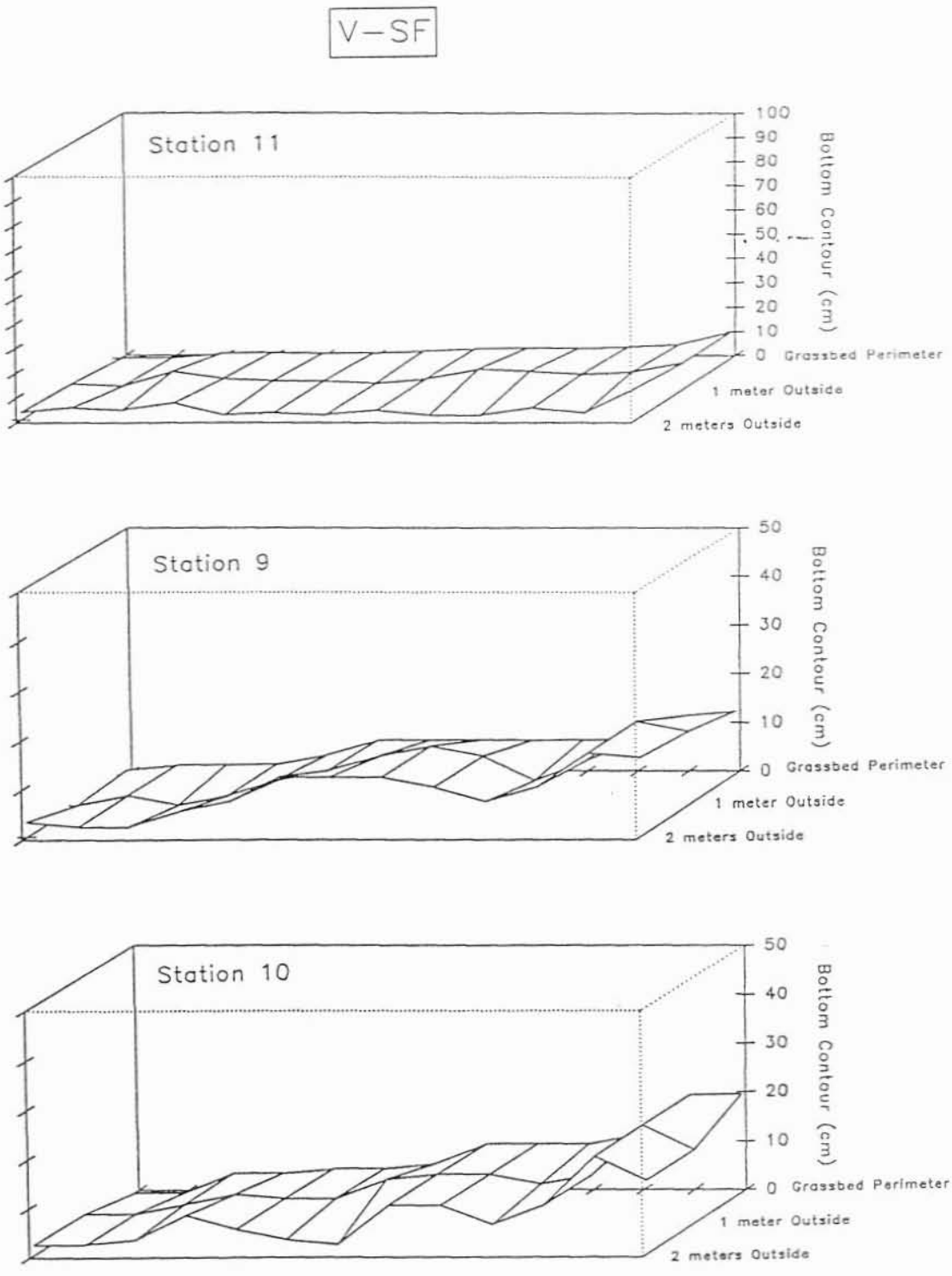

Figure 8. Bottom profiles at seagrass stations 9, 10, and 11, in area V-SF. Water depth measurements were taken on the seagrass bed perimeters and at 1 m and 2 m increments seaward of the seagrass bed edges.

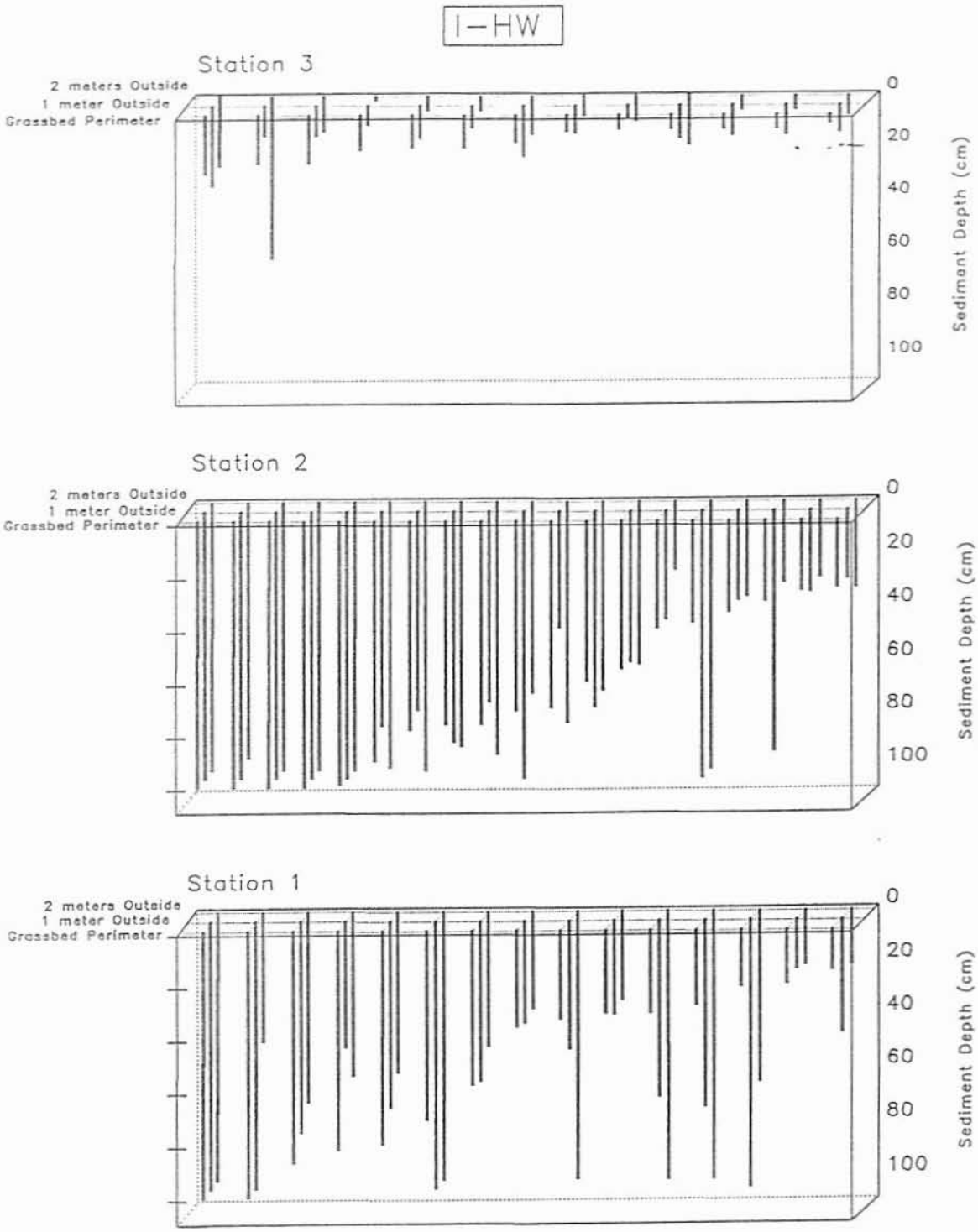

Figure 9. Sediment depth profiles at seagrass stations 1, 2, and 3 in Area I-HW during October 1995. Vertical drop bars represent sediment depths, in cms, as determined by probing the bottom on seagrass bed perimeters and at 1 m and 2 m increments seaward of the grassbed edges.

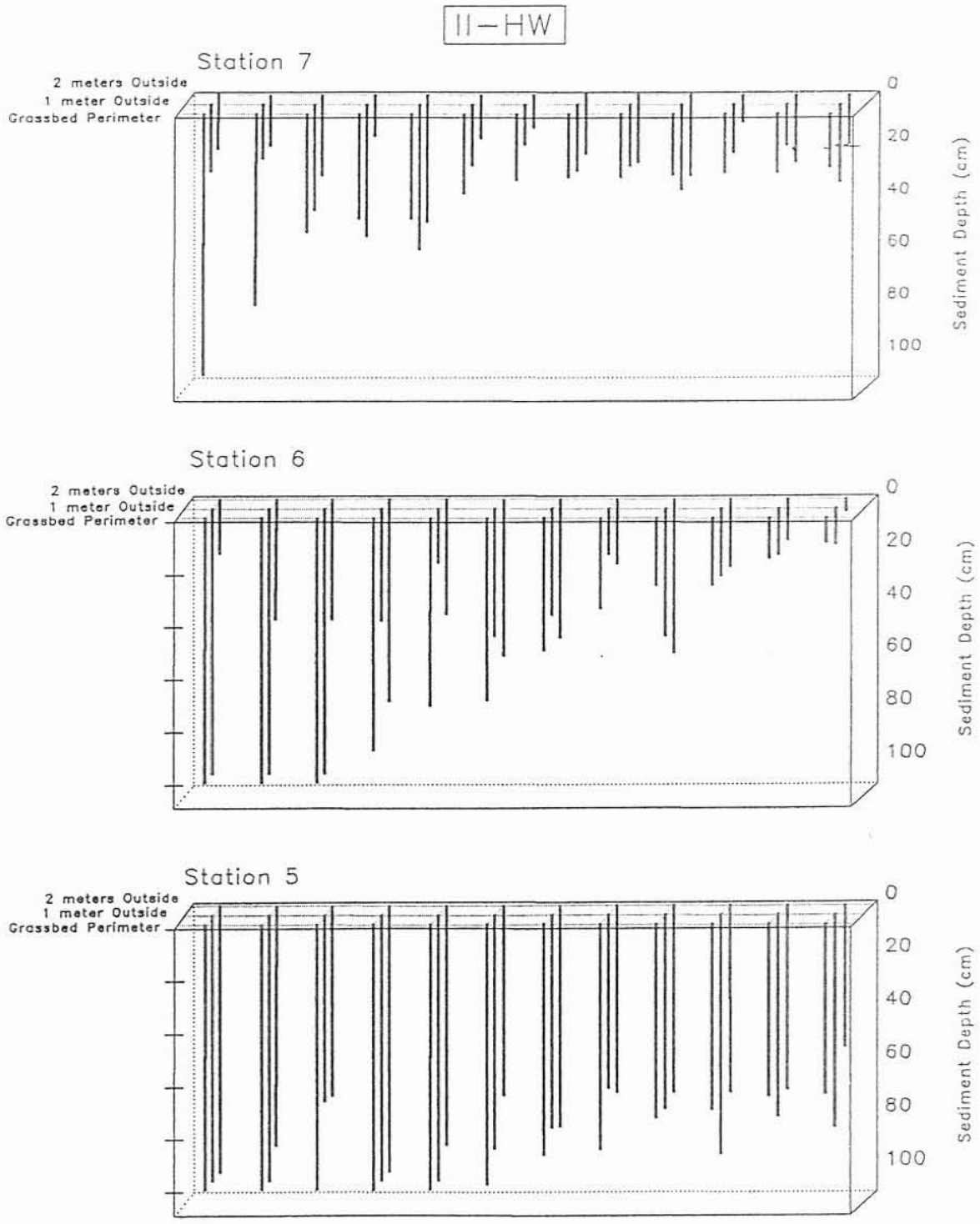

Figure 10. Sediment depth profiles at seagrass stations 5, 6, and 7 in Area II-HW during October 1995. Vertical drop bars represent sediment depths, in cms, as determined by probing the bottom on seagrass bed perimeters and at 1 m and 2 m increments seaward of the grassbed edges.

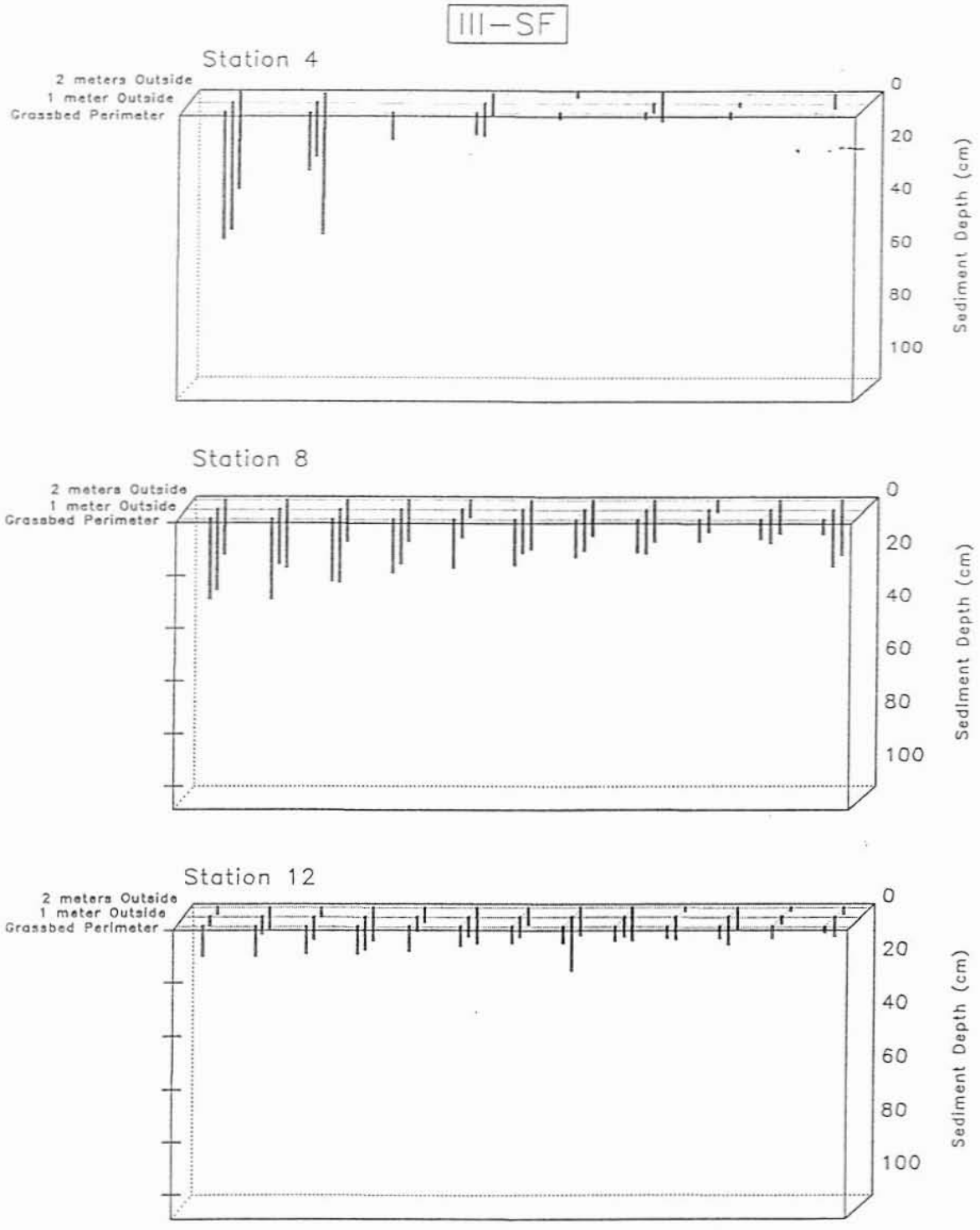

Figure 11. Sediment depth profiles at seagrass stations 4, 8, and 12 in Area III-SF during October 1995. Vertical drop bars represent sediment depths, in cms, as determined by probing the bottom on seagrass bed perimeters and at 1 m and 2 m increments seaward of the grassbed edges.

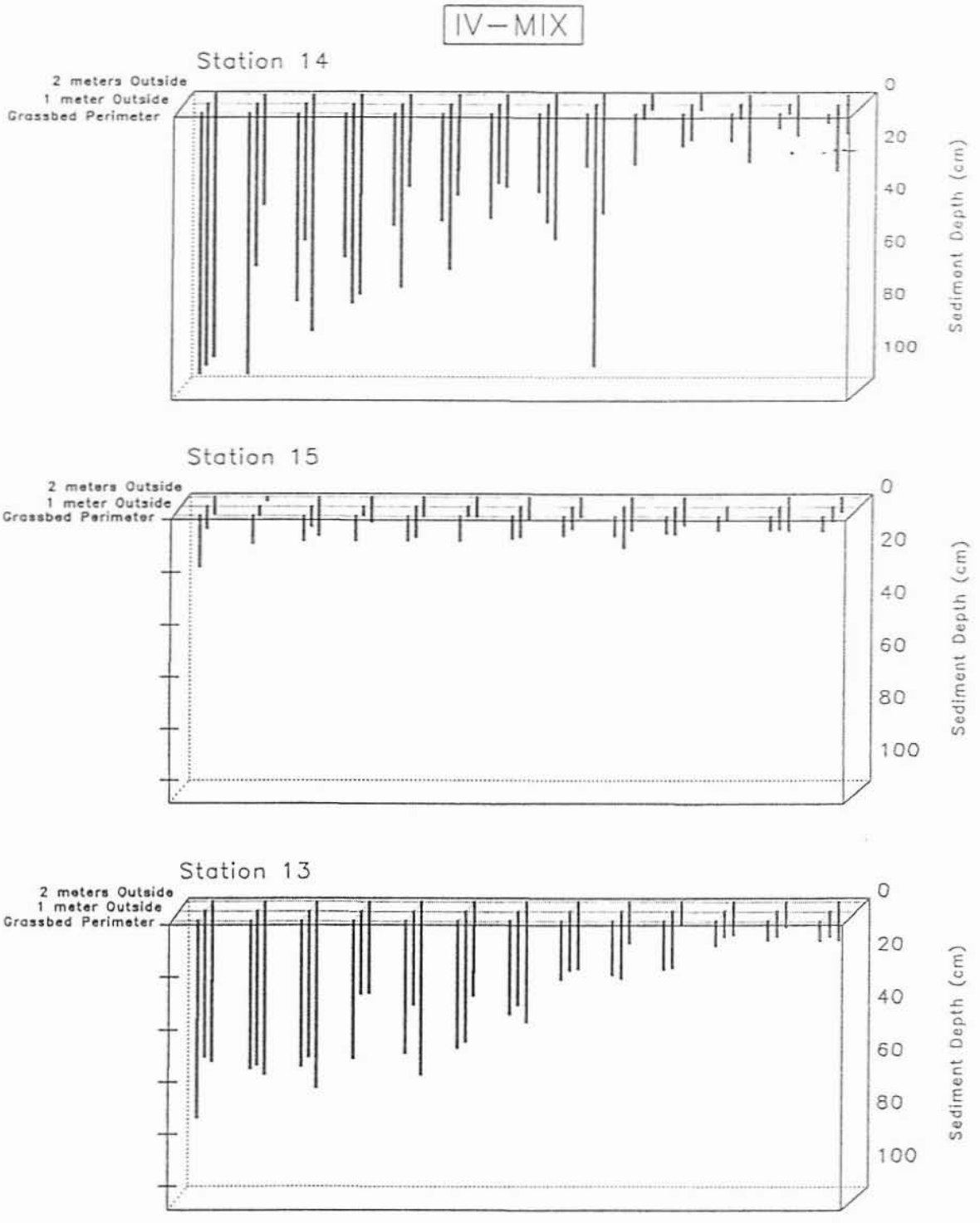

Figure 12. Sediment depth profiles at seagrass stations 13, 14, and 15 in Area IV-Mix during October 1995. Vertical drop bars represent sediment depths, in cms, as determined by probing the bottom on seagrass bed perimeters and at 1 m and 2 m increments seaward of the grassbed edges.

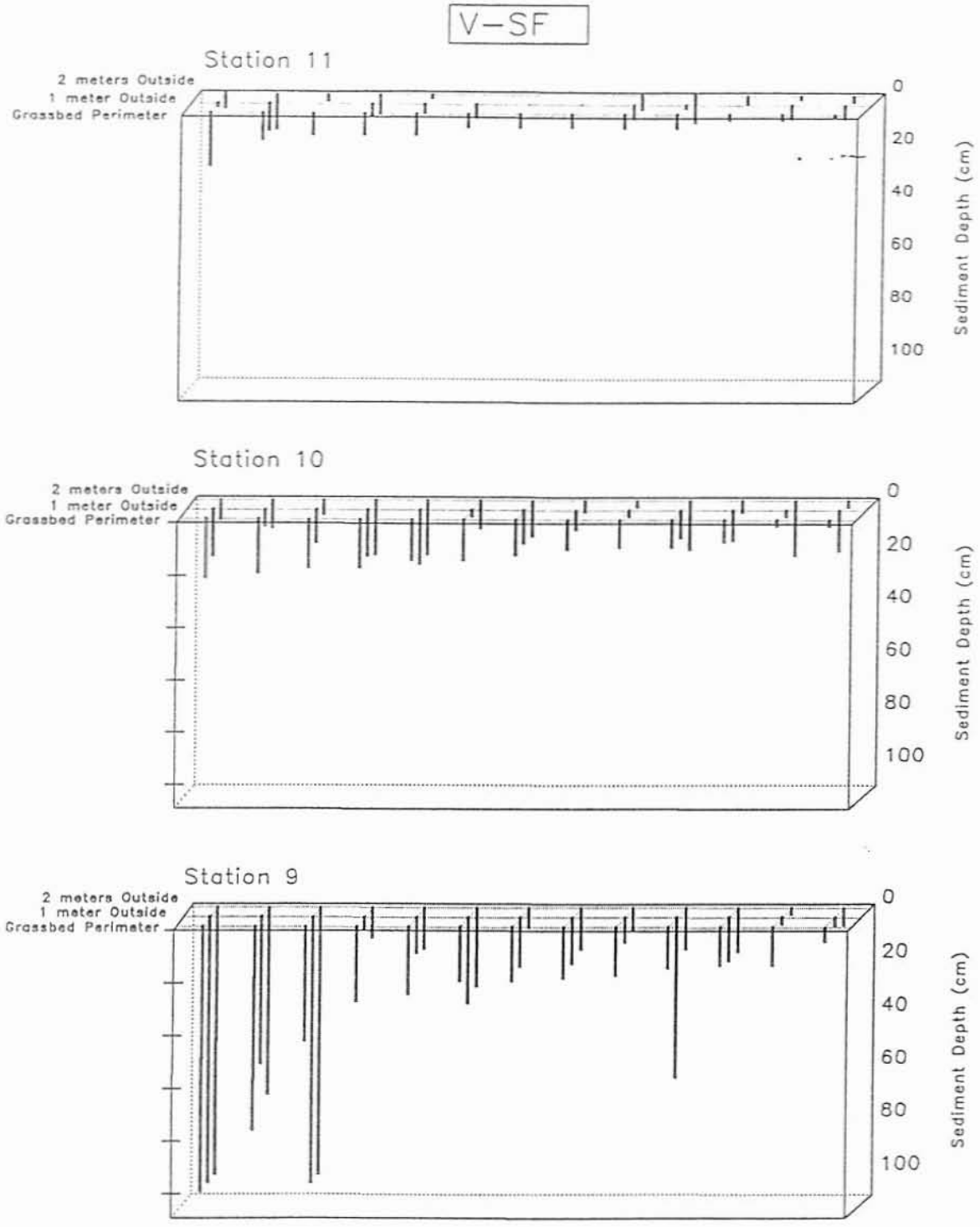

Figure 13. Sediment depth profiles at seagrass stations 11, 10, and 9 in Area V-SF during October 1995. Vertical drop bars represent sediment depths, in cms, as determined by probing the bottom on seagrass bed perimeters and at 1 m and 2 m increments seaward of the grassbed edges.

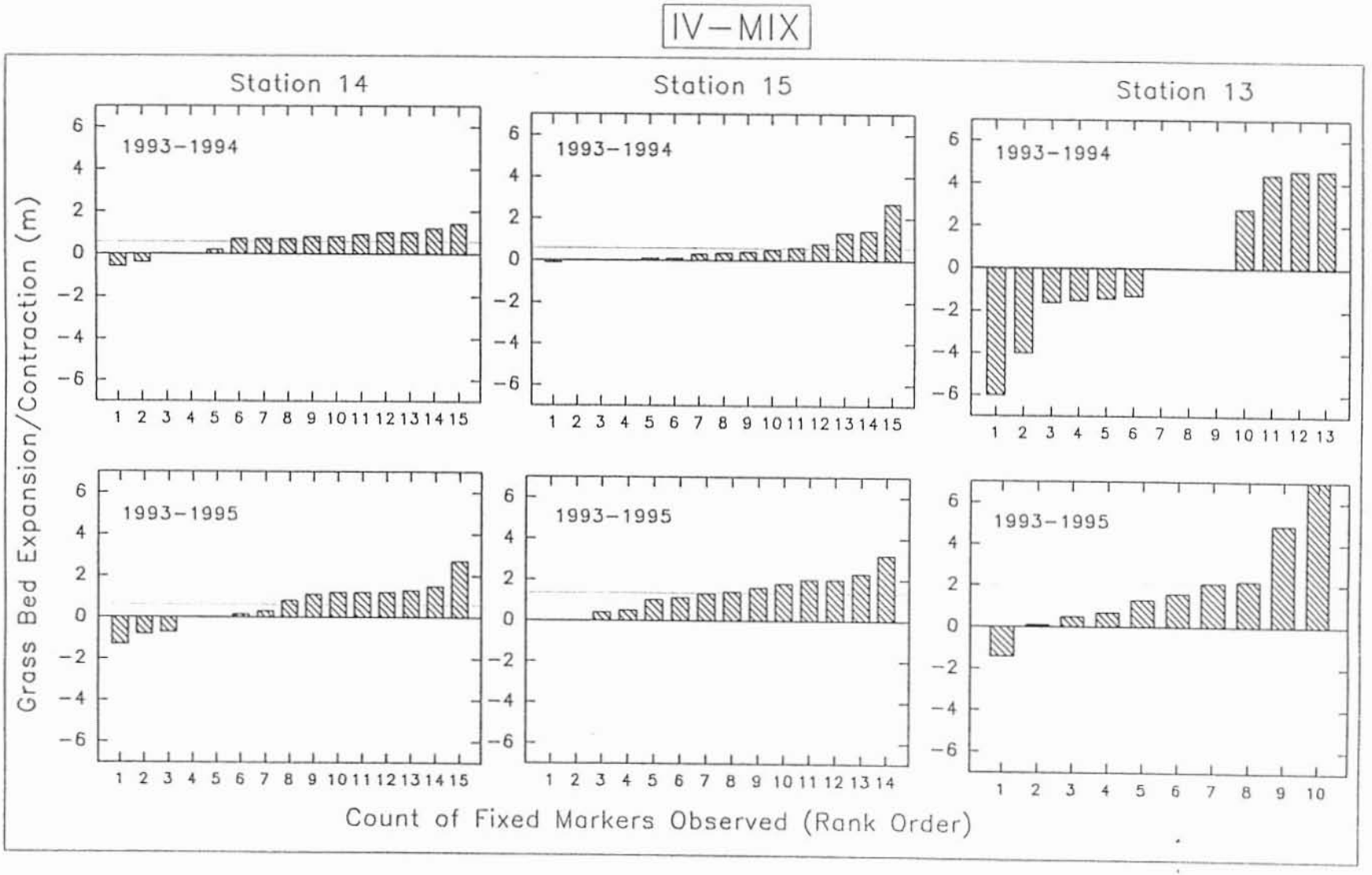

Figure 14. Seagrass bed expansion (+ values) or contraction (- values) from 1993 to 1994 (top row of figures) and from 1993 to 1995 (bottom figures) at Stations 13, 14, and 15 in Area IV-Mix. Dotted lines across each bar graph represent the mean change for each station.

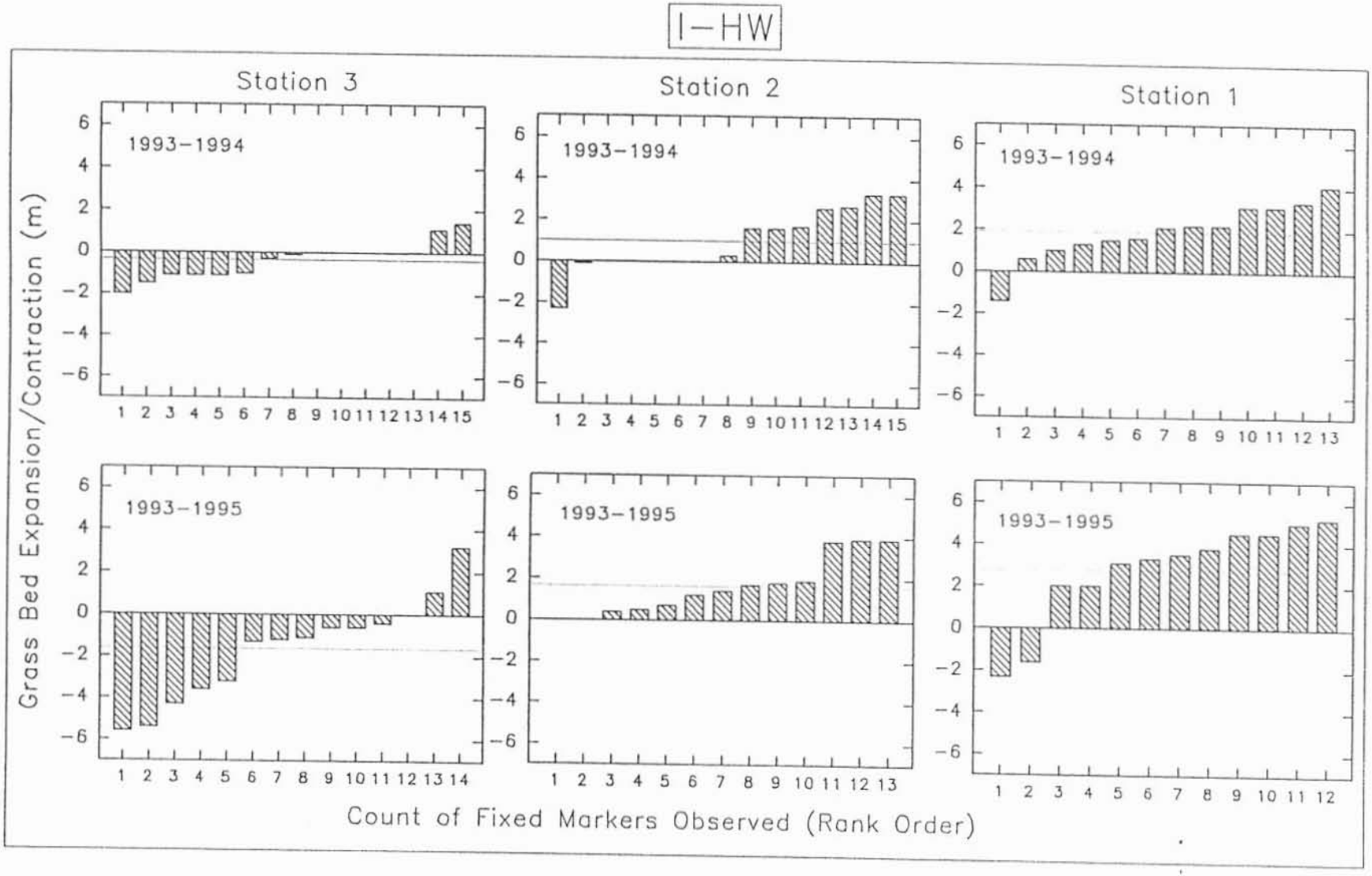

Figure 15. Seagrass bed expansion (+ values) or contraction (- values) from 1993 to 1994 (top row of figures) and from 1993 to 1995 (bottom figures) at Stations 1, 2, and 3 in Area I-HW. Dotted lines across each bar graph represent the mean change for each station.

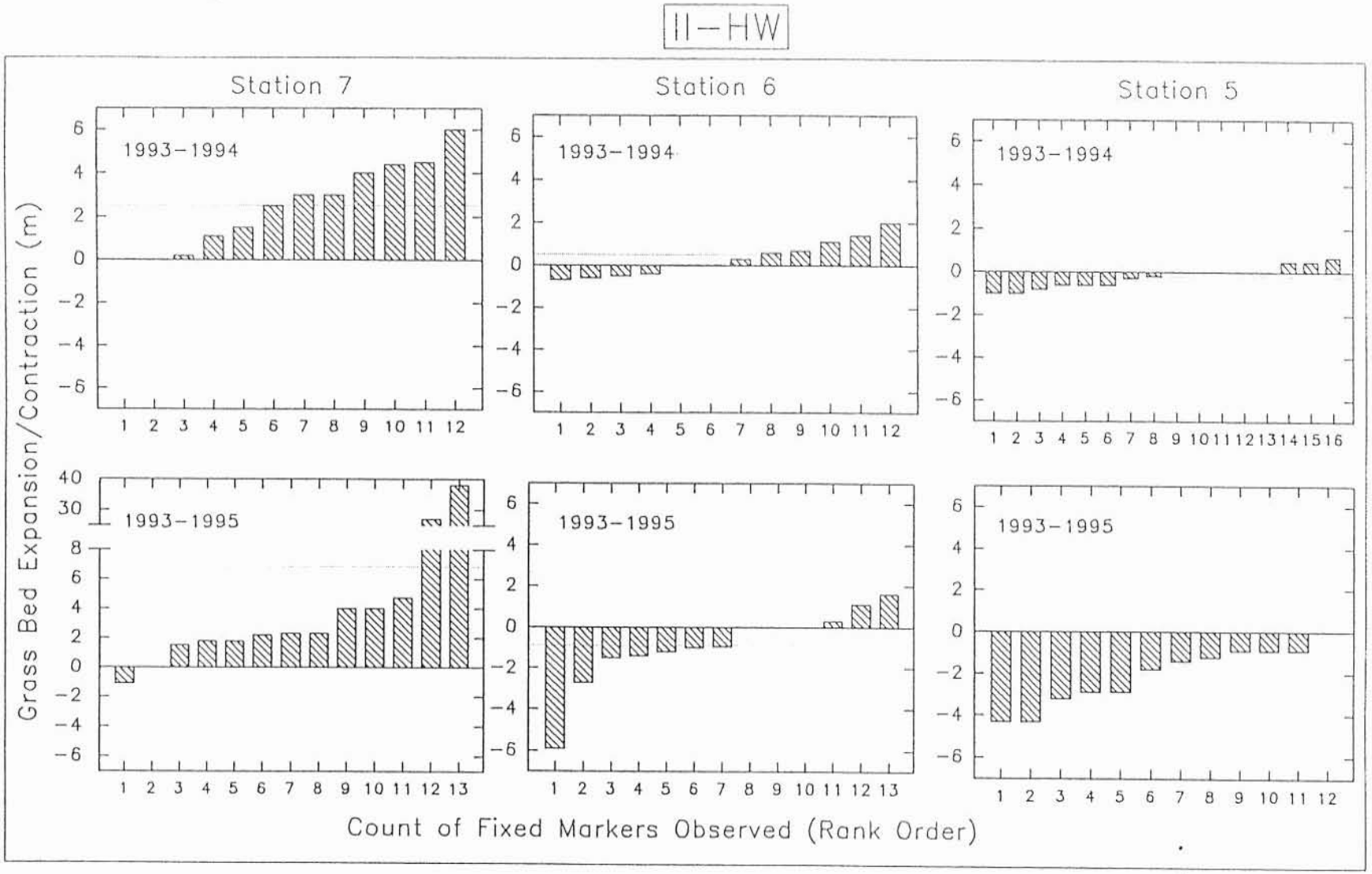

Figure 16. Seagrass bed expansion (+ values) or contraction (- values) from 1993 to 1994 (top row of figures) and from 1993 to 1995 (bottom figures) at Stations 5, 6, and 7 in Area II-HW. Dotted lines across each bar graph represent the mean change for each station.

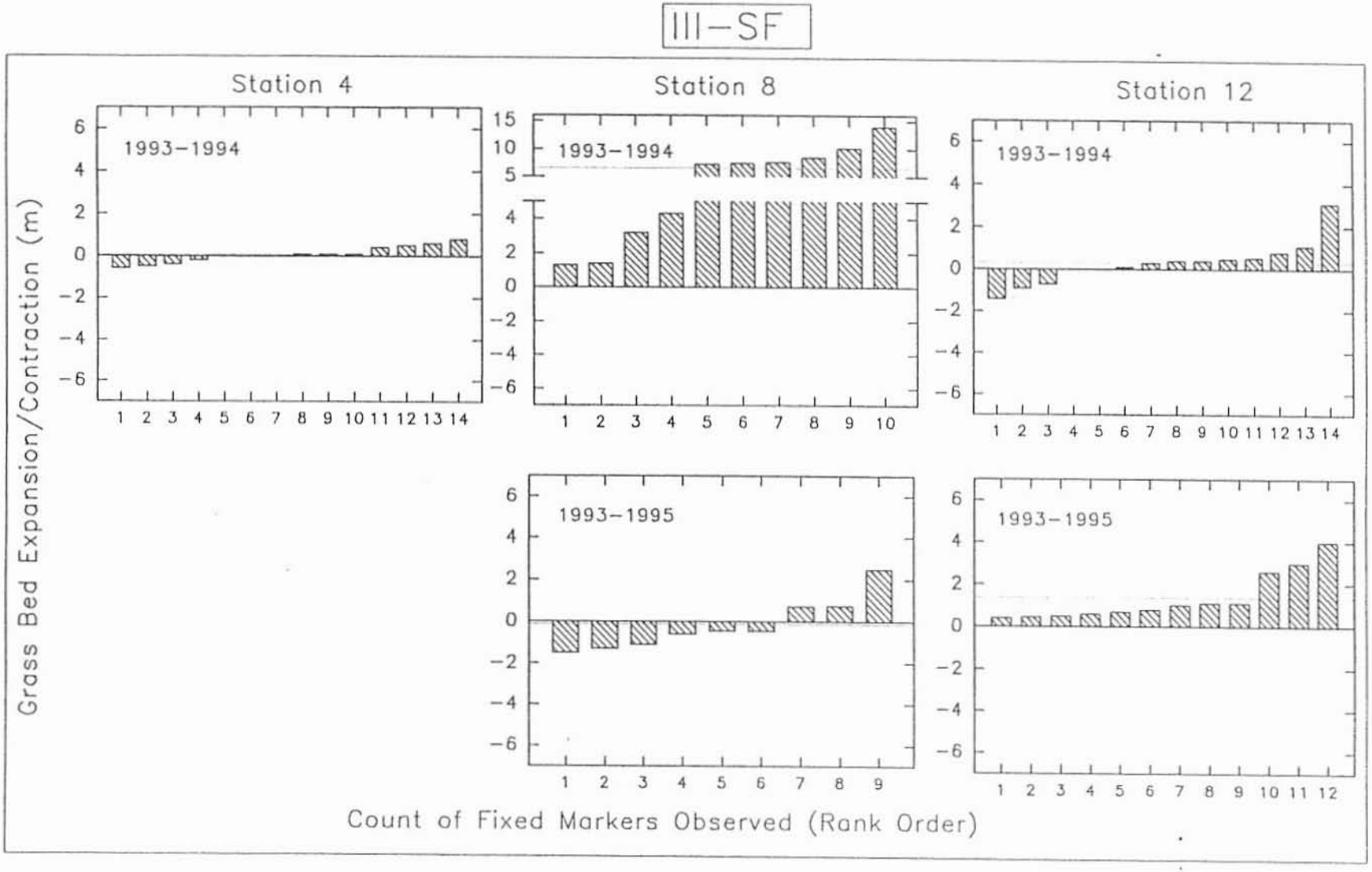

Figure 17. Seagrass bed expansion (+ values) or contraction (- values) from 1993 to 1994 (top row of figures) and from 1993 to 1995 (bottom figures) at Stations 4, 8, and 12 in Area III-SF. Dotted lines across each bar graph represent the mean change for each station. All markers were lost at Station 4 in 1995.

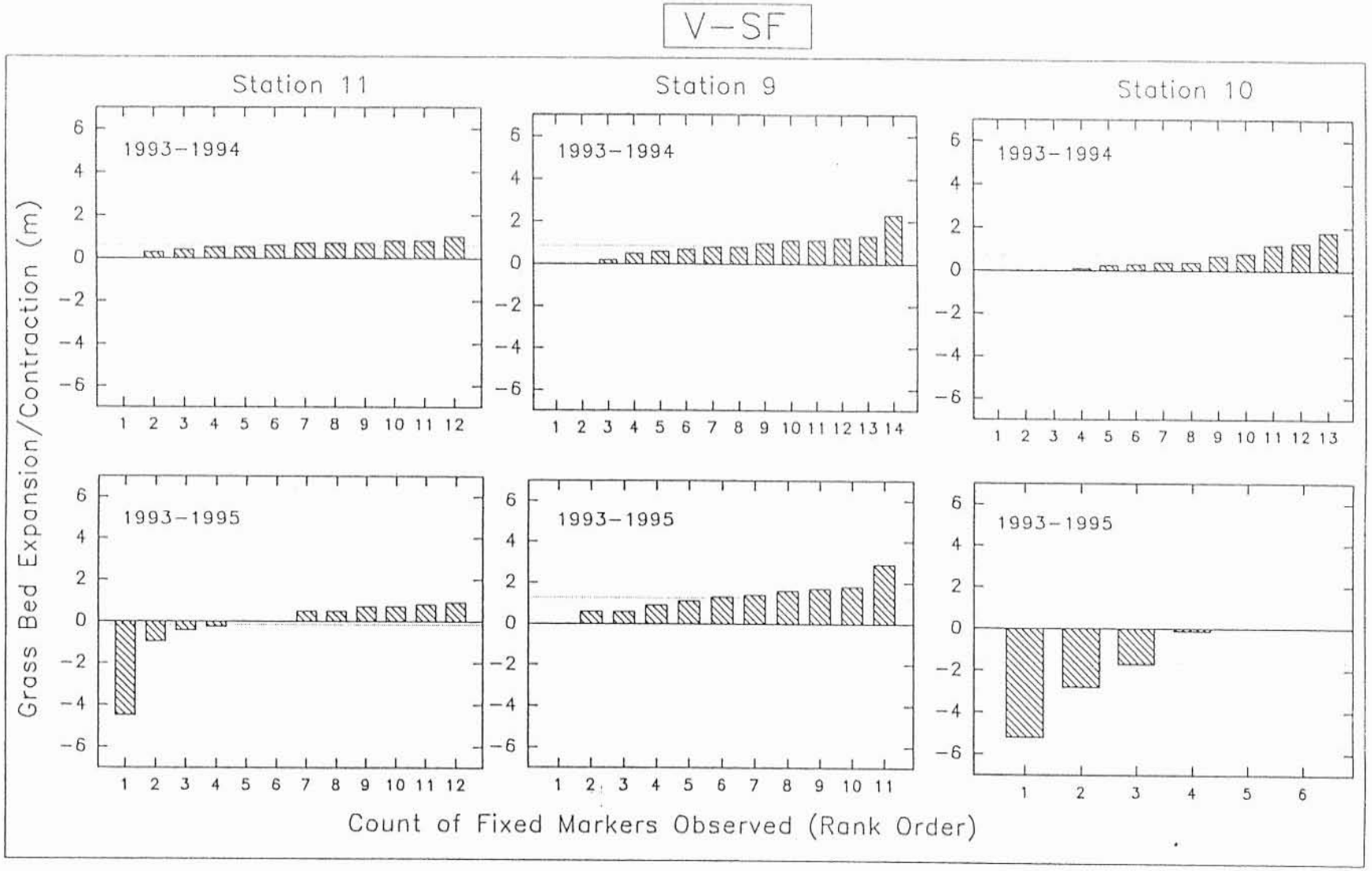

Figure 18. Seagrass bed expansion (+ values) or contraction (- values) from 1993 to 1994 (top row of figures) and from 1993 to 1995 (bottom figures) at Stations 9, 10, and 11 in Area V-SF. Dotted lines across each bar graph represent the mean change for each station.

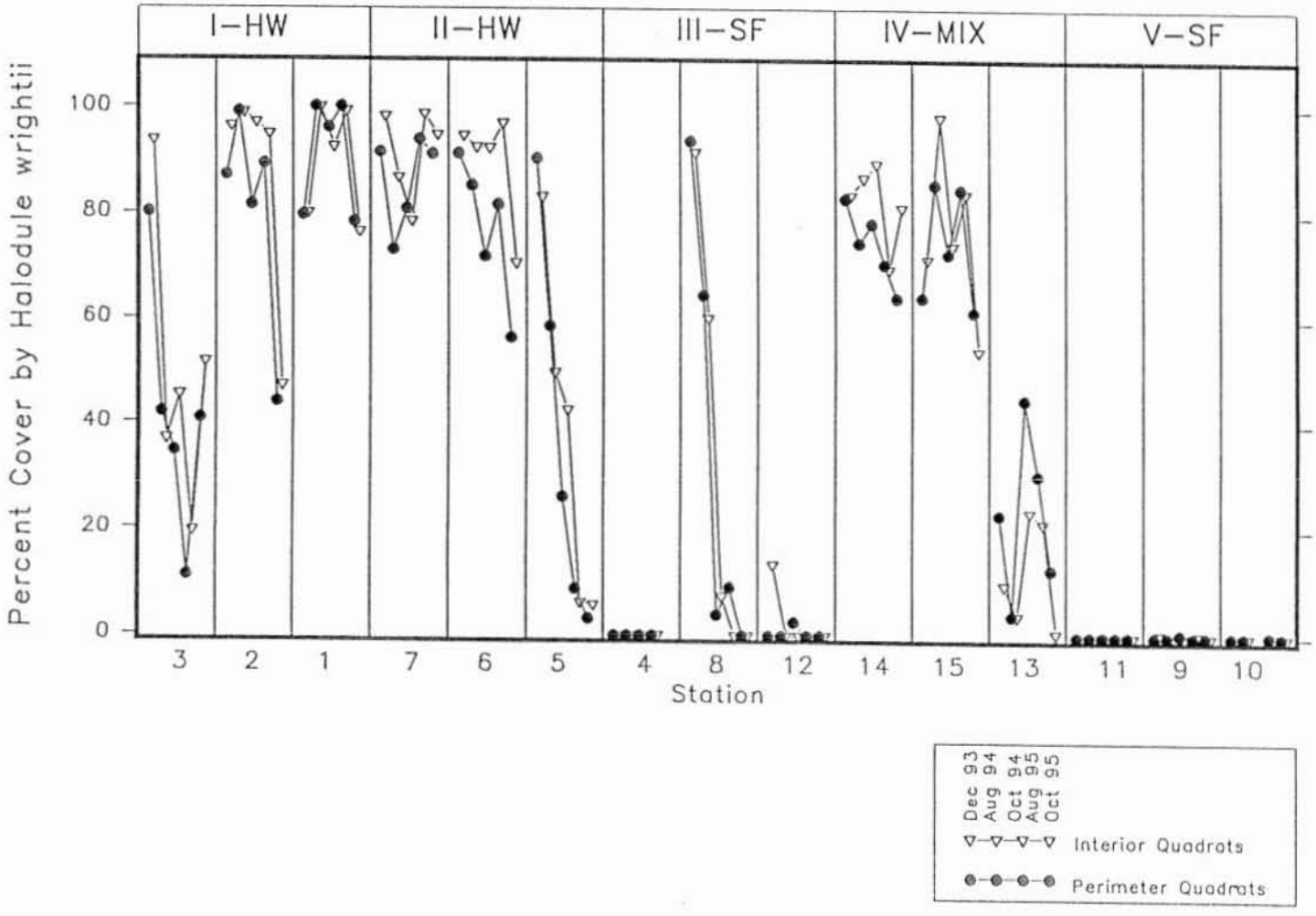

Figure 19. Changes in percent bottom coverage by Halodule wrightii from December 1993 through October 1995 for seagrass bed perimeters and interiors.

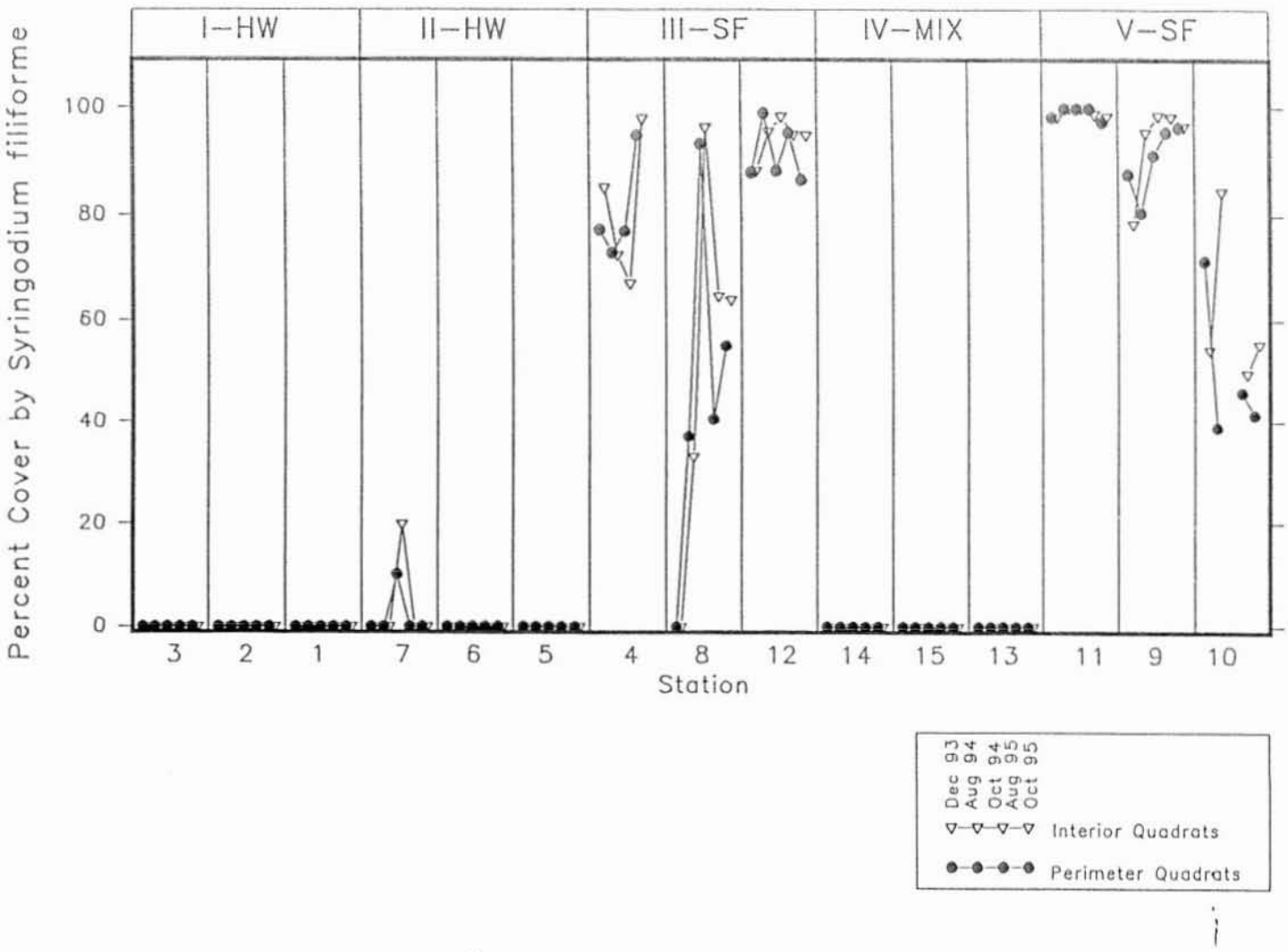

Figure 20. Changes in percent bottom coverage by Syringodium filiforme from December 1993 through October 1995 for seagrass bed perimeters and interiors.

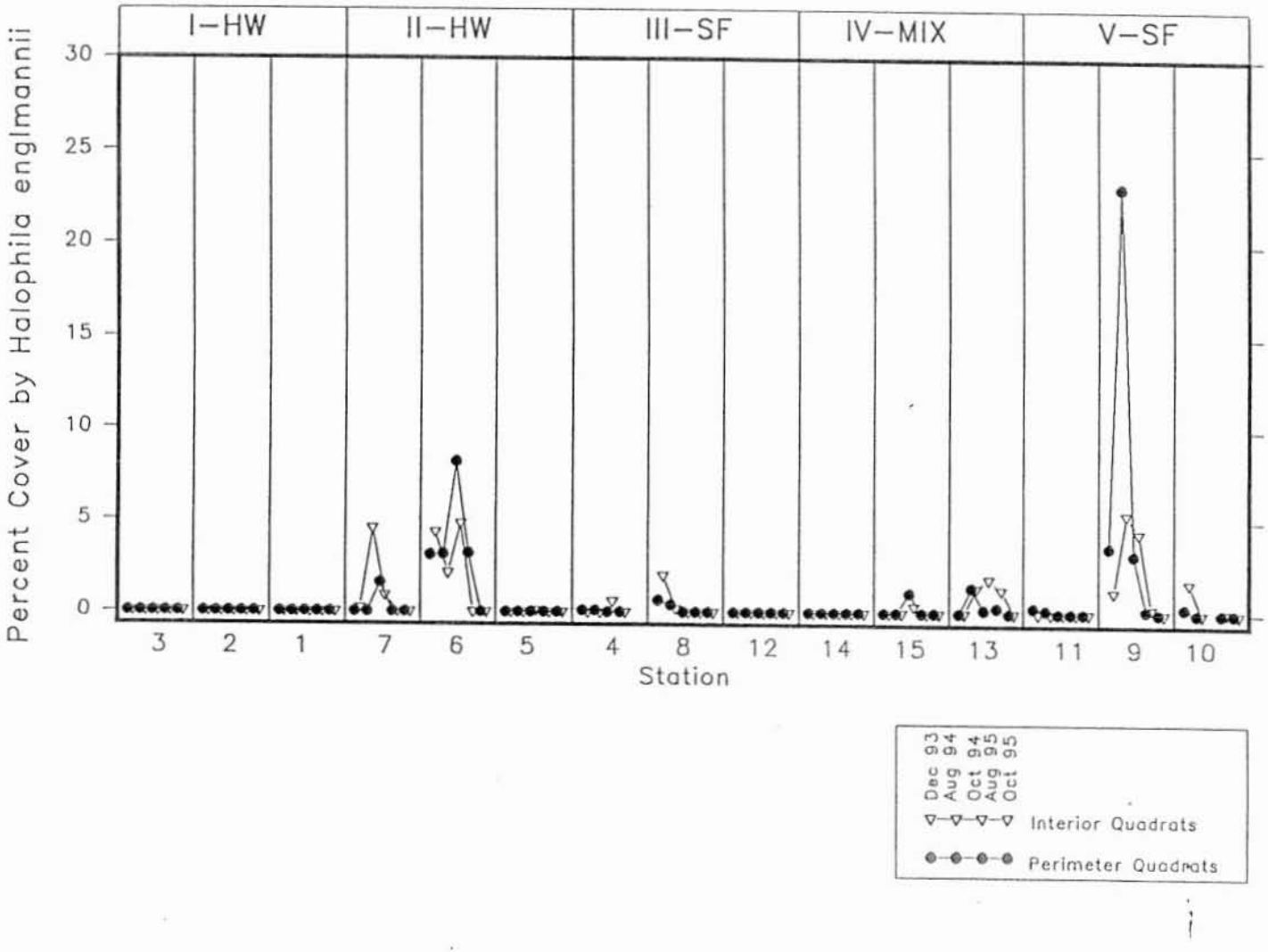

Figure 21. Changes in percent bottom coverage by Halophila englemanii from December 1993 through October 1995 for seagrass bed perimeters and interiors.

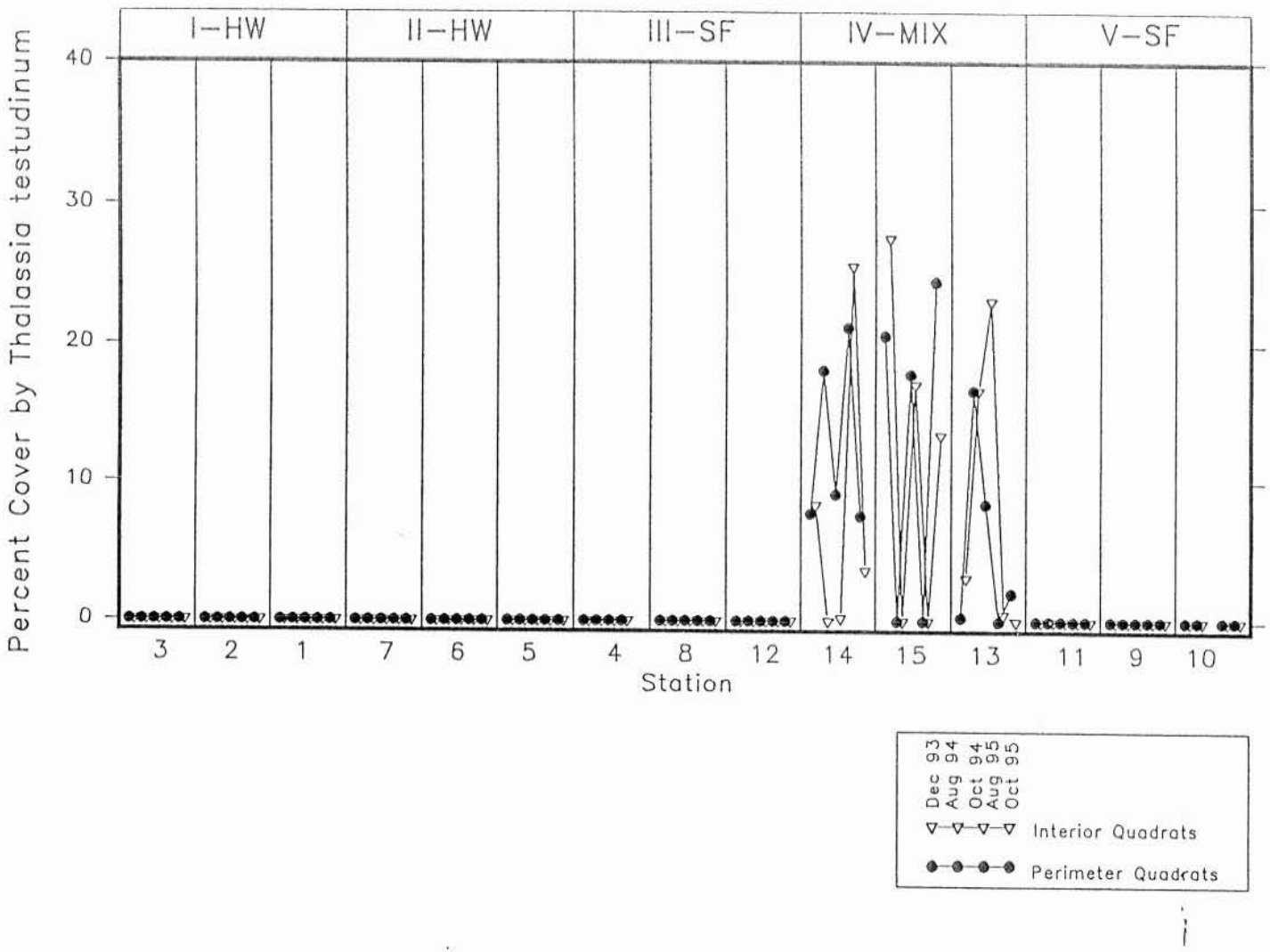

Figure 22. Changes in percent bottom coverage by Thalassia testudinum from December 1993 through October 1995 for seagrass bed perimeters and interiors.

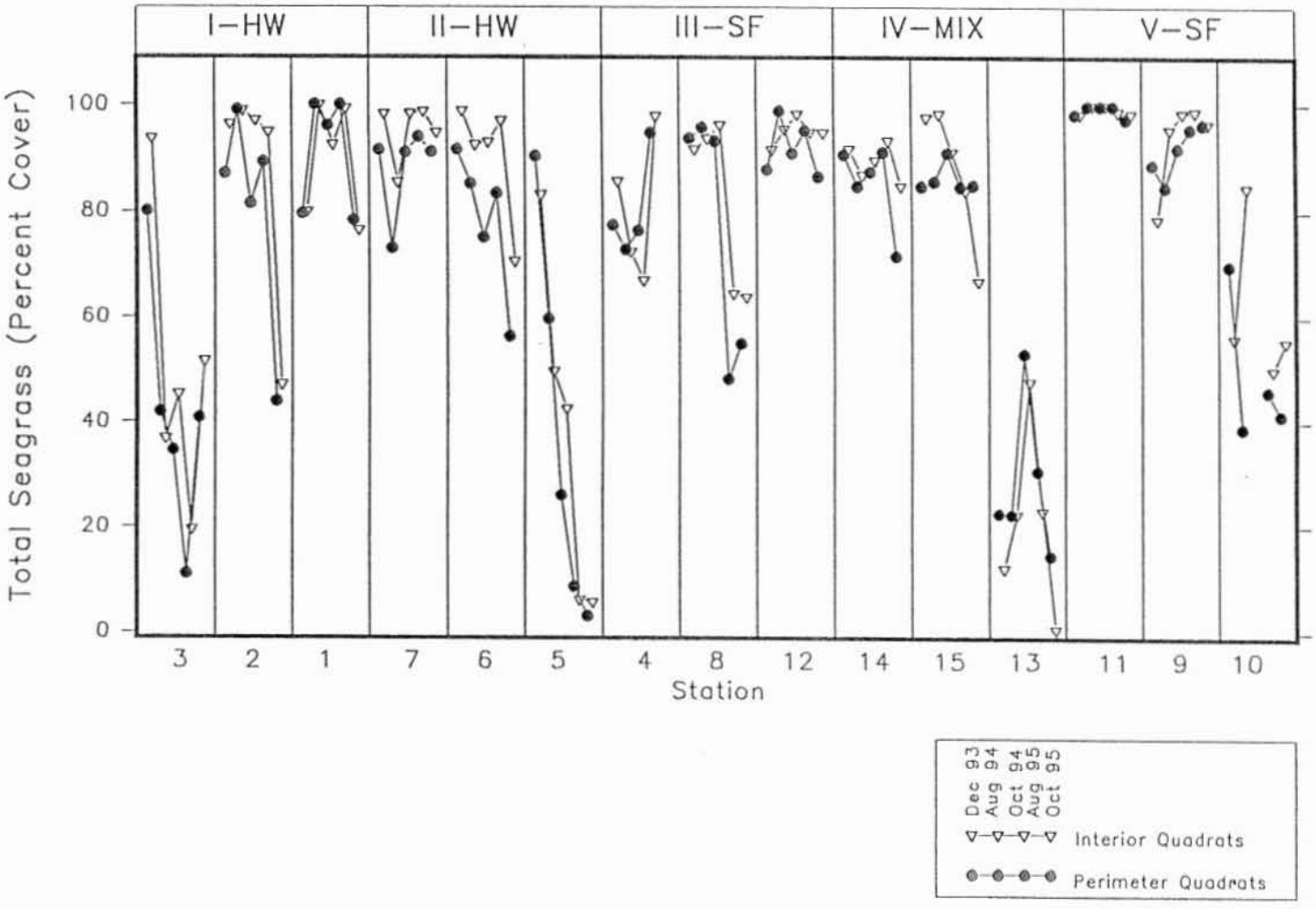

Figure 23. Changes in percent bottom coverage by all seagrass species from December 1993 through October 1995 for seagrass bed perimeters and interiors.

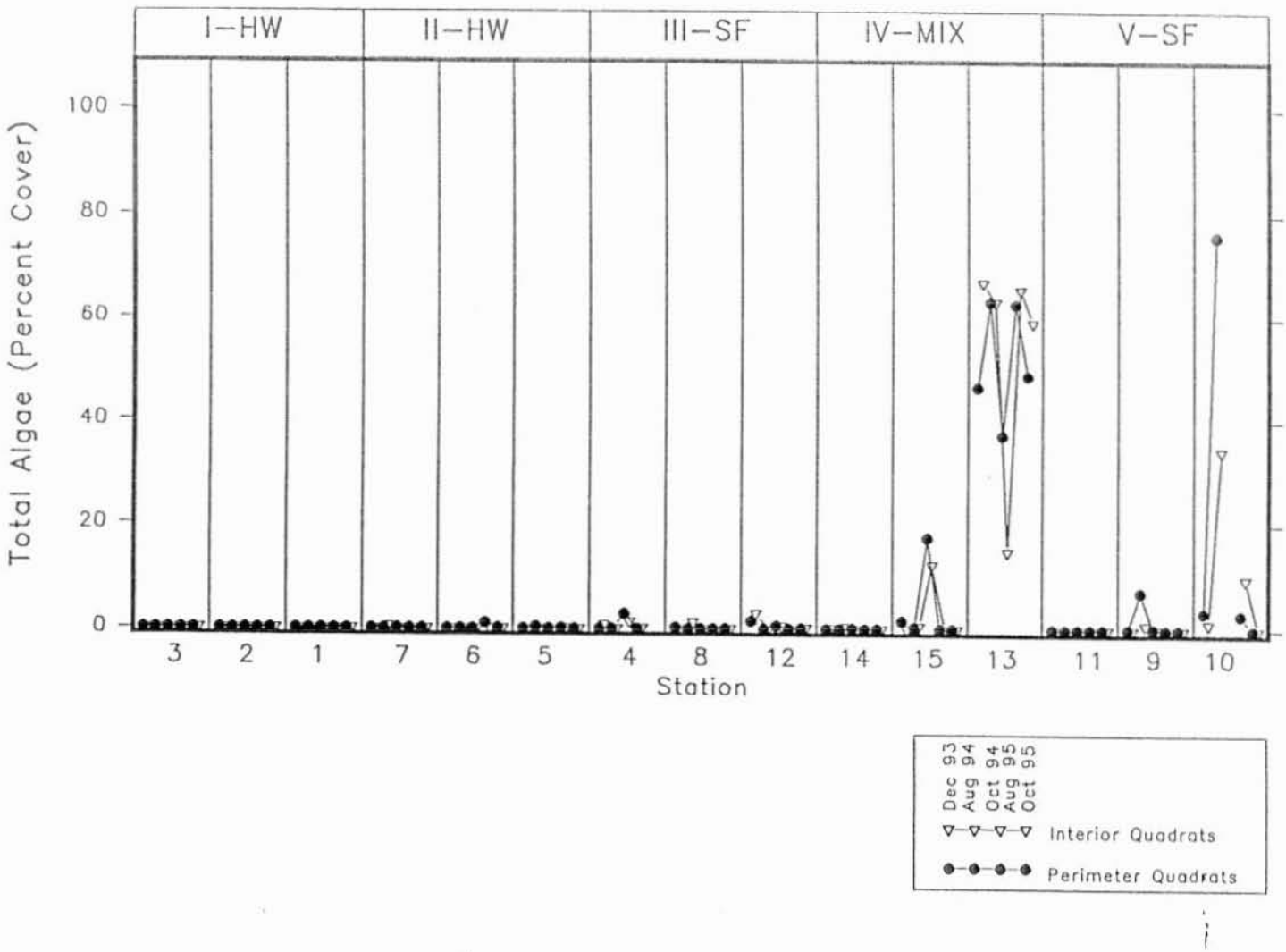

Figure 24. Changes in percent bottom coverage by all attached rhizophytic algae from December 1993 through October 1995 for seagrass bed perimeters and interiors.

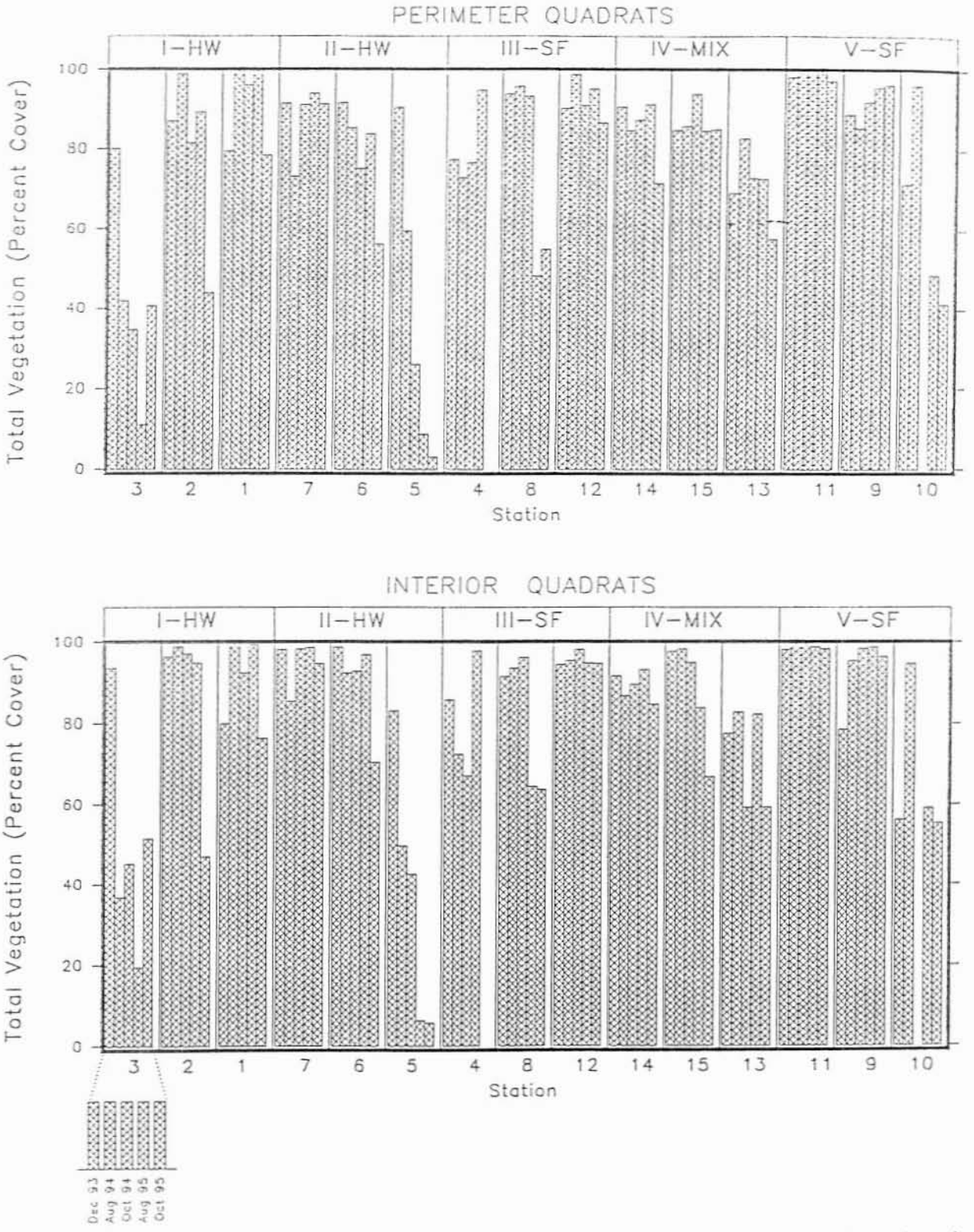

Figure 25. Bar graphs representing total SAV (seagrass and rhizophytic algae) coverage (cross-hatched area) vs. bare bottom (white space above bars) at 15 seagrass stations from December 1993 through October 1995. The top figure shows SAV coverage on seagrass bed perimeters and the bottom set shows coverages in bed interiors.

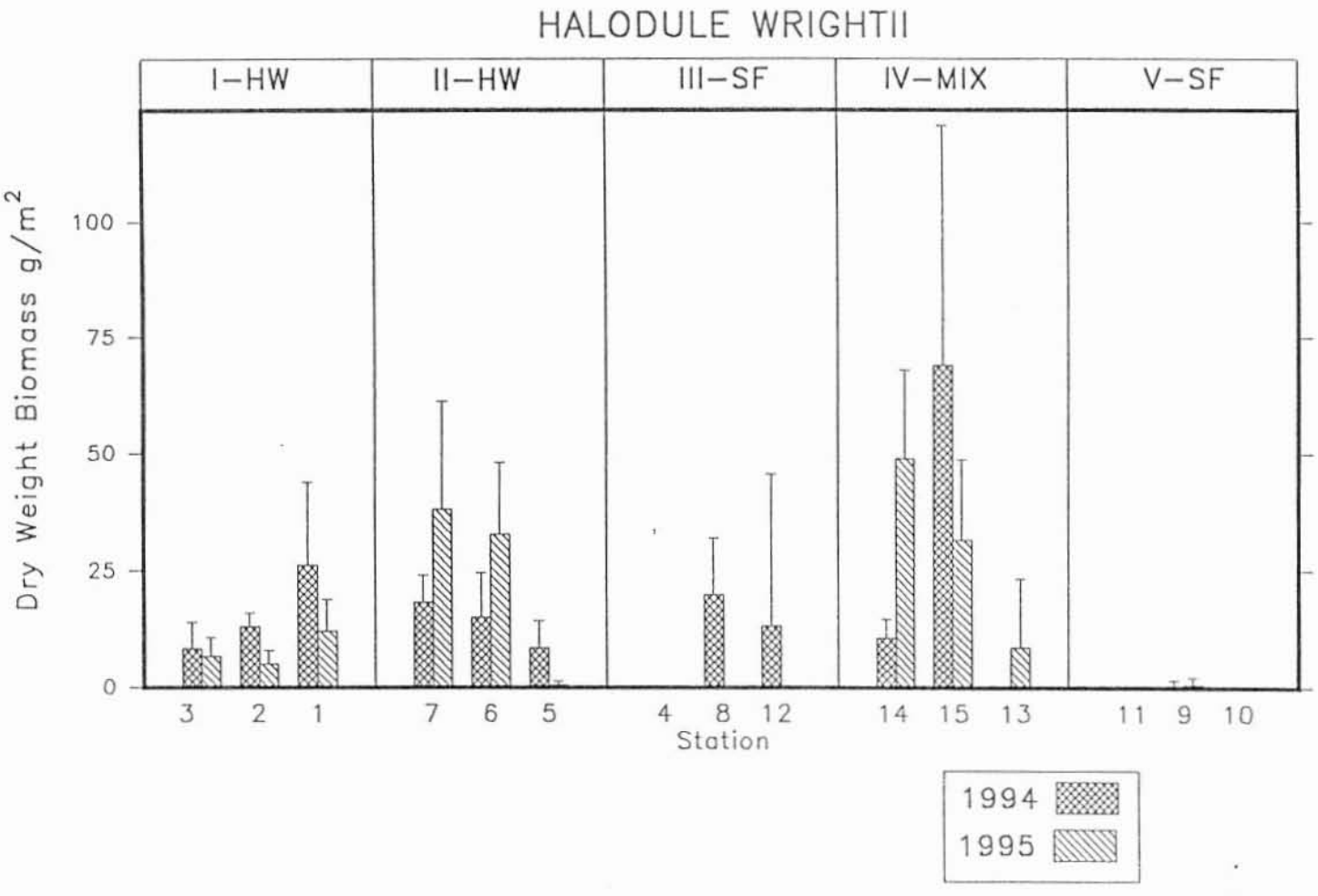

Figure 26. Dry weight biomass (g m^{-2}) of Halodule wrightii at all seagrass stations in August 1994 and 1995. Vertical error bars represent + one standard deviation.

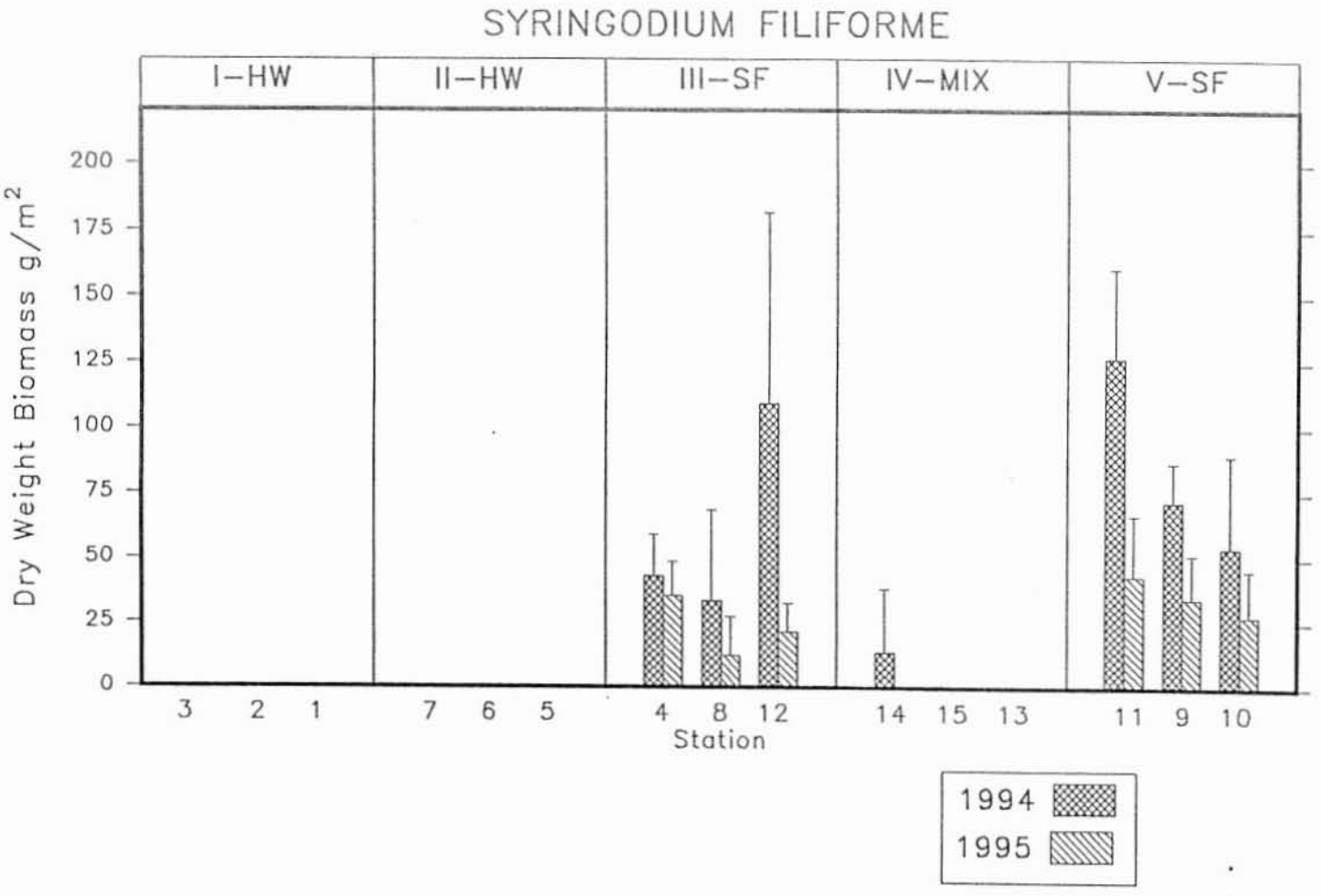

Figure 27. Dry weight biomass (g m^{-2}) of Syringodium filiforme at all seagrass stations in August 1994 and 1995. Vertical error bars represent + one standard deviation.

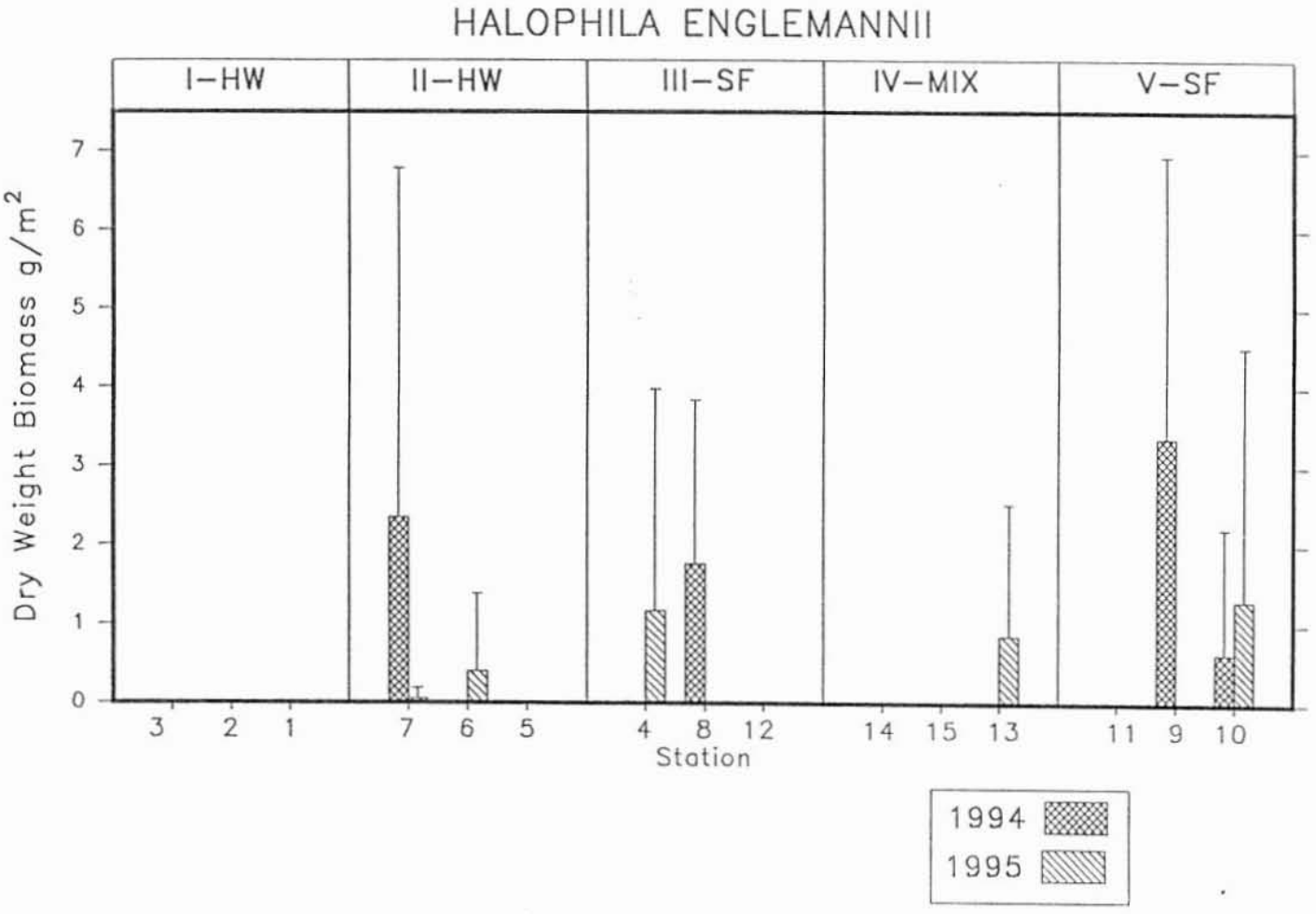

Figure 28. Dry weight biomass (g m^{-2}) of Halophila englemanii at all seagrass stations in August 1994 and 1995. Vertical error bars represent + one standard deviation.

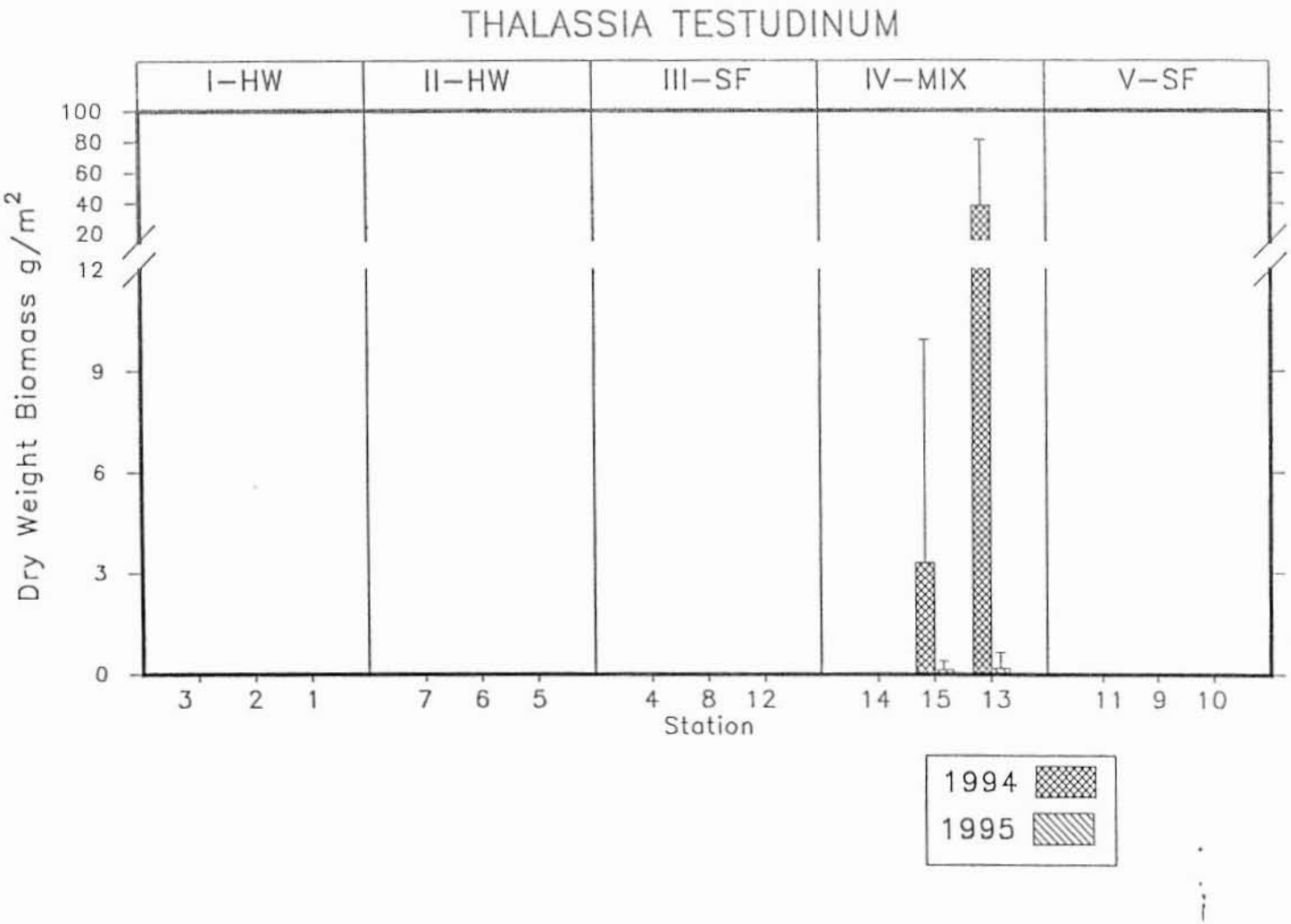

Figure 29. Dry weight biomass (g m^{-2}) of Thalassia testudinum at all seagrass stations in August 1994 and 1995. Vertical error bars represent + one standard deviation.

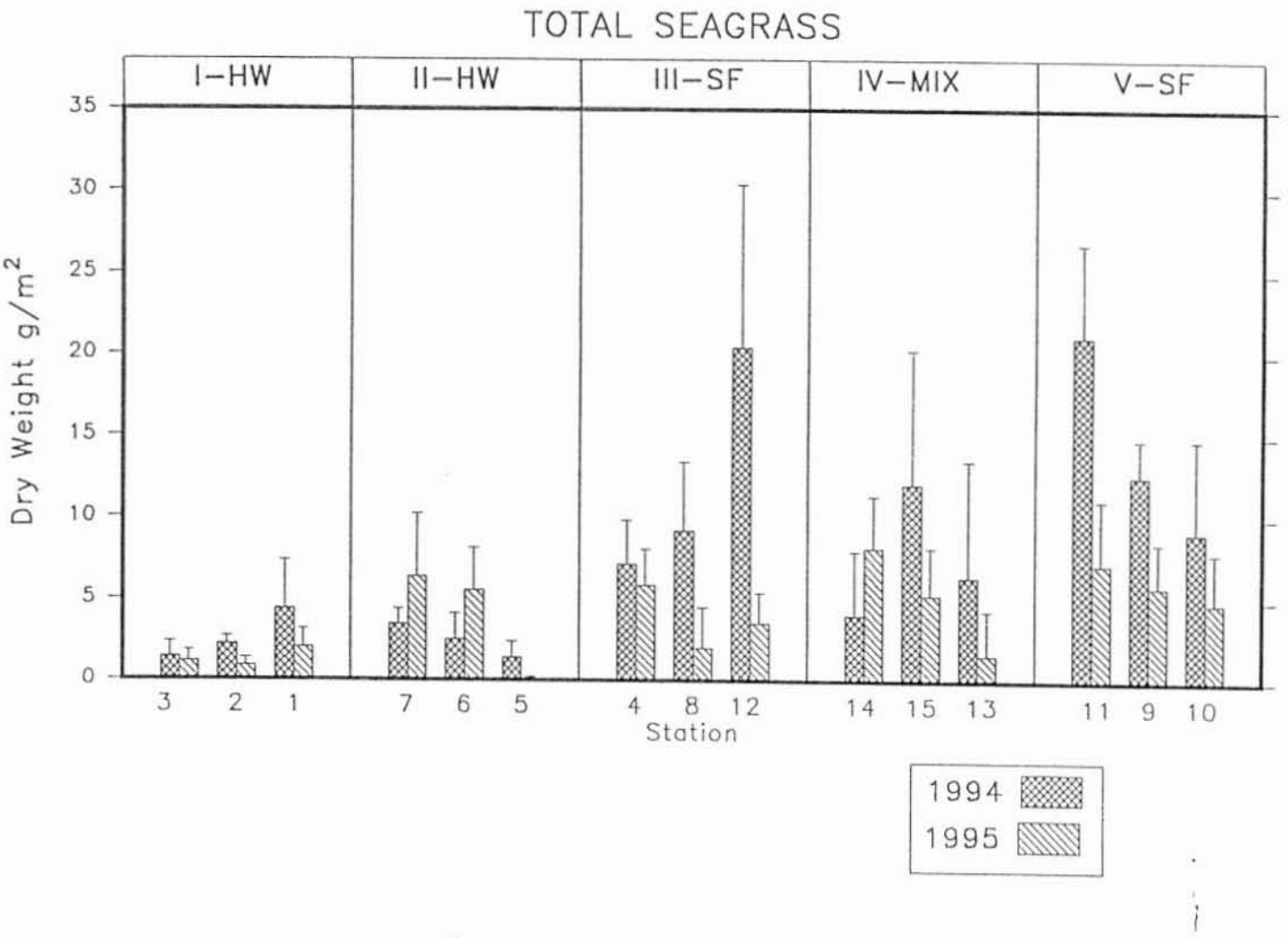

Figure 30. Dry weight biomass (g m^{-2}) of all seagrass species at all seagrass stations in August 1994 and 1995. Vertical error bars represent + one standard deviation.

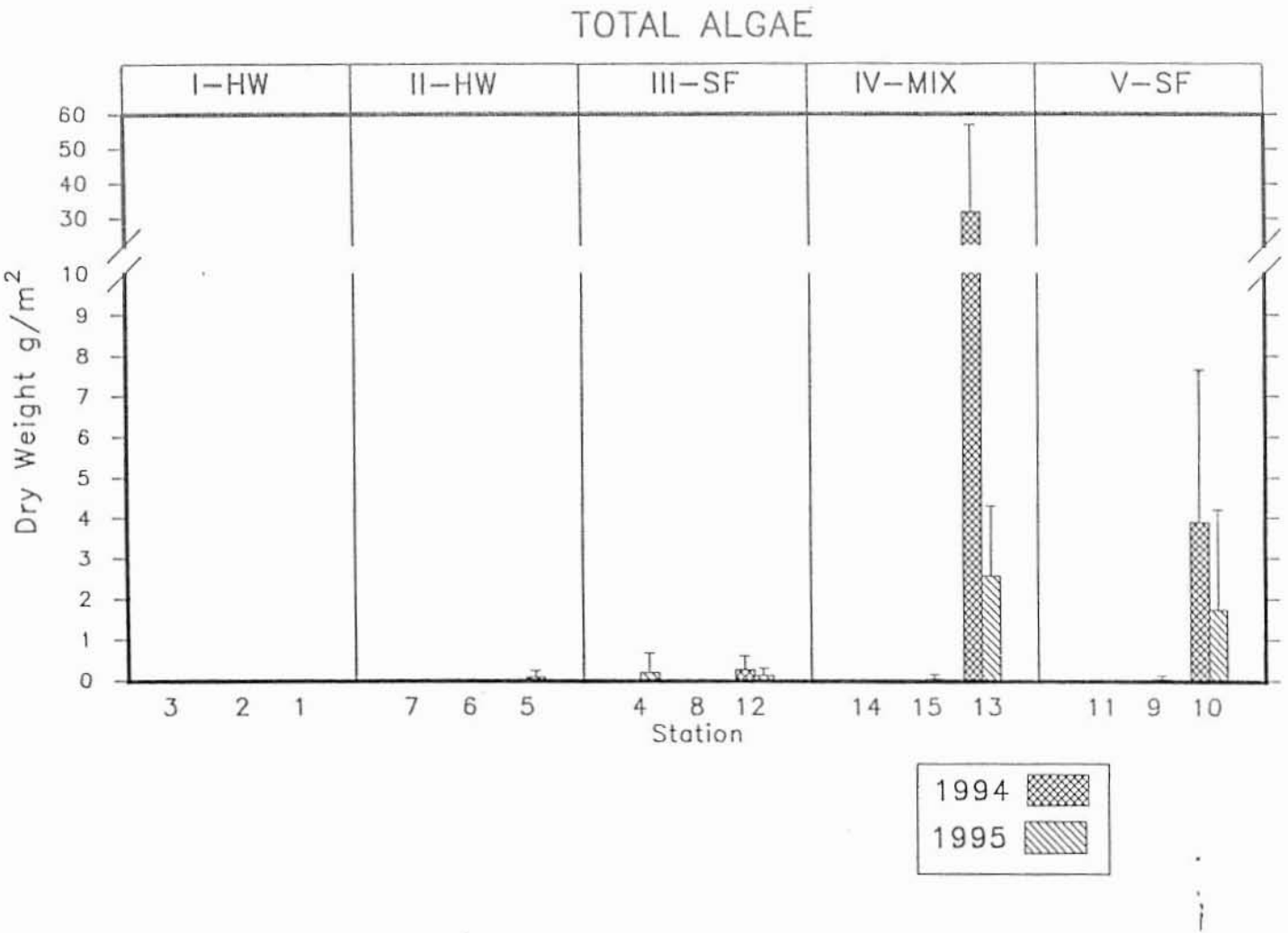

Figure 31. Dry weight biomass (g m^{-2}) of all rhizophytic algae at all seagrass stations in August 1994 and 1995. Vertical error bars represent + one standard deviation.

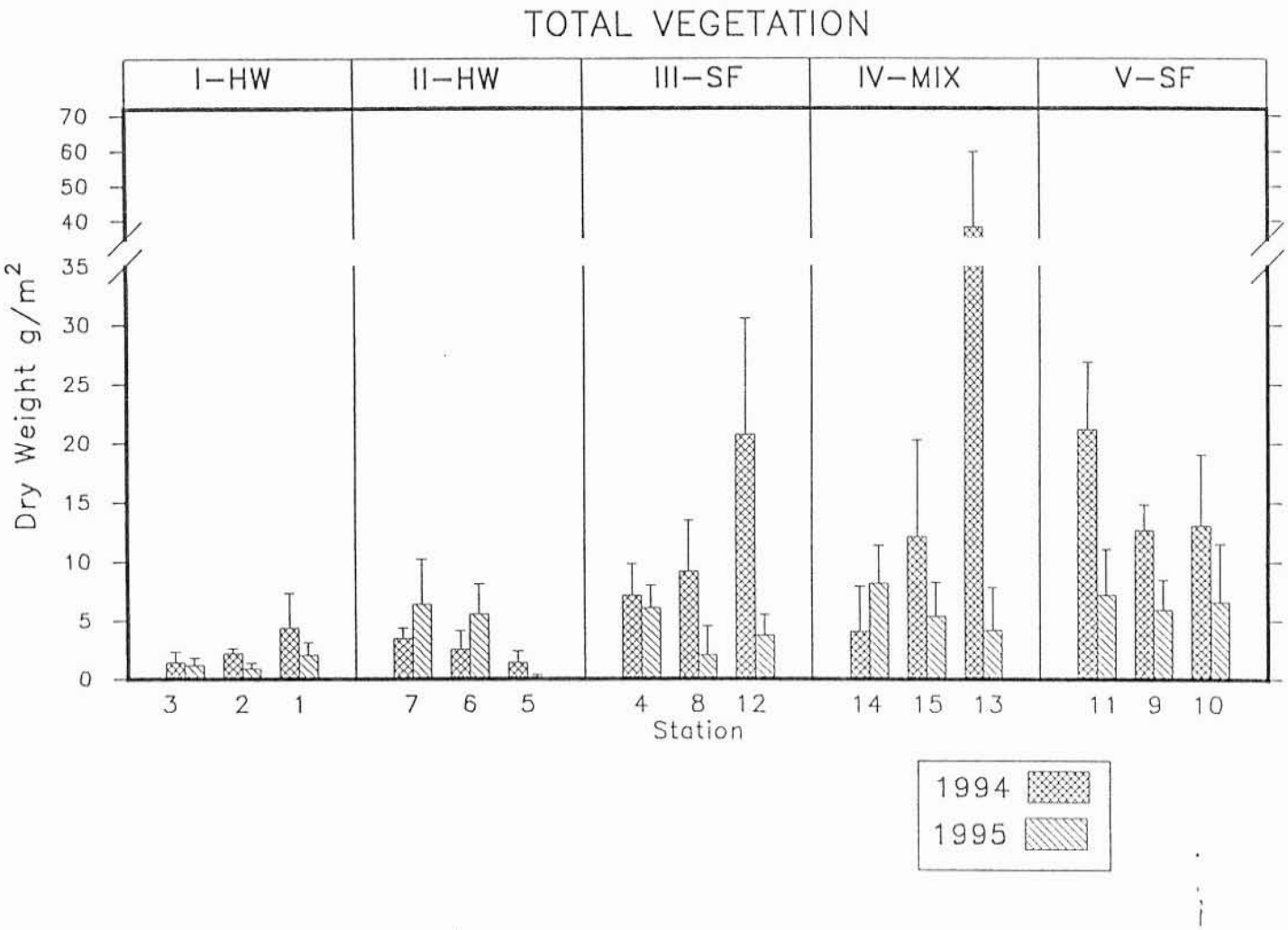

Figure 32. Dry weight biomass (g m^{-2}) of all SAV (= seagrass and rhizophytic algae) at all seagrass stations in August 1994 and 1995. Vertical error bars represent + one standard deviation.

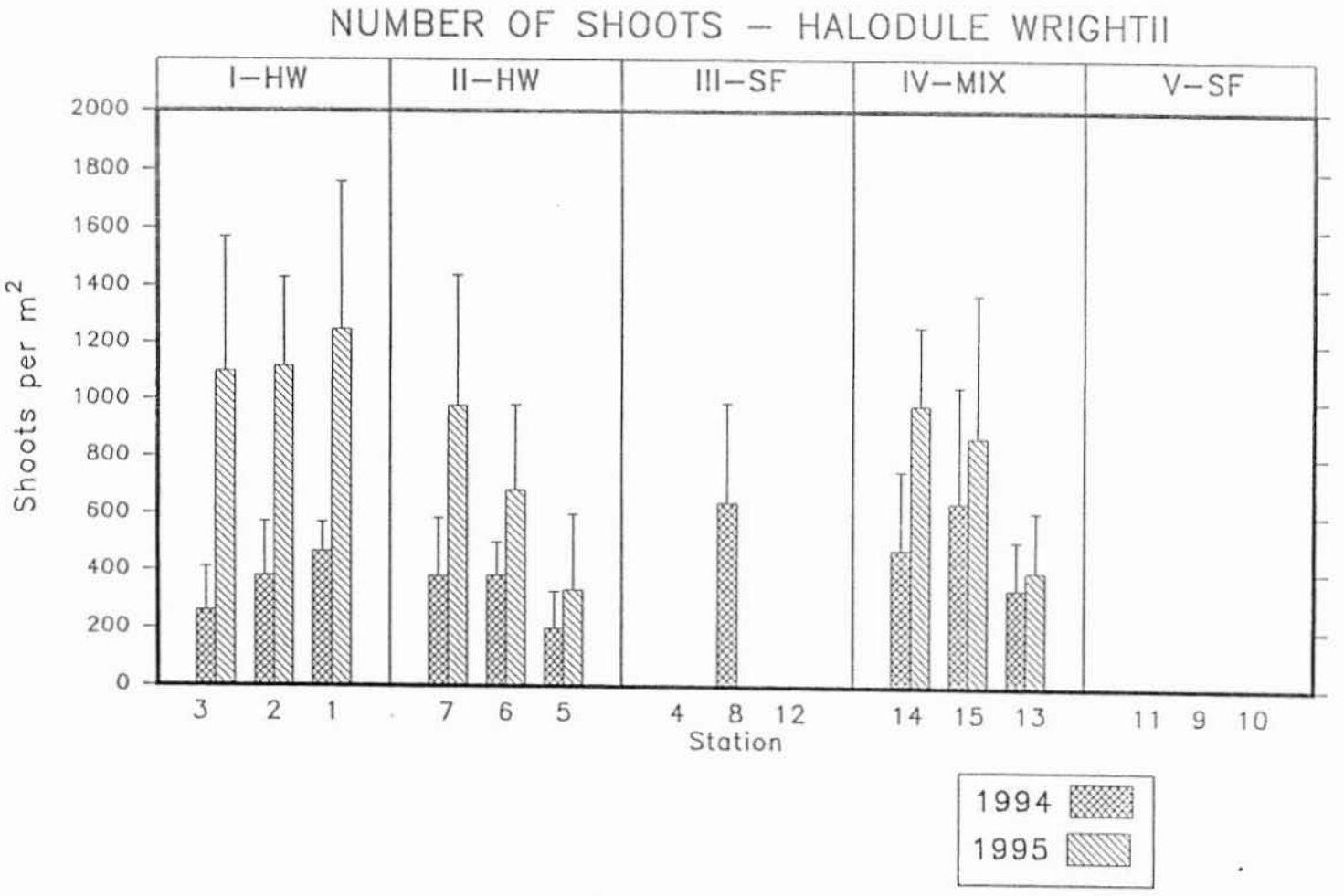

Figure 33. Shoot densities (shoots m^{-2}) of Halodule wrightii in August 1994 and 1995. Error bars represent + one standard deviation.

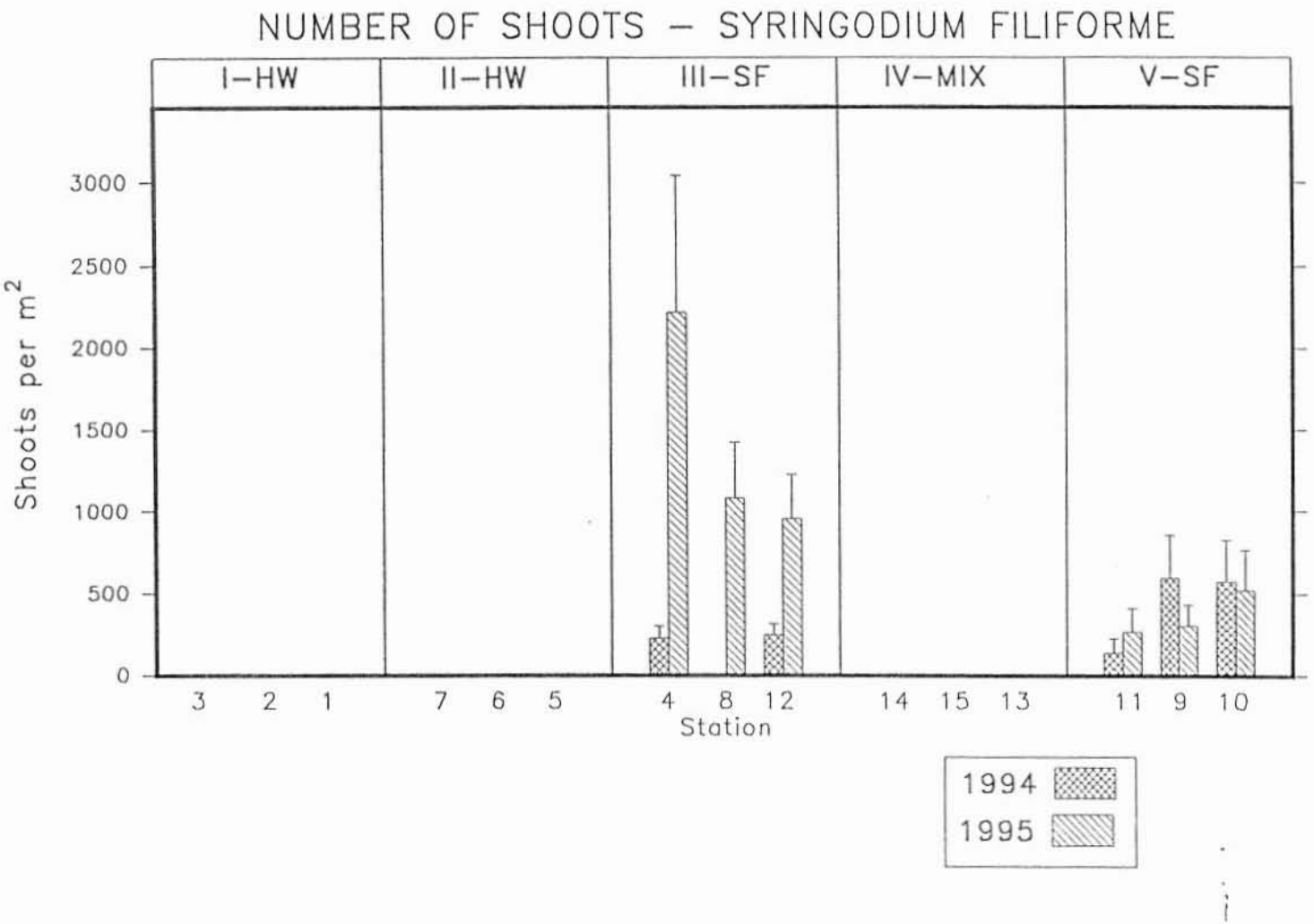

Figure 34. Shoot densities (shoots m^{-2}) of Syringodium filiforme in August 1994 and 1995. Error bars represent + one standard deviation.

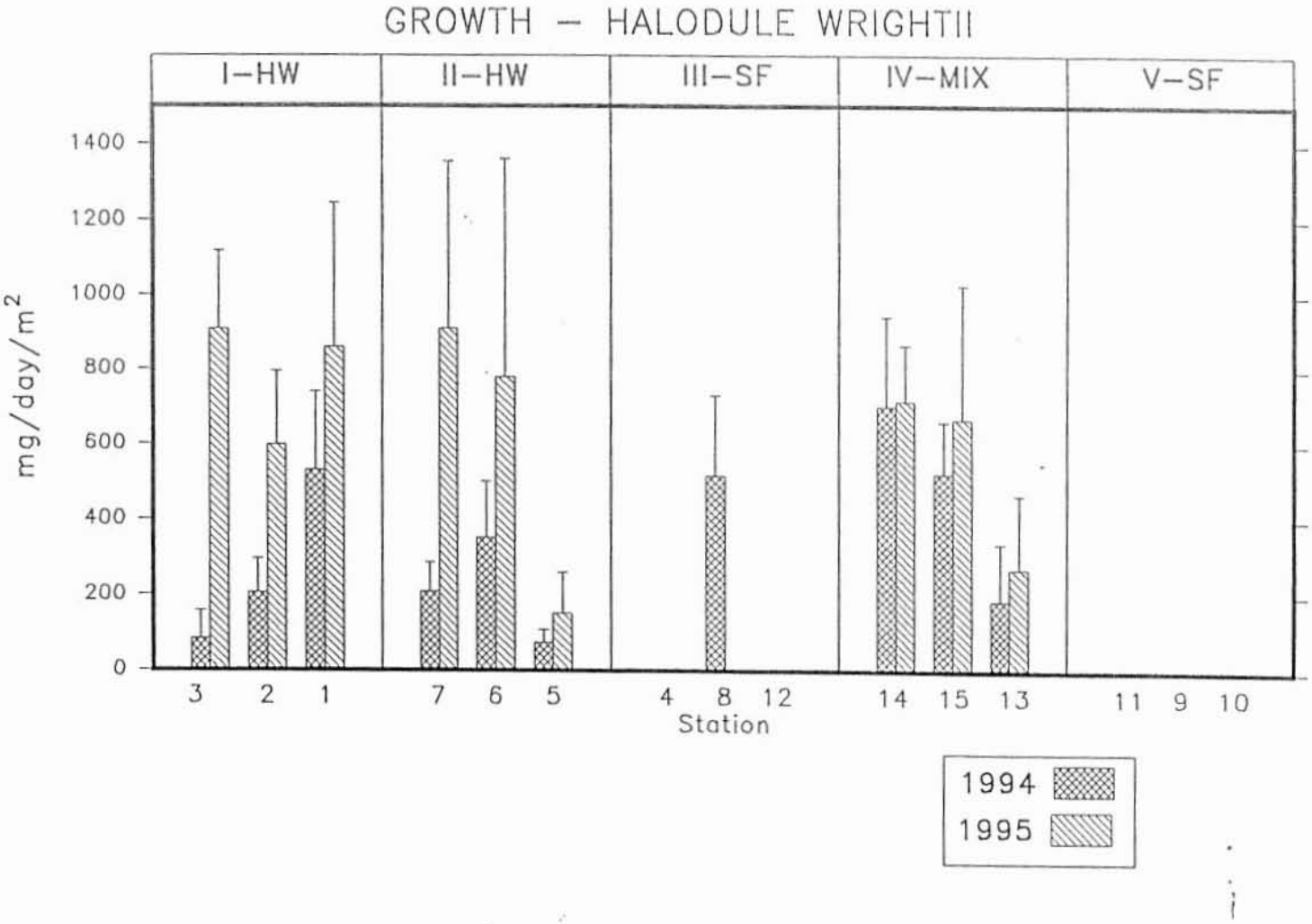

Figure 35. Dry weight biomass production (mg d^{-1} m^{-2}) for Halodule wrightii in August 1994 and 1995. Error bars represent + one standard deviation.

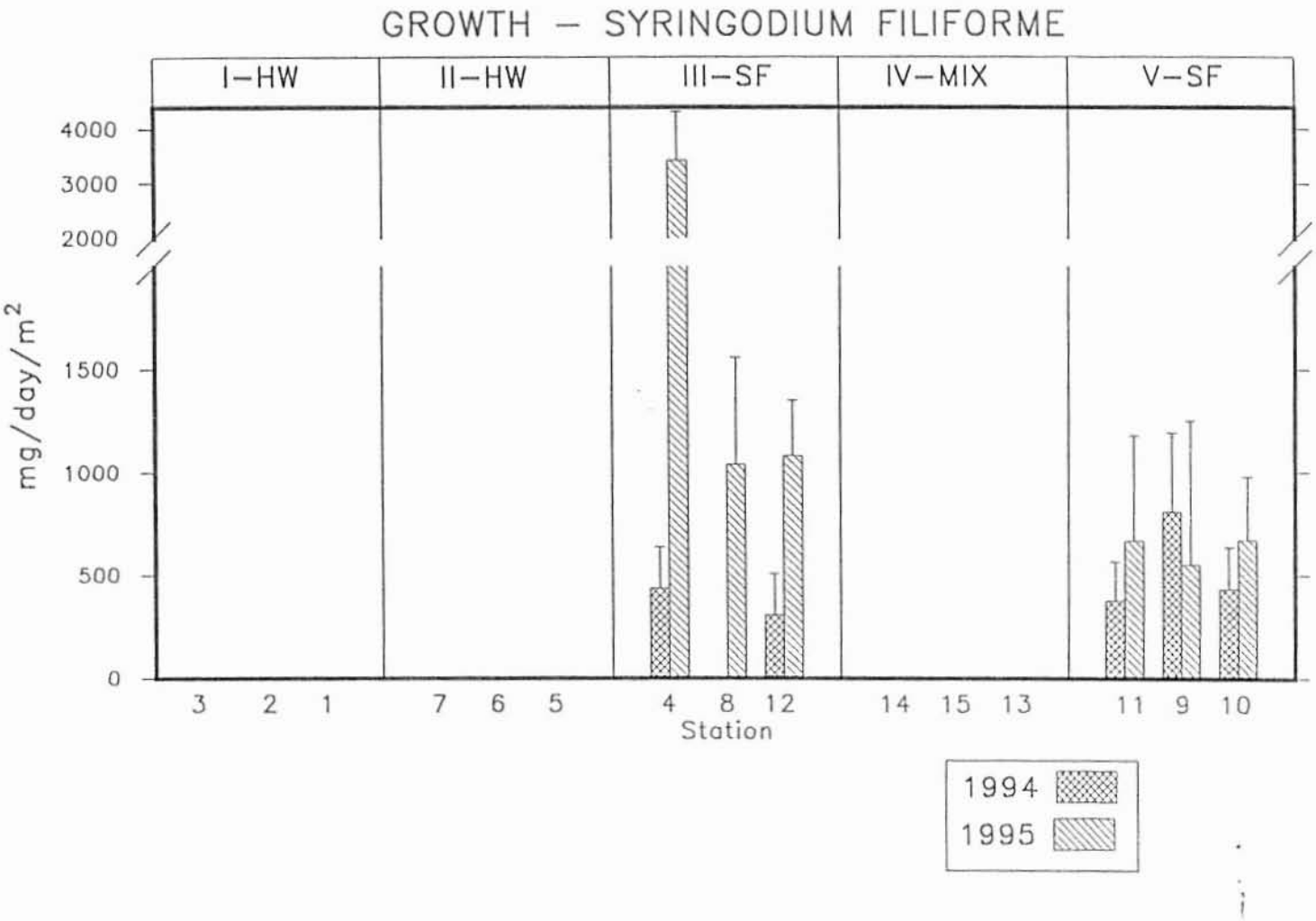

Figure 36. Dry weight biomass production (mg d^{-1} m^{-2}) for Syringodium filiforme in August 1994 and 1995. Error bars represent + one standard deviation.

Appendix Table I. Coordinates of seagrass survey transects.

Transect	Base Loran (45)	Base Loran (62)	End Loran (45)	End Loran (62)
1W	45230.38	62881.46	45230.49	62881.28
2W	45230.18	62883.19	45234.21	62883.08
3W	45232.58	62885.16	45240.93	62884.77
4W	45242.71	62886.86	45242.99	62886.69
5W	45236.43	62888.88	45241.70	62888.66
6W	45236.43	62889.10	45236.80	62889.20
7W	45233.27	62890.86	45233.29	62890.74
8W	45234.63	62892.21	45239.99	62893.91
9W	45236.71	62894.34	45247.41	62894.08
10W	45245.29	62896.76	45243.29	62896.82
11W	45254.70	62901.14	45253.71	62900.27
12W	45238.65	62896.69	45241.36	62896.41
13W	45266.69	62906.44	45271.22	62906.49
1N	45228.91	62880.74	45233.15	62884.81
2N	45255.38	62901.73	45253.71	62900.27

Appendix Table II. Water and sediment depths at the seagrass bed perimeters and differences in depths at 0, 1 and 2 meters from the bed edge.

		Water Depths (cm)					Sediment Depths (cm)				
Year	Station	0m	1m	2m	0m-1m	0m-2m	0m	1m	2m	0m-1m	0m-2m
1994	1	88	87	86	-1	-2	82	47	61	-35	-21
1994	1	86	89	85	3	-1	87	79	71	-8	-16
1994	1	89	91	87	2	-2	71	100	100	29	29
1994	1	88	88	88	0	0	100	100	48	0	-52
1994	1	90	90	89	0	-1	100	100	100	0	0
1994	1	91	91	91	0	0	100	100	82	0	-18
1994	1	93	94	95	1	2	28	70	100	42	72
1994	1	94	94	95	0	1	100	58	71	-42	-29
1994	1	90	90	90	0	0	100	100	100	0	0
1994	1	91	90	90	-1	-1	36	38	36	2	0
1994	1	89	90	89	1	0	20	18	20	-2	0
1994	1	82	80	81	-2	-1	58	60	50	2	-8
1994	1	85	85	84	0	-1	15	42	20	27	5
1995	1	42	41	42	-1	0	33	48	100	15	67
1995	1	43	48	44	5	1	21	100	64	79	43
1995	1	50	50	50	0	0	80	70	60	-10	-20
1995	1	54	53	50	-1	-4	31	66	100	35	69
1995	1	50	47	49	-3	-1	31	35	33	4	2
1994	2	80	79	80	-1	0	40	40	25	0	-15
1994	2	80	80	80	0	0	25	25	32	0	7
1994	2	80	80	81	0	1	34	33	35	-1	1
1994	2	81	81	81	0	0	26	30	28	4	2
1994	2	85	88	85	3	0	78	74	120	-4	42
1994	2	90	90	90	0	0	120	120	120	0	0
1994	2	90	90	90	0	0	71	101	71	30	0
1994	2	91	89	89	-2	-2	120	120	95	0	-25
1994	2	89	90	94	1	5	120	120	120	0	0
1994	2	90	88	90	-2	0	120	120	126	0	6
1994	2	90	90	90	0	0	90	80	99	-10	9
1994	2	88	89	90	1	2	70	43	82	-27	12
1994	2	90	90	90	0	0	76	71	94	-5	18
1994	2	90	90	89	0	-1	60	73	70	13	10
1994	2	89	89	88	0	-1	55	56	60	1	5
1995	2	82	82	80	0	-2	30	90	30	60	0
1995	2	79	80	81	1	2	76	86	91	10	15
1995	2	83	82	82	-1	-1	100	100	100	0	0
1995	2	83	81	90	-2	7	38	100	100	62	62
1995	2	84	83	85	-1	1	99	100	100	1	1
1994	3	70	70	69	0	-1	5	11	5	6	0
1994	3	68	70	70	2	2	12	8	5	-4	-7
1994	3	70	70	70	0	0	18	11	13	-7	-5
1994	3	75	70	75	-5	0	5	11	5	6	0
1994	3	70	70	70	0	0	5	12	18	7	13
1994	3	71	75	77	4	6	28	18	23	-10	-5
1994	3	70	70	75	0	5	12	12	5	0	-7
1994	3	70	72	70	2	0	3	10	7	7	4
1994	3	65	68	68	3	3	22	30	26	8	4
1995	3	62	63	64	1	2	5	4	9	-1	4
1995	3	61	65	65	4	4	13	7	1	-6	-12
1995	3	60	60	61	0	1	6	10	7	4	1

Appendix Table II. Continued.

Year	Station	Water Depths (cm) 0m	1m	2m	0m-1m	0m-2m	Sediment Depths (cm) 0m	1m	2m	0m-1m	0m-2m
1995	3	54	60	64	6	10	10	19	14	9	4
1995	3	55	56	59	1	4	18	11	61	-7	43
1994	4	82	80	80	-2	-2	2	1	0	-1	-2
1994	4	94	90	90	-4	-4	22	20	53	-2	31
1994	4	95	95	95	0	0	48	48	36	0	-12
1994	4	85	85	85	0	0	2	3	10	1	8
1994	4	90	90	86	0	-4	8	12	8	4	0
1994	4	85	85	80	0	-5	2	0	1	-2	-1
1994	4	87	80	80	-7	-7	10	0	0	-10	-10
1994	4	80	80	82	0	2	0	0	5	0	5
1994	5	125	125	130	0	5	150	160	150	10	0
1994	5	130	130	132	0	2	70	90	70	20	0
1994	5	130	140	135	10	5	100	100	90	0	-10
1994	5	130	135	135	5	5	100	100	100	0	0
1994	5	135	135	135	0	0	100	70	71	-30	-29
1994	5	130	130	135	0	5	85	65	70	-20	-15
1994	5	130	130	130	0	0	100	100	90	0	-10
1995	5	62	60	60	-2	-2	64	80	53	16	-11
1995	5	69	70	70	1	1	65	76	69	11	4
1995	5	66	65	65	-1	-1	73	73	70	0	-3
1995	5	62	64	63	2	1	87	80	83	-7	-4
1995	5	67	70	70	3	3	98	88	71	-10	-27
1994	6	105	104	105	-1	0	100	100	45	0	-55
1994	6	105	105	105	0	0	100	100	45	0	-55
1994	6	100	100	100	0	0	100	100	20	0	-80
1994	6	95	95	95	0	0	25	25	25	0	0
1994	6	95	95	95	0	0	15	17	15	2	0
1994	6	95	95	94	0	-1	50	40	52	-10	2
1994	6	100	104	100	4	0	N/A	N/A	N/A	0	0
1994	6	102	100	104	-2	2	25	48	58	23	33
1995	6	39	38	37	-1	-2	88	42	76	-46	-12
1995	6	37	36	37	-1	0	69	48	59	-21	-10
1995	6	36	36	36	0	0	34	17	24	-17	-10
1995	6	30	31	29	1	-1	9	13	4	4	-5
1995	6	34	35	35	1	1	71	20	43	-51	-28
1994	7	70	70	70	0	0	100	25	20	-75	-80
1994	7	70	70	70	0	0	22	15	25	-7	3
1994	7	70	70	70	0	0	45	40	30	-5	-15
1994	7	70	70	70	0	0	40	55	48	15	8
1994	7	100	100	95	0	-5	22	18	10	-4	-12
1994	7	90	90	100	0	10	25	15	12	-10	-13
1994	7	80	90	100	10	20	40	50	15	10	-25
1994	7	90	95	100	5	10	20	29	18	9	-2
1995	7	127	122	120	-5	-7	73	20	19	-53	-54
1995	7	123	120	123	-3	0	24	23	25	-1	1
1995	7	123	120	122	-3	-1	30	23	16	-7	-14
1995	7	122	123	122	1	0	24	25	22	1	-2
1995	7	122	126	123	4	1	23	32	30	9	7
1994	8	150	150	150	0	0	30	20	25	-10	-5
1994	8	150	150	150	0	0	30	30	20	0	-10
1994	8	150	150	150	0	0	23	27	15	4	-8
1994	8	150	150	150	0	0	20	20	15	0	-5

Appendix Table II. Continued.

Year	Station	Water Depths (cm) 0m	1m	2m	0m-1m	0m-2m	Sediment Depths (cm) 0m	1m	2m	0m-1m	0m-2m
1994	8	145	140	150	-5	5	17	16	18	-1	1
1994	8	150	150	150	0	0	7	12	12	5	5
1995	8	72	74	74	2	2	8	8	4	0	-4
1995	8	74	75	80	1	6	18	10	6	-8	-12
1995	8	73	75	78	2	5	5	21	20	16	15
1995	8	74	74	77	0	3	12	16	15	4	3
1995	8	72	71	75	-1	3	14	15	13	1	-1
1994	9	120	115	115	-5	-5	2	15	2	13	0
1994	9	128	127	125	-1	-3	10	10	18	0	8
1994	9	125	125	120	0	-5	15	2	10	-13	-5
1994	9	125	122	120	-3	-5	18	17	20	-1	2
1994	9	125	120	120	-5	-5	15	20	20	5	5
1994	9	125	122	122	-3	-3	20	6	10	-14	-10
1994	9	130	130	130	0	0	2	2	20	0	18
1994	9	130	132	130	2	0	13	12	13	-1	0
1995	9	136	137	134	1	-2	10	2	2	-8	-8
1995	9	135	135	132	0	-3	22	17	7	-5	-15
1995	9	130	132	130	2	0	11	7	4	-4	-7
1995	9	130	128	127	-2	-3	18	12	5	-6	-13
1995	9	124	122	121	-2	-3	8	11	4	3	-4
1994	10	105	105	105	0	0	14	2	2	-12	-12
1994	10	105	110	110	5	5	14	16	16	2	2
1994	10	115	115	115	0	0	5	3	6	-2	1
1994	10	120	120	120	0	0	25	13	15	-12	-10
1994	10	125	123	123	-2	-2	15	60	15	45	0
1994	10	120	120	122	0	2	20	18	7	-2	-13
1994	10	115	115	115	0	0	77	55	70	-22	-7
1994	10	113	115	115	2	2	115	120	120	5	5
1995	10	154	154	155	0	1	18	9	8	-9	-10
1995	10	158	156	156	-2	-2	28	4	11	-24	-17
1995	10	152	149	156	-3	4	20	32	29	12	9
1995	10	148	150	152	2	4	19	17	15	-2	-4
1995	10	154	152	150	-2	-4	43	100	100	57	57
1994	11	82	80	79	-2	-3	10	10	13	0	3
1994	11	80	75	78	-5	-2	8	3	1	-5	-7
1994	11	80	78	75	-2	-5	5	1	10	-4	5
1994	11	78	78	78	0	0	2	5	1	3	-1
1994	11	71	71	69	0	-2	8	4	7	-4	-1
1994	11	80	79	80	-1	0	20	1	5	-19	-15
1994	11	80	79	79	-1	-1	1	5	2	4	1
1994	11	79	80	80	1	1	5	5	5	0	0
1995	11	163	162	163	-1	0	5	0	0	-5	-5
1995	11	168	167	163	-1	-5	5	0	0	-5	-5
1995	11	164	160	166	-4	2	2	0	3	-2	1
1995	11	162	161	165	-1	3	8	0	2	-8	-6
1995	11	164	161	166	-3	2	5	5	0	0	-5
1994	12	118	115	115	-3	-3	5	7	12	2	7
1994	12	115	115	115	0	0	10	12	12	2	2
1994	12	116	120	120	4	4	6	20	10	14	4
1994	12	120	120	120	0	0	2	7	2	5	0
1994	12	118	118	115	0	-3	4	2	1	-2	-3
1994	12	112	110	110	-2	-2	4	10	8	6	4

Appendix Table II. Continued.

Year	Station	Water Depths (cm) 0m	1m	2m	0m-1m	0m-2m	Sediment Depths (cm) 0m	1m	2m	0m-1m	0m-2m
1994	12	101	105	101	4	0	9	5	5	-4	-4
1994	12	98	96	95	-2	-3	10	8	3	-2	-7
1995	12	108	111	108	3	0	11	6	8	-5	-3
1995	12	106	110	107	4	1	7	7	13	0	6
1995	12	111	113	112	2	1	11	3	2	-8	-9
1995	12	112	113	113	1	1	6	7	6	1	0
1995	12	108	108	110	0	2	4	8	1	4	-3
1994	13	80	75	80	-5	0	20	25	15	5	-5
1994	13	95	95	95	0	0	50	35	65	-15	15
1994	13	110	110	110	0	0	35	35	45	0	10
1994	13	120	120	120	0	0	22	22	25	0	3
1994	13	120	120	120	0	0	52	31	34	-21	-18
1994	13	115	115	115	0	0	75	55	60	-20	-15
1994	13	120	120	120	0	0	55	55	70	0	15
1994	13	120	120	120	0	0	56	58	65	2	9
1995	13	175	177	176	2	1	48	49	35	1	-13
1995	13	180	180	180	0	0	18	21	8	3	-10
1995	13	175	174	176	-1	1	9	9	12	0	3
1995	13	170	149	171	-21	1	7	9	14	2	7
1995	13	174	173	173	-1	-1	7	9	9	2	2
1994	14	80	80	85	0	5	20	110	45	90	25
1994	14	89	95	97	6	8	72	52	90	-20	18
1994	14	115	120	125	5	10	55	76	76	21	21
1994	14	130	140	160	10	30	140	120	130	-20	-10
1994	14	130	140	145	10	15	100	62	42	-38	-58
1994	14	130	140	145	10	15	40	30	35	-10	-5
1994	14	95	100	110	5	15	30	45	55	15	25
1994	14	80	82	82	2	2	10	5	25	-5	15
1994	14	68	72	75	4	7	19	5	5	-14	-14
1995	14	60	67	70	7	10	12	13	5	1	-7
1995	14	65	74	75	9	10	5	3	15	-2	10
1995	14	76	80	87	4	11	3	25	14	22	11
1995	14	96	103	105	7	9	43	70	35	27	-8
1995	14	130	138	138	8	8	41	63	38	22	-3
1994	15	90	90	95	0	5	5	5	5	0	0
1994	15	90	95	92	5	2	9	3	7	-6	-2
1994	15	90	95	90	5	0	8	11	8	3	0
1994	15	90	90	90	0	0	7	15	12	8	5
1994	15	90	90	90	0	0	5	8	12	3	7
1994	15	90	90	90	0	0	7	8	7	1	0
1994	15	95	90	90	-5	-5	19	8	6	-11	-13
1994	15	95	95	95	0	0	9	11	7	2	-2
1995	15	78	80	78	2	0	5	5	0	0	-5
1995	15	80	81	83	1	3	10	3	1	-7	-9
1995	15	78	78	78	0	0	9	3	9	-6	0
1995	15	74	77	77	3	3	6	10	10	4	4
1995	15	78	77	74	-1	-4	9	7	14	-2	5

Appendix Table III. Expansion or contraction of seagrass beds initially staked in December 1993. The "Perimeter and "Radius" distances identify the marker stakes.

Station	Perimeter ID	Radius ID	1994 Grass Expansion (m)	1995 Grass Expansion (m)
1	.0	15.7	3.10	-2.30
1	16.1	12.5	3.35	-1.60
1	27.2	10.2	2.10	3.30
1	40.3	8.7	2.20	4.50
1	54.0	8.5	2.20	3.10
1	73.0	10.3	-1.40	3.80
1	88.0	7.6	well inside bed	
1	99.0	7.4	well inside bed	
1	114.0	11.1	1.30	
1	130.0	14.0	3.10	5.20
1	138.7	16.6	1.60	5.00
1	149.0	18.9	4.10	4.50
1	166.5	21.5	1.50	2.00
1	184.8	19.3	.60	2.00
1	198.7	15.8	1.00	3.50
2	.0	12.7	.00	1.80
2	11.4	12.9	1.60	.40
2	21.6	14.0	.30	.00
2	32.1	11.5	3.30	.50
2	44.4	8.1	-.10	1.70
2	60.0	6.4	2.70	3.90
2	71.6	8.2	2.60	3.80
2	79.1	9.7	1.70	3.90
2	90.3	11.8	1.60	.00
2	99.2	13.9	.00	
2	105.1	13.8	.00	1.90
2	113.6	11.6	-2.30	.70
2	126.3	14.7	.00	1.20
2	139.4	15.9	.00	1.40
2	147.1	15.9	3.30	
3	.0	13.3	1.40	
3	10.7	12.3	-1.50	-1.10
3	22.8	11.1	.00	-1.20
3	34.9	9.1	.00	-3.60
3	43.1	7.3	-1.00	-5.40
3	62.2	8.4	-.30	-5.60
3	83.3	13.7	.00	-4.30
3	93.0	17.5	.02	-1.30
3	102.3	19.5	1.10	-.60
3	112.6	20.4	-.10	-.40
3	120.2	22.1	.00	-.60
3	132.6	22.6	-2.00	.00
3	141.6	22.7	-1.10	1.10
3	163.0	27.2	-1.10	3.20
3	176.2	31.3	-1.10	-3.20

Appendix Table III. Continued.

Station	Perimeter ID	Radius ID	1994 Grass Expansion (m)	1995 Grass Expansion (m)
4	.0	18.0	.50	N/A
4	9.5	15.4	-.50	N/A
4	20.4	12.5	.60	N/A
4	36.1	7.2	.10	N/A
4	50.5	4.3	-.60	N/A
4	57.5	2.1	.00	N/A
4	84.2	9.8	-.40	N/A
4	92.3	9.9	.00	N/A
4	97.8	10.4	.80	N/A
4	103.8	11.8	.40	N/A
4	108.8	12.9	.10	N/A
4	124.5	17.5	.10	N/A
4	132.3	18.4	.00	N/A
4	139.8	19.1	-.20	N/A
5	.0	9.2	.50	.00
5	5.8	8.5	.00	-2.90
5	13.5		.50	-.90
5	21.6	10.8	.00	-1.40
5	31.6	12.5	-.20	-.90
5	38.8	11.4	.00	-.90
5	45.4	10.0	-.80	-2.90
5	52.0	8.4	-.60	-1.80
5	57.4	8.0	-.30	-3.20
5	63.5	7.3	.70	-4.30
5	70.8	8.2	-.60	-4.30
5	82.3	9.4	-1.00	
5	89.0	11.3	.00	
5	97.0	12.4	-.60	
5	102.3	14.4	-1.00	-1.20
5	111.2	14.8	.00	
6	.0	13.1	.70	-1.20
6	11.1	7.9	-.50	-5.90
6	18.6	7.9	-.70	-2.70
6	27.9	7.6	-.60	-1.40
6	33.4	7.6	2.30	-.95
6	40.6	8.1	.00	-1.00
6	54.6	10.7	.30	.00
6	66.4	13.5	2.00	1.10
6	72.8	15.4	.60	.00
6	84.5	18.9	-.40	-1.50
6	101.2	22.3	.00	.30
6	110.4	20.8	1.10	1.60
6	120.9	27.8	1.40	.00
7	.0	10.6	4.40	27.00
7	7.4	10.8	4.00	38.00
7	16.2	13.0	missing	
7	22.1	14.4	1.10	4.00

Appendix Table III. Continued.

Station	Perimeter ID	Radius ID	1994 Grass Expansion (m)	1995 Grass Expansion (m)
7	37.3	8.6	2.50	1.50
7	44.9	9.6	4.50	2.30
7	52.3	10.0	3.00	2.20
7	59.2	11.1	6.00	4.70
7	64.7	10.7	3.00	1.80
7	74.0	9.5	1.50	1.80
7	80.7	11.8	missing; not replaced	
7	93.4	14.2		2.30
7	101.0	15.4	.20	.00
7	107.0	11.9	.00	-1.10
7	116.8	18.4	.00	4.00
8	.0	11.8	14.00	.75
8	5.7	10.9	7.40	2.50
8	10.4	8.8	10.20	.70
8	13.6	N/A	--	
8	22.9	9.9	3.20	-.45
8	28.3	10.2	4.30	-1.50
8	43.9	9.8	7.20	-.45
8	48.7	9.2	7.60	-.60
8	57.6	8.6	8.50	-1.30
8	79.0	11.7	1.30	-1.10
8	86.6	11.9	1.40	
9	.0	25.5	--	
9	11.0	22.7	.20	
9	24.0	1880.0	.50	
9	37.3	15.4	.00	
9	49.6	12.4	found on leaving	
9	63.5	13.2	.00	.60
9	78.3	11.8	.60	.60
9	95.1	9.0	1.20	1.70
9	107.1	9.6	2.30	2.90
9	116.3	12.4	1.30	1.30
9	126.8	14.3	1.10	.90
9	136.9	16.3	.70	.00
9	145.1	18.1	.80	1.60
9	153.8	20.7	.80	1.80
9	160.4	22.4	1.10	1.10
9	167.4	24.1	1.00	1.40
10	.0	18.5	.40	.00
10	14.0	15.2	.25	-.10
10	25.1	12.2	.40	.00
10	36.8	9.0	.80	-2.80
10	48.2	6.3	replaced	-1.70
10	63.7	4.0	.10	-5.20
10	75.8	7.4	.30	
10	91.1	11.6	1.30	
10	101.0	14.1	.00	

Appendix Table III. Continued.

Station	Perimeter ID	Radius ID	1994 Grass Expansion (m)	1995 Grass Expansion (m)
10	118.8	18.7	.00	
10	126.0	20.2	1.20	
10	136.7	18.6	2.70	
10	149.4	15.1	.70	
10	158.0	12.8	.00	
10	166.3	10.4	1.80	
11	.0	12.8	1.00	.00
11	11.1	11.2	.50	.70
11	21.0	11.1	.40	.00
11	29.6	10.2	.70	-.40
11	40.6	12.1	.00	-.95
11	51.1	13.4	.70	-4.50
11	61.0	14.2	.30	-.25
11	81.0	8.8	.70	.50
11	87.6	8.2	.80	.50
11	97.0	8.9	.80	.70
11	104.2	8.8	.50	.80
11	115.0	12.5	.60	.90
12	.0	18.9	.00	.60
12	10.0	19.1	--	
12	18.5	20.2	.10	1.10
12	28.1	18.9	.50	.70
12	34.8	17.0	.55	.40
12	42.2	15.9	.40	1.00
12	52.5	14.3	.30	1.10
12	61.6	12.8	.40	.80
12	71.0	12.3	.80	.45
12	76.8	12.4	1.10	.50
12	85.5	12.6	-.90	3.00
12	92.6	12.6	-1.40	4.00
12	100.6	12.7	-.70	2.60
12	110.4	11.7	3.10	
12	124.3	14.8	.00	
13	.0	14.4	.00	.10
13	14.5	13.9	.00	-1.40
13	30.3	12.7	.00	.70
13	48.8	14.7	-1.40	.50
13	56.8	16.9	-4.00	2.10
13	63.9	18.8	-6.00	1.60
13	75.4	17.4	-1.30	1.30
13	80.5	17.9	-1.60	2.20
13	87.0	19.5	-1.50	
13	94.9	20.9	2.80	
13	105.5	20.6	4.40	
13	114.9	23.3	4.60	4.90
13	122.1	24.2	found on leaving	
13	127.5	24.9	4.60	8.70

Appendix Table III. Continued.

Station	Perimeter ID	Radius ID	1994 Grass Expansion (m)	1995 Grass Expansion (m)
14	.0	17.9	1.00	
14	11.9	14.4	.80	1.10
14	22.2	11.3	1.00	1.20
14	31.1	8.9	1.20	1.20
14	41.4	8.6	.80	.80
14	50.6	7.6	-.40	-1.30
14	59.1	5.0	1.40	1.20
14	69.5	4.2	.90	-.80
14	77.9	3.8	.00	.30
14	87.3	6.4	-.60	-.70
14	98.1	8.1	.00	.15
14	109.7	10.4	replaced	.00
14	119.9	13.5	.70	2.70
14	129.3	16.1	.20	.00
14	139.5	11.3	.70	1.50
14	149.2	10.6	.70	1.30
15	.0	19.0	2.70	2.30
15	9.4	17.7	.80	.40
15	19.3	15.3	.40	1.00
15	32.4	11.3	-.10	.00
15	41.4	9.2	.30	1.30
15	50.3	10.2	.00	2.00
15	62.0	6.7	1.40	2.00
15	69.8	4.3	.10	.50
15	80.2	5.0	.00	
15	90.1	6.2	.10	3.20
15	102.1	8.7	.00	1.10
15	109.4	10.8	.60	1.60
15	116.5	12.1	.35	1.40
15	125.0	14.6	.50	.00
15	133.6	17.1	1.30	1.80

Appendix Table IV. Vegetation coverage (percent) in seagrass beds for 1m2 quadrats along bed perimeters and 2 meters inside beds.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1993-12	1	1	I	43	43	0	Halodule wrightii	43
1993-12	1	2	I	93	93	0	Halodule wrightii	93
1993-12	1	2	P	74	74	0	Halodule wrightii	74
1993-12	1	3	I	85	85	0	Halodule wrightii	85
1993-12	1	3	P	89	89	0	Halodule wrightii	89
1993-12	1	4	I	97	97	0	Halodule wrightii	97
1993-12	1	4	P	79	79	0	Halodule wrightii	79
1993-12	1	5	I	71	71	0	Halodule wrightii	71
1993-12	1	5	P	79	79	0	Halodule wrightii	79
1993-12	1	6	I	96	96	0	Halodule wrightii	96
1993-12	1	6	P	82	82	0	Halodule wrightii	82
1993-12	1	7	I	94	94	0	Halodule wrightii	94
1993-12	1	7	P	87	87	0	Halodule wrightii	87
1993-12	1	8	I	96	96	0	Halodule wrightii	96
1993-12	1	8	P	73	73	0	Halodule wrightii	73
1993-12	1	9	I	90	90	0	Halodule wrightii	90
1993-12	1	9	P	73	73	0	Halodule wrightii	73
1993-12	1	10	I	35	35	0	Halodule wrightii	35
1993-12	1	10	P	80	80	0	Halodule wrightii	80
1994-08	1	1	I	100	100	0	Halodule wrightii	100
1994-08	1	1	P	100	100	0	Halodule wrightii	100
1994-08	1	2	I	100	100	0	Halodule wrightii	100
1994-08	1	2	P	100	100	0	Halodule wrightii	100
1994-08	1	3	I	100	100	0	Halodule wrightii	100
1994-08	1	3	P	100	100	0	Halodule wrightii	100
1994-08	1	4	I	100	100	0	Halodule wrightii	100
1994-08	1	4	P	100	100	0	Halodule wrightii	100
1994-08	1	5	I	100	100	0	Halodule wrightii	100
1994-08	1	5	P	100	100	0	Halodule wrightii	100
1994-08	1	6	I	100	100	0	Halodule wrightii	100
1994-08	1	6	P	100	100	0	Halodule wrightii	100
1994-08	1	7	I	100	100	0	Halodule wrightii	100
1994-08	1	7	P	100	100	0	Halodule wrightii	100
1994-08	1	8	I	100	100	0	Halodule wrightii	100
1994-08	1	8	P	100	100	0	Halodule wrightii	100
1994-08	1	9	I	100	100	0	Halodule wrightii	100
1994-08	1	9	P	100	100	0	Halodule wrightii	100
1994-08	1	10	I	100	100	0	Halodule wrightii	100
1994-08	1	10	P	100	100	0	Halodule wrightii	100
1994-10	1	1	I	54	54	0	Halodule wrightii	54
1994-10	1	1	P	71	71	0	Halodule wrightii	71
1994-10	1	2	I	99	99	0	Halodule wrightii	99
1994-10	1	2	P	100	100	0	Halodule wrightii	100
1994-10	1	3	I	77	77	0	Halodule wrightii	77
1994-10	1	3	P	96	96	0	Halodule wrightii	96
1994-10	1	4	I	97	97	0	Halodule wrightii	97
1994-10	1	4	P	100	100	0	Halodule wrightii	100
1994-10	1	5	I	99	99	0	Halodule wrightii	99
1994-10	1	5	P	99	99	0	Halodule wrightii	99
1994-10	1	6	I	100	100	0	Halodule wrightii	100
1994-10	1	6	P	96	96	0	Halodule wrightii	96
1994-10	1	7	I	100	100	0	Halodule wrightii	100
1994-10	1	7	P	100	100	0	Halodule wrightii	100
1994-10	1	8	I	99	99	0	Halodule wrightii	99
1994-10	1	8	P	99	99	0	Halodule wrightii	99

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-10	1	9	I	100	100	0	Halodule wrightii	100
1994-10	1	9	P	100	100	0	Halodule wrightii	100
1994-10	1	10	I	100	100	0	Halodule wrightii	100
1994-10	1	10	P	100	100	0	Halodule wrightii	100
1995-08	1	1	I	99	99	0	Halodule wrightii	99
1995-08	1	1	P	100	100	0	Halodule wrightii	100
1995-08	1	2	I	100	100	0	Halodule wrightii	100
1995-08	1	2	P	100	100	0	Halodule wrightii	100
1995-08	1	3	I	100	100	0	Halodule wrightii	100
1995-08	1	3	P	100	100	0	Halodule wrightii	100
1995-08	1	4	I	100	100	0	Halodule wrightii	100
1995-08	1	4	P	100	100	0	Halodule wrightii	100
1995-08	1	5	I	100	100	0	Halodule wrightii	100
1995-08	1	5	P	100	100	0	Halodule wrightii	100
1995-08	1	6	I	100	100	0	Halodule wrightii	100
1995-08	1	6	P	100	100	0	Halodule wrightii	100
1995-08	1	7	I	100	100	0	Halodule wrightii	100
1995-08	1	7	P	100	100	0	Halodule wrightii	100
1995-08	1	8	I	100	100	0	Halodule wrightii	100
1995-08	1	8	P	100	100	0	Halodule wrightii	100
1995-08	1	9	I	97	97	0	Halodule wrightii	97
1995-08	1	9	P	100	100	0	Halodule wrightii	100
1995-08	1	10	I	97	97	0	Halodule wrightii	97
1995-08	1	10	P	100	100	0	Halodule wrightii	100
1995-10	1	1	I	17	17	0	Halodule wrightii	17
1995-10	1	1	P	65	65	0	Halodule wrightii	65
1995-10	1	2	I	100	100	0	Halodule wrightii	100
1995-10	1	2	P	100	100	0	Halodule wrightii	100
1995-10	1	3	I	99	99	0	Halodule wrightii	99
1995-10	1	3	P	98	98	0	Halodule wrightii	98
1995-10	1	4	I	98	98	0	Halodule wrightii	98
1995-10	1	4	P	98	98	0	Halodule wrightii	98
1995-10	1	5	I	100	100	0	Halodule wrightii	100
1995-10	1	5	P	99	99	0	Halodule wrightii	99
1995-10	1	6	I	18	18	0	Halodule wrightii	18
1995-10	1	6	P	20	20	0	Halodule wrightii	20
1995-10	1	7	I	82	82	0	Halodule wrightii	82
1995-10	1	7	P	60	60	0	Halodule wrightii	60
1995-10	1	8	I	75	75	0	Halodule wrightii	75
1995-10	1	8	P	85	85	0	Halodule wrightii	85
1995-10	1	9	I	78	78	0	Halodule wrightii	78
1995-10	1	9	P	72	72	0	Halodule wrightii	72
1995-10	1	10	I	98	98	0	Halodule wrightii	98
1995-10	1	10	P	87	87	0	Halodule wrightii	87
1993-12	2	1	I	96	96	0	Halodule wrightii	96
1993-12	2	1	P	94	94	0	Halodule wrightii	94
1993-12	2	2	I	98	98	0	Halodule wrightii	98
1993-12	2	2	P	80	80	0	Halodule wrightii	80
1993-12	2	3	I	98	98	0	Halodule wrightii	98
1993-12	2	3	P	95	95	0	Halodule wrightii	95
1993-12	2	4	I	98	98	0	Halodule wrightii	98
1993-12	2	4	P	100	100	0	Halodule wrightii	100
1993-12	2	5	I	100	100	0	Halodule wrightii	100
1993-12	2	5	P	100	100	0	Halodule wrightii	100
1993-12	2	6	I	97	97	0	Halodule wrightii	97
1993-12	2	6	P	87	87	0	Halodule wrightii	87

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1993-12	2	7	I	95	95	0	Halodule wrightii	95
1993-12	2	7	P	93	93	0	Halodule wrightii	93
1993-12	2	8	I	96	96	0	Halodule wrightii	96
1993-12	2	8	P	82	82	0	Halodule wrightii	82
1993-12	2	9	I	92	92	0	Halodule wrightii	92
1993-12	2	9	P	83	83	0	Halodule wrightii	83
1993-12	2	10	I	94	94	0	Halodule wrightii	94
1993-12	2	10	P	57	57	0	Halodule wrightii	57
1994-08	2	1	I	92	92	0	Halodule wrightii	92
1994-08	2	1	P	94	94	0	Halodule wrightii	94
1994-08	2	2	I	100	100	0	Halodule wrightii	100
1994-08	2	2	P	100	100	0	Halodule wrightii	100
1994-08	2	3	I	100	100	0	Halodule wrightii	100
1994-08	2	3	P	100	100	0	Halodule wrightii	100
1994-08	2	4	I	100	100	0	Halodule wrightii	100
1994-08	2	4	P	100	100	0	Halodule wrightii	100
1994-08	2	5	I	100	100	0	Halodule wrightii	100
1994-08	2	5	P	100	100	0	Halodule wrightii	100
1994-08	2	6	I	100	100	0	Halodule wrightii	100
1994-08	2	6	P	100	100	0	Halodule wrightii	100
1994-08	2	7	I	100	100	0	Halodule wrightii	100
1994-08	2	7	P	100	100	0	Halodule wrightii	100
1994-08	2	8	I	100	100	0	Halodule wrightii	100
1994-08	2	8	P	100	100	0	Halodule wrightii	100
1994-08	2	9	I	99	99	0	Halodule wrightii	99
1994-08	2	9	P	100	100	0	Halodule wrightii	100
1994-08	2	10	I	98	98	0	Halodule wrightii	98
1994-08	2	10	P	96	96	0	Halodule wrightii	96
1994-10	2	1	I	93	93	0	Halodule wrightii	93
1994-10	2	1	P	85	85	0	Halodule wrightii	85
1994-10	2	2	I	96	96	0	Halodule wrightii	96
1994-10	2	2	P	93	93	0	Halodule wrightii	93
1994-10	2	3	I	92	92	0	Halodule wrightii	92
1994-10	2	3	P	92	92	0	Halodule wrightii	92
1994-10	2	4	I	100	100	0	Halodule wrightii	100
1994-10	2	4	P	98	98	0	Halodule wrightii	98
1994-10	2	5	I	100	100	0	Halodule wrightii	100
1994-10	2	5	P	96	96	0	Halodule wrightii	96
1994-10	2	6	I	99	99	0	Halodule wrightii	99
1994-10	2	6	P	65	65	0	Halodule wrightii	65
1994-10	2	7	I	99	99	0	Halodule wrightii	99
1994-10	2	7	P	81	81	0	Halodule wrightii	81
1994-10	2	8	I	100	100	0	Halodule wrightii	100
1994-10	2	8	P	50	50	0	Halodule wrightii	50
1994-10	2	9	I	97	97	0	Halodule wrightii	97
1994-10	2	9	P	87	87	0	Halodule wrightii	87
1994-10	2	10	I	95	95	0	Halodule wrightii	95
1994-10	2	10	P	68	68	0	Halodule wrightii	68
1995-08	2	1	I	97	97	0	Halodule wrightii	97
1995-08	2	1	P	100	100	0	Halodule wrightii	100
1995-08	2	2	I	99	99	0	Halodule wrightii	99
1995-08	2	2	P	100	100	0	Halodule wrightii	100
1995-08	2	3	I	100	100	0	Halodule wrightii	100
1995-08	2	3	P	100	100	0	Halodule wrightii	100
1995-08	2	4	I	100	100	0	Halodule wrightii	100
1995-08	2	4	P	91	91	0	Halodule wrightii	91

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-08	15	2	P	88	88	0	Halodule wrightii	88
1994-08	15	3	I	93	93	0	Halodule wrightii	93
1994-08	15	3	P	78	78	0	Halodule wrightii	78
1994-08	15	4	I	100	100	0	Halodule wrightii	100
1994-08	15	4	P	71	71	0	Halodule wrightii	71
1994-08	15	5	I	100	100	0	Halodule wrightii	100
1994-08	15	5	P	80	80	0	Halodule wrightii	80
1994-08	15	6	I	99	99	3	Halimeda incrassata	3
1994-08	15	6	I	99	99	3	Halodule wrightii	99
1994-08	15	6	P	99	99	3	Caulerpa prolifera	3
1994-08	15	6	P	99	99	3	Halodule wrightii	99
1994-08	15	7	I	99	99	2	Halimeda incrassata	2
1994-08	15	7	I	99	99	2	Halodule wrightii	99
1994-08	15	7	P	98	98	0	Halodule wrightii	98
1994-08	15	8	I	100	100	0	Halodule wrightii	100
1994-08	15	8	P	99	99	0	Halodule wrightii	99
1994-08	15	9	I	100	100	0	Halodule wrightii	100
1994-08	15	9	P	56	56	0	Halodule wrightii	56
1994-08	15	10	I	100	100	0	Halodule wrightii	100
1994-08	15	10	P	98	98	0	Halodule wrightii	98
1994-10	15	1	I	87	87	0	Thalassia testudinum	87
1994-10	15	1	P	87	87	0	Thalassia testudinum	87
1994-10	15	2	I	84	84	0	Thalassia testudinum	84
1994-10	15	2	P	91	91	0	Thalassia testudinum	91
1994-10	15	3	I	97	97	0	Halodule wrightii	97
1994-10	15	3	P	86	86	0	Halodule wrightii	86
1994-10	15	4	I	86	86	0	Halodule wrightii	86
1994-10	15	4	P	96	96	1	Halodule wrightii	96
1994-10	15	4	P	96	96	1	Udotea conglutinata	1
1994-10	15	5	I	100	100	0	Halodule wrightii	100
1994-10	15	5	P	100	100	0	Halodule wrightii	100
1994-10	15	6	I	100	100	0	Halodule wrightii	100
1994-10	15	6	I	100	100	0	Halophila englemannii	4
1994-10	15	6	P	91	91	0	Halodule wrightii	83
1994-10	15	6	P	91	91	0	Halophila englemannii	11
1994-10	15	7	I	100	96	22	Halimeda incrassata	22
1994-10	15	7	I	100	96	22	Halodule wrightii	96
1994-10	15	7	P	94	94	70	Halimeda incrassata	70
1994-10	15	7	P	94	94	70	Halodule wrightii	94
1994-10	15	8	I	100	65	98	Halimeda incrassata	98
1994-10	15	8	I	100	65	98	Halodule wrightii	65
1994-10	15	8	P	96	76	78	Halimeda incrassata	76
1994-10	15	8	P	96	76	78	Halodule wrightii	76
1994-10	15	8	P	96	76	78	Udotea conglutinata	2
1994-10	15	9	I	100	100	3	Halimeda incrassata	3
1994-10	15	9	I	100	100	3	Halodule wrightii	100
1994-10	15	9	P	100	95	23	Caulerpa prolifera	19
1994-10	15	9	P	100	95	23	Halimeda incrassata	2
1994-10	15	9	P	100	95	23	Halodule wrightii	95
1994-10	15	9	P	100	95	23	Udotea conglutinata	2
1994-10	15	10	I	97	97	0	Halodule wrightii	97
1994-10	15	10	P	97	95	3	Caulerpa prolifera	3
1994-10	15	10	P	97	95	3	Halodule wrightii	95
1995-08	15	1	I	58	58	0	Halodule wrightii	58
1995-08	15	1	P	92	92	0	Halodule wrightii	92
1995-08	15	2	I	95	95	0	Halodule wrightii	95

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1995-08	15	2	P	86	86	0	Halodule wrightii	86
1995-08	15	3	I	94	94	0	Halodule wrightii	94
1995-08	15	3	P	95	95	0	Halodule wrightii	95
1995-08	15	4	I	100	100	0	Halodule wrightii	100
1995-08	15	4	P	94	94	0	Halodule wrightii	94
1995-08	15	5	I	95	95	0	Halodule wrightii	95
1995-08	15	5	P	94	94	0	Halodule wrightii	94
1995-08	15	6	I	0	0	0	Bare	0
1995-08	15	6	P	21	21	0	Halodule wrightii	21
1995-08	15	7	I	100	100	0	Halodule wrightii	100
1995-08	15	7	P	75	75	0	Halodule wrightii	75
1995-08	15	8	I	100	100	0	Halodule wrightii	100
1995-08	15	8	P	94	94	0	Halodule wrightii	94
1995-08	15	9	I	97	97	0	Halodule wrightii	97
1995-08	15	9	P	98	98	0	Halodule wrightii	98
1995-08	15	10	I	100	100	0	Halodule wrightii	100
1995-08	15	10	P	98	98	0	Halodule wrightii	98
1995-10	15	1	I	42	42	0	Thalassia testudinum	42
1995-10	15	1	P	70	70	0	Thalassia testudinum	70
1995-10	15	2	I	88	88	0	Thalassia testudinum	88
1995-10	15	2	P	90	90	0	Thalassia testudinum	90
1995-10	15	3	I	100	100	0	Halodule wrightii	100
1995-10	15	3	I	100	100	0	Thalassia testudinum	4
1995-10	15	3	P	85	85	0	Halodule wrightii	10
1995-10	15	3	P	85	85	0	Thalassia testudinum	85
1995-10	15	4	I	100	100	0	Halodule wrightii	100
1995-10	15	4	P	100	100	0	Halodule wrightii	100
1995-10	15	5	I	99	99	0	Halodule wrightii	99
1995-10	15	5	P	99	99	0	Halodule wrightii	99
1995-10	15	6	I	98	98	0	Halodule wrightii	98
1995-10	15	6	P	80	80	0	Halodule wrightii	80
1995-10	15	7	I	25	25	0	Halodule wrightii	25
1995-10	15	7	P	93	93	0	Halodule wrightii	93
1995-10	15	8	I	20	20	0	Halodule wrightii	20
1995-10	15	8	P	88	88	0	Halodule wrightii	88
1995-10	15	9	I	0	0	0	Bare	0
1995-10	15	9	P	68	68	0	Halodule wrightii	68
1995-10	15	10	I	98	98	0	Halodule wrightii	98
1995-10	15	10	P	77	77	0	Halodule wrightii	77

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1995-08	2	5	I	88	88	0	Halodule wrightii	88
1995-08	2	5	P	97	97	0	Halodule wrightii	97
1995-08	2	6	I	85	85	0	Halodule wrightii	85
1995-08	2	6	P	83	83	0	Halodule wrightii	83
1995-08	2	7	I	95	95	0	Halodule wrightii	95
1995-08	2	7	P	93	93	0	Halodule wrightii	93
1995-08	2	8	I	90	90	0	Halodule wrightii	90
1995-08	2	8	P	65	65	0	Halodule wrightii	65
1995-08	2	9	I	98	98	0	Halodule wrightii	98
1995-08	2	9	P	75	75	0	Halodule wrightii	75
1995-08	2	10	I	97	97	0	Halodule wrightii	97
1995-08	2	10	P	89	89	0	Halodule wrightii	89
1995-10	2	1	I	35	35	0	Halodule wrightii	35
1995-10	2	1	P	48	48	0	Halodule wrightii	48
1995-10	2	2	I	75	75	0	Halodule wrightii	75
1995-10	2	2	P	8	8	0	Halodule wrightii	8
1995-10	2	3	I	22	22	0	Halodule wrightii	22
1995-10	2	3	P	82	82	0	Halodule wrightii	82
1995-10	2	4	I	55	55	0	Halodule wrightii	55
1995-10	2	4	P	62	62	0	Halodule wrightii	62
1995-10	2	5	I	80	80	0	Halodule wrightii	80
1995-10	2	5	P	49	49	0	Halodule wrightii	49
1995-10	2	6	I	2	2	0	Halodule wrightii	2
1995-10	2	6	P	2	2	0	Halodule wrightii	2
1995-10	2	7	I	97	97	0	Halodule wrightii	97
1995-10	2	7	P	99	99	0	Halodule wrightii	99
1995-10	2	8	I	45	45	0	Halodule wrightii	45
1995-10	2	8	P	65	65	0	Halodule wrightii	65
1995-10	2	9	I	45	45	0	Halodule wrightii	45
1995-10	2	9	P	15	15	0	Halodule wrightii	15
1995-10	2	10	I	15	15	0	Halodule wrightii	15
1995-10	2	10	P	10	10	0	Halodule wrightii	10
1993-12	3	1	I	88	88	0	Halodule wrightii	88
1993-12	3	1	P	70	70	0	Halodule wrightii	70
1993-12	3	2	I	87	87	0	Halodule wrightii	87
1993-12	3	2	P	84	84	0	Halodule wrightii	84
1993-12	3	3	I	100	100	0	Halodule wrightii	100
1993-12	3	3	P	92	92	0	Halodule wrightii	92
1993-12	3	4	I	100	100	0	Halodule wrightii	100
1993-12	3	4	P	94	94	0	Halodule wrightii	94
1993-12	3	5	I	98	98	0	Halodule wrightii	98
1993-12	3	5	P	64	64	0	Halodule wrightii	64
1993-12	3	6	I	81	81	0	Halodule wrightii	81
1993-12	3	6	P	84	84	0	Halodule wrightii	84
1993-12	3	7	I	91	91	0	Halodule wrightii	91
1993-12	3	7	P	98	98	0	Halodule wrightii	98
1993-12	3	8	I	100	100	0	Halodule wrightii	100
1993-12	3	8	P	46	46	0	Halodule wrightii	46
1993-12	3	9	I	100	100	0	Halodule wrightii	100
1993-12	3	9	P	93	93	0	Halodule wrightii	93
1993-12	3	10	I	92	92	0	Halodule wrightii	92
1993-12	3	10	P	76	76	0	Halodule wrightii	76
1994-08	3	1	I	30	30	0	Halodule wrightii	30
1994-08	3	1	P	46	46	0	Halodule wrightii	46
1994-08	3	2	I	25	25	0	Halodule wrightii	25
1994-08	3	2	P	15	15	0	Halodule wrightii	15

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-08	3	3	I	81	81	0	Halodule wrightii	81
1994-08	3	3	P	64	64	0	Halodule wrightii	64
1994-08	3	4	I	36	36	0	Halodule wrightii	36
1994-08	3	4	P	28	28	0	Halodule wrightii	28
1994-08	3	5	I	30	30	0	Halodule wrightii	30
1994-08	3	5	P	54	54	0	Halodule wrightii	54
1994-08	3	6	I	15	15	0	Halodule wrightii	15
1994-08	3	6	P	0	0	0	Halodule wrightii	0
1994-08	3	7	I	15	15	0	Halodule wrightii	15
1994-08	3	7	P	80	80	0	Halodule wrightii	80
1994-08	3	8	I	90	90	0	Halodule wrightii	90
1994-08	3	8	P	65	65	0	Halodule wrightii	65
1994-08	3	9	I	20	20	0	Halodule wrightii	20
1994-08	3	9	P	42	42	0	Halodule wrightii	42
1994-08	3	10	I	27	27	0	Halodule wrightii	27
1994-08	3	10	P	26	26	0	Halodule wrightii	26
1994-10	3	1	I	26	26	0	Halodule wrightii	26
1994-10	3	1	P	22	22	0	Halodule wrightii	22
1994-10	3	2	I	8	8	0	Halodule wrightii	8
1994-10	3	2	P	6	6	0	Halodule wrightii	6
1994-10	3	3	I	6	6	0	Halodule wrightii	6
1994-10	3	3	P	91	91	0	Halodule wrightii	91
1994-10	3	4	I	12	12	0	Halodule wrightii	12
1994-10	3	4	P	72	72	0	Halodule wrightii	72
1994-10	3	5	I	16	16	0	Halodule wrightii	16
1994-10	3	5	P	17	17	0	Halodule wrightii	17
1994-10	3	6	I	55	55	0	Halodule wrightii	55
1994-10	3	6	P	46	46	0	Halodule wrightii	46
1994-10	3	7	I	96	96	0	Halodule wrightii	96
1994-10	3	7	P	28	28	0	Halodule wrightii	28
1994-10	3	8	I	74	74	0	Halodule wrightii	74
1994-10	3	8	P	4	4	0	Halodule wrightii	4
1994-10	3	9	I	86	86	0	Halodule wrightii	86
1994-10	3	9	P	0	0	0	Bare	0
1994-10	3	10	I	74	74	0	Halodule wrightii	74
1994-10	3	10	P	61	61	0	Halodule wrightii	61
1995-08	3	1	I	45	45	0	Halodule wrightii	45
1995-08	3	1	P	51	51	0	Halodule wrightii	51
1995-08	3	2	I	0	0	0	Bare	0
1995-08	3	2	P	3	3	0	Halodule wrightii	3
1995-08	3	3	I	2	2	0	Halodule wrightii	2
1995-08	3	3	P	26	26	0	Halodule wrightii	26
1995-08	3	4	I	21	21	0	Halodule wrightii	21
1995-08	3	4	P	0	0	0	Halodule wrightii	0
1995-08	3	5	I	13	13	0	Halodule wrightii	13
1995-08	3	5	P	26	26	0	Halodule wrightii	26
1995-08	3	6	I	95	95	0	Halodule wrightii	95
1995-08	3	6	P	4	4	0	Halodule wrightii	4
1995-08	3	7	I	7	7	0	Halodule wrightii	7
1995-08	3	7	P	0	0	0	Bare	0
1995-08	3	8	I	1	1	0	Halodule wrightii	1
1995-08	3	8	P	0	0	0	Bare	0
1995-08	3	9	I	0	0	0	Bare	0
1995-08	3	9	P	1	1	0	Halodule wrightii	1
1995-08	3	10	I	11	11	0	Halodule wrightii	11
1995-08	3	10	P	0	0	0	Bare	0

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1995-10	3	1	I	0	0	0	Bare	0
1995-10	3	1	P	2	2	0	Halodule wrightii	2
1995-10	3	2	I	2	2	0	Halodule wrightii	2
1995-10	3	2	P	0	0	0	Halodule wrightii	0
1995-10	3	3	I	5	5	0	Halodule wrightii	5
1995-10	3	3	P	1	1	0	Halodule wrightii	1
1995-10	3	4	I	93	93	0	Halodule wrightii	93
1995-10	3	4	P	82	82	0	Halodule wrightii	82
1995-10	3	5	I	100	100	0	Halodule wrightii	100
1995-10	3	5	P	94	94	0	Halodule wrightii	94
1995-10	3	6	I	13	13	0	Halodule wrightii	13
1995-10	3	6	P	29	29	0	Halodule wrightii	29
1995-10	3	7	I	4	4	0	Halodule wrightii	4
1995-10	3	7	P	2	2	0	Halodule wrightii	2
1995-10	3	8	I	100	100	0	Halodule wrightii	100
1995-10	3	8	P	100	100	0	Halodule wrightii	100
1995-10	3	9	I	99	99	0	Halodule wrightii	99
1995-10	3	9	P	98	98	0	Halodule wrightii	98
1995-10	3	10	I	100	100	0	Halodule wrightii	100
1995-10	3	10	P	0	0	0	Bare	0
1993-12	4	1	I	84	84	0	Syringodium filiforme	84
1993-12	4	1	P	92	92	0	Syringodium filiforme	92
1993-12	4	2	I	74	74	0	Syringodium filiforme	74
1993-12	4	2	P	71	71	0	Syringodium filiforme	71
1993-12	4	3	I	71	71	0	Syringodium filiforme	71
1993-12	4	3	P	68	68	0	Syringodium filiforme	68
1993-12	4	4	I	87	87	0	Syringodium filiforme	87
1993-12	4	4	P	66	66	0	Halophila englemannii	1
1993-12	4	4	P	66	66	0	Syringodium filiforme	65
1993-12	4	5	I	94	94	0	Syringodium filiforme	94
1993-12	4	5	P	73	73	0	Syringodium filiforme	73
1993-12	4	6	I	96	96	0	Syringodium filiforme	96
1993-12	4	6	P	78	78	0	Syringodium filiforme	78
1993-12	4	7	I	89	87	2	Caulerpa prolifera	2
1993-12	4	7	I	89	87	2	Syringodium filiforme	87
1993-12	4	7	P	70	70	0	Syringodium filiforme	70
1993-12	4	8	I	95	95	5	Caulerpa prolifera	5
1993-12	4	8	I	95	95	5	Syringodium filiforme	90
1993-12	4	8	P	89	89	0	Syringodium filiforme	89
1993-12	4	9	I	83	83	0	Syringodium filiforme	83
1993-12	4	9	P	90	90	0	Syringodium filiforme	90
1994-08	4	1	I	100	100	0	Syringodium filiforme	100
1994-08	4	1	P	98	98	0	Syringodium filiforme	98
1994-08	4	2	I	94	94	0	Syringodium filiforme	94
1994-08	4	2	P	73	73	0	Syringodium filiforme	73
1994-08	4	3	I	58	58	0	Syringodium filiforme	58
1994-08	4	3	P	91	91	0	Syringodium filiforme	91
1994-08	4	4	I	83	83	0	Syringodium filiforme	83
1994-08	4	4	P	70	70	0	Syringodium filiforme	70
1994-08	4	5	I	58	58	0	Syringodium filiforme	58
1994-08	4	5	P	48	48	0	Syringodium filiforme	48
1994-08	4	6	I	84	84	0	Syringodium filiforme	84
1994-08	4	6	P	76	76	0	Syringodium filiforme	76
1994-08	4	7	I	95	95	0	Syringodium filiforme	95
1994-08	4	7	P	76	76	0	Syringodium filiforme	76
1994-08	4	8	I	18	18	0	Syringodium filiforme	18

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-08	4	8	P	80	80	0	Halophila englemannii	1
1994-08	4	8	P	80	80	0	Syringodium filiforme	80
1994-08	4	9	I	91	91	0	Syringodium filiforme	91
1994-08	4	9	P	96	96	0	Syringodium filiforme	96
1994-08	4	10	I	44	44	0	Syringodium filiforme	44
1994-08	4	10	P	21	21	0	Syringodium filiforme	21
1994-10	4	1	I	99	99	0	Syringodium filiforme	99
1994-10	4	1	P	92	92	8	Halimeda incrassata	3
1994-10	4	1	P	92	92	8	Syringodium filiforme	92
1994-10	4	1	P	92	92	8	Udotea conglutinata	5
1994-10	4	2	I	83	83	9	Halimeda incrassata	3
1994-10	4	2	I	83	83	9	Halophila englemannii	6
1994-10	4	2	I	83	83	9	Syringodium filiforme	83
1994-10	4	2	P	78	78	0	Syringodium filiforme	78
1994-10	4	3	I	87	87	0	Syringodium filiforme	87
1994-10	4	3	P	75	75	0	Syringodium filiforme	75
1994-10	4	4	I	88	88	3	Halimeda incrassata	3
1994-10	4	4	I	88	88	3	Syringodium filiforme	88
1994-10	4	4	P	91	89	2	Caulerpa prolifera	2
1994-10	4	4	P	91	89	2	Syringodium filiforme	89
1994-10	4	5	I	2	2	0	Syringodium filiforme	2
1994-10	4	5	P	57	57	0	Syringodium filiforme	57
1994-10	4	6	I	22	22	0	Syringodium filiforme	22
1994-10	4	6	P	13	13	0	Syringodium filiforme	13
1994-10	4	7	I	79	78	1	Caulerpa prolifera	1
1994-10	4	7	I	79	78	1	Syringodium filiforme	78
1994-10	4	7	P	89	89	2	Caulerpa prolifera	2
1994-10	4	7	P	89	89	2	Syringodium filiforme	89
1994-10	4	8	I	88	88	0	Syringodium filiforme	88
1994-10	4	8	P	100	100	14	Caulerpa prolifera	8
1994-10	4	8	P	100	100	14	Penicillus sp.	2
1994-10	4	8	P	100	100	14	Syringodium filiforme	4
1994-10	4	8	P	100	100	14	Syringodium filiforme	100
1994-10	4	9	I	30	30	0	Syringodium filiforme	30
1994-10	4	9	P	80	80	0	Syringodium filiforme	80
1994-10	4	10	I	94	94	0	Syringodium filiforme	94
1994-10	4	10	P	92	92	2	Caulerpa prolifera	1
1994-10	4	10	P	92	92	2	Halimeda incrassata	1
1994-10	4	10	P	92	92	2	Syringodium filiforme	92
1995-08	4	1	I	97	97	0	Syringodium filiforme	97
1995-08	4	1	P	98	98	0	Syringodium filiforme	98
1995-08	4	2	I	93	93	0	Syringodium filiforme	93
1995-08	4	2	P	96	96	0	Syringodium filiforme	96
1995-08	4	3	I	98	98	0	Syringodium filiforme	98
1995-08	4	3	P	83	83	0	Syringodium filiforme	83
1995-08	4	4	I	100	100	0	Syringodium filiforme	100
1995-08	4	4	P	98	98	0	Syringodium filiforme	98
1995-08	4	5	I	100	100	0	Syringodium filiforme	100
1995-08	4	5	P	97	97	0	Syringodium filiforme	97
1995-08	4	6	I	100	100	0	Syringodium filiforme	100
1995-08	4	6	P	97	97	0	Syringodium filiforme	97
1995-08	4	7	I	98	98	0	Syringodium filiforme	98
1995-08	4	7	P	100	100	0	Syringodium filiforme	100
1995-08	4	8	I	96	96	0	Syringodium filiforme	96
1995-08	4	8	P	97	97	0	Syringodium filiforme	97
1995-08	4	9	I	99	99	1	Caulerpa prolifera	1

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1995-08	4	9	I	99	99	1	Halodule wrightii	1
1995-08	4	9	I	99	99	1	Syringodium filiforme	99
1995-08	4	9	P	96	96	0	Syringodium filiforme	96
1995-08	4	10	I	98	98	0	Syringodium filiforme	98
1995-08	4	10	P	86	86	0	Syringodium filiforme	86
1993-12	5	1	I	40	40	0	Halodule wrightii	40
1993-12	5	1	P	92	92	0	Halodule wrightii	92
1993-12	5	2	I	96	96	0	Halodule wrightii	96
1993-12	5	2	P	93	93	0	Halodule wrightii	93
1993-12	5	3	I	91	91	0	Halodule wrightii	91
1993-12	5	3	P	93	93	0	Halodule wrightii	93
1993-12	5	4	I	93	93	0	Halodule wrightii	93
1993-12	5	4	P	83	83	0	Halodule wrightii	83
1993-12	5	5	I	84	84	0	Halodule wrightii	84
1993-12	5	5	P	88	88	0	Halodule wrightii	88
1993-12	5	6	I	77	77	0	Halodule wrightii	77
1993-12	5	6	P	89	89	0	Halodule wrightii	89
1993-12	5	7	I	80	80	0	Halodule wrightii	80
1993-12	5	7	P	88	88	0	Halodule wrightii	88
1993-12	5	8	I	79	79	0	Halodule wrightii	79
1993-12	5	8	P	100	100	0	Halodule wrightii	100
1993-12	5	9	I	96	96	0	Halodule wrightii	96
1993-12	5	9	P	88	88	0	Halodule wrightii	88
1993-12	5	10	I	96	96	0	Halodule wrightii	96
1993-12	5	10	P	90	90	0	Halodule wrightii	90
1994-08	5	1	I	50	50	0	Halodule wrightii	50
1994-08	5	1	P	56	56	0	Halodule wrightii	56
1994-08	5	2	I	65	65	0	Halodule wrightii	65
1994-08	5	2	P	53	53	0	Halodule wrightii	53
1994-08	5	3	I	18	18	0	Halodule wrightii	18
1994-08	5	3	P	71	71	3	Caulerpa prolifera	3
1994-08	5	3	P	71	71	0	Halodule wrightii	71
1994-08	5	4	I	9	9	0	Halodule wrightii	9
1994-08	5	4	P	48	48	0	Halodule wrightii	48
1994-08	5	5	I	16	16	0	Halodule wrightii	16
1994-08	5	5	P	37	37	0	Halodule wrightii	37
1994-08	5	6	I	74	74	0	Halodule wrightii	74
1994-08	5	6	P	50	50	0	Halodule wrightii	50
1994-08	5	7	I	98	98	0	Halodule wrightii	98
1994-08	5	7	P	85	85	0	Halodule wrightii	85
1994-08	5	8	I	85	85	0	Halodule wrightii	85
1994-08	5	8	P	74	74	0	Halodule wrightii	74
1994-08	5	9	I	4	4	0	Halodule wrightii	4
1994-08	5	9	P	55	55	0	Halodule wrightii	55
1994-08	5	10	I	78	78	0	Halodule wrightii	78
1994-08	5	10	P	57	57	0	Halodule wrightii	57
1994-10	5	1	I	24	24	0	Halodule wrightii	24
1994-10	5	1	P	46	46	0	Halodule wrightii	46
1994-10	5	2	I	29	29	0	Halodule wrightii	29
1994-10	5	2	P	52	52	0	Halodule wrightii	52
1994-10	5	3	I	60	60	0	Halodule wrightii	60
1994-10	5	3	P	14	14	0	Halodule wrightii	14
1994-10	5	4	I	51	51	0	Halodule wrightii	51
1994-10	5	4	P	15	15	0	Halodule wrightii	15
1994-10	5	5	I	53	53	0	Halodule wrightii	53
1994-10	5	5	P	22	22	0	Halodule wrightii	22

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-10	5	6	I	6	5	0	Halodule wrightii	5
1994-10	5	6	I	6	5	0	Halophila englemannii	1
1994-10	5	6	P	73	73	0	Halodule wrightii	73
1994-10	5	7	I	19	19	0	Halodule wrightii	19
1994-10	5	7	P	13	13	0	Halodule wrightii	13
1994-10	5	8	I	15	15	0	Halodule wrightii	15
1994-10	5	8	P	8	8	0	Halodule wrightii	8
1994-10	5	9	I	84	84	0	Halodule wrightii	84
1994-10	5	9	P	12	12	0	Halodule wrightii	12
1994-10	5	10	I	86	86	0	Halodule wrightii	86
1994-10	5	10	P	6	6	0	Halodule wrightii	6
1995-08	5	1	I	5	5	0	Halodule wrightii	5
1995-08	5	1	P	60	60	0	Halodule wrightii	60
1995-08	5	2	I	0	0	0	Bare	0
1995-08	5	2	P	16	16	0	Halodule wrightii	16
1995-08	5	3	I	17	16	1	Caulerpa mexicana	1
1995-08	5	3	I	17	16	1	Halodule wrightii	16
1995-08	5	3	P	2	1	1	Caulerpa prolifera	1
1995-08	5	3	P	2	1	1	Halodule wrightii	1
1995-08	5	4	I	7	7	0	Halodule wrightii	7
1995-08	5	4	P	6	6	0	Halodule wrightii	6
1995-08	5	5	I	3	3	0	Halodule wrightii	3
1995-08	5	5	P	1	1	0	Halodule wrightii	1
1995-08	5	6	I	5	5	0	Halodule wrightii	5
1995-08	5	6	P	0	0	0	Bare	0
1995-08	5	7	I	14	14	0	Halodule wrightii	14
1995-08	5	7	P	3	3	0	Halodule wrightii	3
1995-08	5	8	I	5	5	0	Halodule wrightii	5
1995-08	5	8	P	0	0	0	Bare	0
1995-08	5	9	I	4	4	0	Halodule wrightii	4
1995-08	5	9	P	0	0	0	Bare	0
1995-08	5	10	I	3	3	0	Halodule wrightii	3
1995-08	5	10	P	0	0	0	Bare	0
1995-10	5	1	I	1	1	0	Halodule wrightii	1
1995-10	5	1	P	3	3	0	Halodule wrightii	3
1995-10	5	2	I	13	13	0	Halodule wrightii	13
1995-10	5	2	P	0	0	0	Bare	0
1995-10	5	3	I	0	0	0	Bare	0
1995-10	5	3	P	1	1	0	Halodule wrightii	1
1995-10	5	4	I	0	0	0	Bare	0
1995-10	5	4	P	2	2	0	Halodule wrightii	2
1995-10	5	5	I	3	3	0	Halodule wrightii	3
1995-10	5	5	P	1	1	0	Halodule wrightii	1
1995-10	5	6	I	0	0	0	Bare	0
1995-10	5	6	P	10	10	0	Halodule wrightii	10
1995-10	5	7	I	4	4	0	Halodule wrightii	4
1995-10	5	7	P	4	4	0	Halodule wrightii	4
1995-10	5	8	I	29	29	0	Halodule wrightii	29
1995-10	5	8	P	3	3	0	Halodule wrightii	3
1995-10	5	9	I	1	1	0	Halodule wrightii	1
1995-10	5	9	P	5	5	0	Halodule wrightii	5
1995-10	5	10	I	6	6	0	Halodule wrightii	6
1995-10	5	10	P	2	2	0	Halodule wrightii	2
1993-12	6	1	I	100	100	0	Halodule wrightii	100
1993-12	6	1	P	100	100	0	Halodule wrightii	100
1993-12	6	2	I	97	97	0	Halodule wrightii	59

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1993-12	6	2	I	97	97	0	Halophila englemannii	38
1993-12	6	2	P	75	75	0	Halodule wrightii	75
1993-12	6	3	I	99	99	0	Halodule wrightii	99
1993-12	6	3	I	99	99	0	Halophila englemannii	1
1993-12	6	3	P	83	83	0	Halodule wrightii	83
1993-12	6	3	P	83	83	0	Halophila englemannii	10
1993-12	6	4	I	100	100	0	Halodule wrightii	100
1993-12	6	4	P	94	94	0	Halodule wrightii	92
1993-12	6	4	P	94	94	0	Halophila englemannii	2
1993-12	6	5	I	99	99	0	Halodule wrightii	99
1993-12	6	5	P	90	90	0	Halodule wrightii	90
1993-12	6	6	I	99	99	0	Halodule wrightii	99
1993-12	6	6	P	98	98	0	Halodule wrightii	97
1993-12	6	6	P	98	98	0	Halophila englemannii	1
1993-12	6	7	I	99	99	0	Halodule wrightii	99
1993-12	6	7	P	94	94	0	Halodule wrightii	94
1993-12	6	8	I	99	99	0	Halodule wrightii	99
1993-12	6	8	P	98	98	0	Halodule wrightii	98
1993-12	6	9	I	98	98	0	Halodule wrightii	98
1993-12	6	9	P	93	93	0	Halodule wrightii	93
1993-12	6	9	P	93	93	0	Halophila englemannii	15
1994-08	6	1	I	85	85	0	Halodule wrightii	85
1994-08	6	1	I	85	85	0	Halophila englemannii	4
1994-08	6	1	P	66	66	0	Halodule wrightii	66
1994-08	6	1	P	66	66	0	Halophila englemannii	3
1994-08	6	2	I	81	81	0	Halodule wrightii	81
1994-08	6	2	I	81	81	0	Halophila englemannii	1
1994-08	6	2	P	63	63	0	Halodule wrightii	63
1994-08	6	2	P	63	63	0	Halophila englemannii	1
1994-08	6	3	I	97	97	0	Halodule wrightii	97
1994-08	6	3	P	93	93	0	Halodule wrightii	93
1994-08	6	3	P	93	93	0	Halophila englemannii	7
1994-08	6	4	I	92	92	0	Halodule wrightii	92
1994-08	6	4	I	92	92	0	Halophila englemannii	6
1994-08	6	4	P	92	92	0	Halodule wrightii	92
1994-08	6	4	P	92	92	0	Halophila englemannii	5
1994-08	6	5	I	91	91	0	Halodule wrightii	91
1994-08	6	5	I	91	91	0	Halophila englemannii	1
1994-08	6	5	P	84	84	0	Halodule wrightii	84
1994-08	6	5	P	84	84	0	Halophila englemannii	6
1994-08	6	6	I	99	99	0	Halodule wrightii	99
1994-08	6	6	P	92	92	0	Halodule wrightii	92
1994-08	6	7	I	95	95	0	Halodule wrightii	95
1994-08	6	7	I	95	95	0	Halophila englemannii	5
1994-08	6	7	P	94	94	0	Halodule wrightii	94
1994-08	6	7	P	94	94	0	Halophila englemannii	3
1994-08	6	8	I	100	100	0	Halodule wrightii	100
1994-08	6	8	P	98	98	0	Halodule wrightii	98
1994-10	6	1	I	90	90	0	Halodule wrightii	90
1994-10	6	1	I	90	90	0	Halophila englemannii	6
1994-10	6	1	P	65	65	0	Halodule wrightii	65
1994-10	6	1	P	65	65	0	Halophila englemannii	8
1994-10	6	2	I	97	97	0	Halodule wrightii	97
1994-10	6	2	I	97	97	0	Halophila englemannii	1
1994-10	6	2	P	86	86	0	Halodule wrightii	86
1994-10	6	2	P	86	86	0	Halophila englemannii	4

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-10	6	3	I	100	100	0	Halodule wrightii	100
1994-10	6	3	I	100	100	0	Halophila englemannii	16
1994-10	6	3	P	94	94	0	Halodule wrightii	94
1994-10	6	4	I	100	100	0	Halodule wrightii	100
1994-10	6	4	I	100	100	0	Halophila englemannii	4
1994-10	6	4	P	100	100	0	Halodule wrightii	100
1994-10	6	5	I	81	81	0	Halodule wrightii	81
1994-10	6	5	P	67	67	0	Halodule wrightii	53
1994-10	6	5	P	67	67	0	Halophila englemannii	16
1994-10	6	6	I	97	97	0	Halodule wrightii	97
1994-10	6	6	P	71	71	0	Halodule wrightii	66
1994-10	6	6	P	71	71	0	Halophila englemannii	8
1994-10	6	7	I	98	98	0	Halodule wrightii	98
1994-10	6	7	P	68	68	0	Halodule wrightii	55
1994-10	6	7	P	68	68	0	Halophila englemannii	28
1994-10	6	8	I	68	68	0	Halodule wrightii	62
1994-10	6	8	I	68	68	0	Halophila englemannii	21
1994-10	6	8	P	87	87	0	Halodule wrightii	87
1994-10	6	8	P	87	87	0	Halophila englemannii	7
1994-10	6	9	I	99	99	0	Halodule wrightii	99
1994-10	6	9	P	70	70	0	Halodule wrightii	70
1994-10	6	9	P	70	70	0	Halophila englemannii	11
1994-10	6	10	I	100	100	0	Halodule wrightii	100
1994-10	6	10	P	43	43	0	Halodule wrightii	43
1995-08	6	1	I	100	100	0	Halodule wrightii	100
1995-08	6	1	P	98	98	0	Halodule wrightii	98
1995-08	6	2	I	100	100	0	Halodule wrightii	100
1995-08	6	2	P	85	85	0	Halodule wrightii	82
1995-08	6	2	P	85	85	0	Halophila englemannii	15
1995-08	6	3	I	91	91	0	Halodule wrightii	91
1995-08	6	3	P	59	59	0	Halodule wrightii	59
1995-08	6	3	P	59	59	0	Halophila englemannii	1
1995-08	6	4	I	93	93	0	Halodule wrightii	93
1995-08	6	4	P	73	69	10	Halodule wrightii	69
1995-08	6	4	P	73	69	10	Halophila englemannii	1
1995-08	6	4	P	73	69	10	Udotea conglutinata	7
1995-08	6	5	I	89	89	0	Halodule wrightii	89
1995-08	6	5	P	45	45	0	Halodule wrightii	30
1995-08	6	5	P	45	45	0	Halophila englemannii	15
1995-08	6	6	I	98	98	0	Halodule wrightii	98
1995-08	6	6	P	99	99	0	Halodule wrightii	99
1995-08	6	7	I	100	100	0	Halodule wrightii	100
1995-08	6	7	P	97	97	0	Halodule wrightii	97
1995-08	6	8	I	100	100	0	Halodule wrightii	100
1995-08	6	8	P	93	93	0	Halodule wrightii	93
1995-08	6	9	I	100	100	0	Halodule wrightii	100
1995-08	6	9	P	89	89	0	Halodule wrightii	89
1995-08	6	10	I	99	99	0	Halodule wrightii	99
1995-08	6	10	P	100	100	0	Halodule wrightii	100
1995-10	6	1	I	7	7	0	Halodule wrightii	7
1995-10	6	1	P	3	3	0	Halodule wrightii	3
1995-10	6	2	I	78	78	0	Halodule wrightii	78
1995-10	6	2	P	80	80	0	Halodule wrightii	80
1995-10	6	3	I	40	40	0	Halodule wrightii	40
1995-10	6	3	P	78	78	0	Halodule wrightii	78
1995-10	6	4	I	3	3	0	Halodule wrightii	3

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1995-10	6	4	P	5	5	0	Halodule wrightii	5
1995-10	6	5	I	82	82	0	Halodule wrightii	82
1995-10	6	5	P	3	3	0	Halodule wrightii	3
1995-10	6	6	I	100	100	0	Halodule wrightii	100
1995-10	6	6	P	100	100	0	Halodule wrightii	100
1995-10	6	7	I	100	100	0	Halodule wrightii	100
1995-10	6	7	P	97	97	0	Halodule wrightii	97
1995-10	6	8	I	96	96	0	Halodule wrightii	96
1995-10	6	8	P	64	64	0	Halodule wrightii	64
1995-10	6	9	I	100	100	0	Halodule wrightii	100
1995-10	6	9	P	35	35	1	Halodule wrightii	35
1995-10	6	9	P	35	35	1	Udotea conglutinata	1
1995-10	6	10	I	100	100	0	Halodule wrightii	100
1995-10	6	10	P	98	98	0	Halodule wrightii	98
1993-12	7	1	I	100	100	0	Halodule wrightii	100
1993-12	7	1	P	93	93	0	Halodule wrightii	93
1993-12	7	2	I	88	88	0	Halodule wrightii	88
1993-12	7	2	P	86	86	0	Halodule wrightii	86
1993-12	7	3	I	95	95	0	Halodule wrightii	95
1993-12	7	3	P	66	66	0	Halodule wrightii	66
1993-12	7	4	I	100	100	0	Halodule wrightii	100
1993-12	7	4	P	100	100	0	Halodule wrightii	100
1993-12	7	5	I	100	100	0	Halodule wrightii	100
1993-12	7	5	P	90	90	0	Halodule wrightii	90
1993-12	7	6	I	100	100	0	Halodule wrightii	100
1993-12	7	6	P	94	94	0	Halodule wrightii	94
1993-12	7	7	I	100	100	0	Halodule wrightii	100
1993-12	7	7	P	96	96	0	Halodule wrightii	96
1993-12	7	8	I	100	100	0	Halodule wrightii	100
1993-12	7	8	P	100	100	0	Halodule wrightii	100
1993-12	7	9	I	100	100	0	Halodule wrightii	100
1993-12	7	9	I	100	100	0	Halophila englemannii	2
1993-12	7	9	P	97	97	0	Halodule wrightii	97
1993-12	7	10	I	100	100	0	Halodule wrightii	100
1993-12	7	10	P	93	93	0	Halodule wrightii	93
1994-08	7	1	I	73	73	0	Caulerpa mexicana	2
1994-08	7	1	I	73	73	2	Halodule wrightii	73
1994-08	7	1	P	61	61	0	Halodule wrightii	61
1994-08	7	2	I	56	56	0	Halodule wrightii	56
1994-08	7	2	I	56	56	0	Halophila englemannii	10
1994-08	7	2	P	58	58	0	Halodule wrightii	58
1994-08	7	3	I	90	90	0	Halodule wrightii	90
1994-08	7	3	P	49	49	0	Halodule wrightii	49
1994-08	7	4	I	75	75	3	Halodule wrightii	75
1994-08	7	4	I	75	75	3	Halophila englemannii	3
1994-08	7	4	P	79	79	0	Halodule wrightii	79
1994-08	7	5	I	89	89	0	Halodule wrightii	89
1994-08	7	5	P	78	78	0	Halodule wrightii	78
1994-08	7	6	I	99	99	0	Halodule wrightii	99
1994-08	7	6	I	99	99	0	Halophila englemannii	15
1994-08	7	6	P	75	75	0	Halodule wrightii	75
1994-08	7	7	I	94	94	0	Halodule wrightii	94
1994-08	7	7	I	94	94	0	Halophila englemannii	3
1994-08	7	7	P	87	87	0	Halodule wrightii	87
1994-08	7	8	I	97	97	0	Halodule wrightii	97
1994-08	7	8	P	80	80	0	Halodule wrightii	80

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-08	7	9	I	98	98	0	Halodule wrightii	98
1994-08	7	9	I	98	98	0	Halophila englemannii	7
1994-08	7	9	P	76	76	0	Halodule wrightii	76
1994-08	7	10	I	96	96	0	Halodule wrightii	96
1994-08	7	10	I	96	96	0	Halophila englemannii	7
1994-08	7	10	P	88	88	0	Halodule wrightii	88
1994-10	7	1	I	96	96	0	Halodule wrightii	96
1994-10	7	1	P	96	96	0	Halodule wrightii	96
1994-10	7	2	I	97	97	0	Halodule wrightii	97
1994-10	7	2	P	99	99	0	Halodule wrightii	99
1994-10	7	3	I	100	100	0	Halodule wrightii	100
1994-10	7	3	P	73	73	0	Halodule wrightii	73
1994-10	7	4	I	100	100	0	Halodule wrightii	100
1994-10	7	4	P	100	100	0	Halodule wrightii	100
1994-10	7	5	I	98	98	0	Halodule wrightii	98
1994-10	7	5	P	97	97	0	Halodule wrightii	97
1994-10	7	6	I	98	98	0	Halodule wrightii	98
1994-10	7	6	P	76	76	0	Halodule wrightii	76
1994-10	7	7	I	100	100	0	Halodule wrightii	100
1994-10	7	7	P	99	99	0	Halodule wrightii	99
1994-10	7	8	I	96	96	0	Halodule wrightii	96
1994-10	7	8	I	96	96	0	Halophila englemannii	9
1994-10	7	8	P	91	91	1	Caulerpa prolifera	1
1994-10	7	8	P	91	91	1	Halodule wrightii	88
1994-10	7	8	P	91	91	1	Halophila englemannii	16
1994-10	7	9	I	100	100	0	Syringodium filiforme	100
1994-10	7	9	P	100	100	0	Syringodium filiforme	100
1994-10	7	10	I	99	99	0	Syringodium filiforme	99
1994-10	7	10	P	80	80	0	Halodule wrightii	80
1995-08	7	1	I	100	100	0	Halodule wrightii	100
1995-08	7	1	P	100	100	0	Halodule wrightii	100
1995-08	7	2	I	95	95	0	Halodule wrightii	95
1995-08	7	2	P	83	83	0	Halodule wrightii	83
1995-08	7	3	I	100	100	0	Halodule wrightii	100
1995-08	7	3	P	100	100	0	Halodule wrightii	100
1995-08	7	4	I	100	100	0	Halodule wrightii	100
1995-08	7	4	P	98	98	0	Halodule wrightii	98
1995-08	7	5	I	100	100	0	Halodule wrightii	100
1995-08	7	5	P	100	100	0	Halodule wrightii	100
1995-08	7	6	I	99	99	0	Halodule wrightii	99
1995-08	7	6	P	96	96	0	Halodule wrightii	96
1995-08	7	7	I	96	96	0	Halodule wrightii	96
1995-08	7	7	P	95	95	0	Halodule wrightii	95
1995-08	7	8	I	100	100	0	Halodule wrightii	100
1995-08	7	8	P	93	93	0	Halodule wrightii	93
1995-08	7	9	I	99	99	0	Halodule wrightii	99
1995-08	7	9	P	83	83	0	Halodule wrightii	83
1995-08	7	10	I	98	98	0	Halodule wrightii	98
1995-08	7	10	P	92	92	0	Halodule wrightii	92
1995-10	7	1	I	89	89	0	Halodule wrightii	89
1995-10	7	1	P	87	87	0	Halodule wrightii	87
1995-10	7	2	I	97	97	0	Halodule wrightii	97
1995-10	7	2	P	93	93	0	Halodule wrightii	93
1995-10	7	3	I	96	96	0	Halodule wrightii	96
1995-10	7	3	P	90	90	0	Halodule wrightii	90
1995-10	7	4	I	76	76	0	Halodule wrightii	76

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1995-10	7	4	P	88	88	0	Halodule wrightii	88
1995-10	7	5	I	100	100	0	Halodule wrightii	100
1995-10	7	5	P	95	95	0	Halodule wrightii	95
1995-10	7	6	I	98	98	0	Halodule wrightii	98
1995-10	7	6	P	99	99	0	Halodule wrightii	99
1995-10	7	7	I	97	97	0	Halodule wrightii	97
1995-10	7	7	P	99	99	0	Halodule wrightii	99
1995-10	7	8	I	100	100	0	Halodule wrightii	100
1995-10	7	8	P	80	80	0	Halodule wrightii	80
1995-10	7	9	I	97	97	0	Halodule wrightii	97
1995-10	7	9	P	95	95	0	Halodule wrightii	95
1995-10	7	10	I	98	98	0	Halodule wrightii	98
1995-10	7	10	P	86	86	0	Halodule wrightii	86
1993-12	8	1	I	91	91	0	Halodule wrightii	91
1993-12	8	1	I	91	91	0	Halophila englemannii	6
1993-12	8	1	P	99	99	2	Caulerpa prolifera	2
1993-12	8	1	P	99	99	2	Halodule wrightii	99
1993-12	8	1	P	99	99	2	Halophila englemannii	2
1993-12	8	2	I	97	97	0	Halodule wrightii	97
1993-12	8	2	I	97	97	0	Halophila englemannii	2
1993-12	8	2	P	94	94	0	Halodule wrightii	94
1993-12	8	3	I	98	98	0	Halodule wrightii	98
1993-12	8	3	I	98	98	0	Halophila englemannii	6
1993-12	8	3	P	100	100	0	Halodule wrightii	100
1993-12	8	4	I	100	100	0	Halodule wrightii	100
1993-12	8	4	I	100	100	0	Halophila englemannii	4
1993-12	8	4	P	95	95	0	Halodule wrightii	95
1993-12	8	5	I	94	94	0	Halodule wrightii	94
1993-12	8	5	P	94	94	0	Halodule wrightii	94
1993-12	8	5	P	94	94	0	Halophila englemannii	4
1993-12	8	6	I	90	90	0	Halodule wrightii	90
1993-12	8	6	P	76	76	0	Halodule wrightii	76
1993-12	8	7	I	75	75	0	Halodule wrightii	75
1993-12	8	7	P	100	100	0	Halodule wrightii	100
1993-12	8	8	I	86	86	0	Halodule wrightii	86
1993-12	8	8	P	96	96	0	Halodule wrightii	96
1993-12	8	9	I	94	94	0	Halodule wrightii	94
1993-12	8	9	P	90	90	0	Halodule wrightii	90
1994-08	8	1	I	100	100	0	Halodule wrightii	100
1994-08	8	1	P	99	99	0	Halodule wrightii	99
1994-08	8	2	I	96	96	0	Halodule wrightii	96
1994-08	8	2	P	100	100	0	Halodule wrightii	100
1994-08	8	3	I	60	60	0	Halodule wrightii	60
1994-08	8	3	I	60	60	0	Syringodium filiforme	6
1994-08	8	3	P	88	88	0	Halodule wrightii	88
1994-08	8	4	I	100	100	0	Halodule wrightii	100
1994-08	8	4	P	96	96	0	Halodule wrightii	96
1994-08	8	5	I	95	95	0	Halodule wrightii	95
1994-08	8	5	P	94	94	0	Halodule wrightii	94
1994-08	8	6	I	99	99	0	Syringodium filiforme	99
1994-08	8	6	P	91	91	0	Halophila englemannii	3
1994-08	8	6	P	91	91	0	Syringodium filiforme	91
1994-08	8	7	I	96	96	11	Caulerpa prolifera	1
1994-08	8	7	I	96	96	11	Halodule wrightii	96
1994-08	8	7	I	96	96	11	Udotea conglutinata	11
1994-08	8	7	P	95	95	0	Halodule wrightii	95

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-08	8	7	P	95	95	0	Halophila englemannii	1
1994-08	8	8	I	92	92	1	Caulerpa prolifera	1
1994-08	8	8	I	92	92	1	Halodule wrightii	55
1994-08	8	8	I	92	92	1	Syringodium filiforme	28
1994-08	8	8	P	100	100	0	Syringodium filiforme	100
1994-08	8	9	I	99	99	0	Halophila englemannii	2
1994-08	8	9	I	99	99	0	Syringodium filiforme	98
1994-08	8	9	P	98	98	0	Halodule wrightii	73
1994-08	8	9	P	98	98	0	Syringodium filiforme	83
1994-08	8	10	I	100	100	0	Syringodium filiforme	100
1994-08	8	10	P	97	97	0	Syringodium filiforme	97
1994-10	8	1	I	100	100	0	Syringodium filiforme	100
1994-10	8	1	P	86	86	0	Syringodium filiforme	86
1994-10	8	2	I	93	93	0	Halodule wrightii	40
1994-10	8	2	I	93	93	0	Syringodium filiforme	93
1994-10	8	2	P	96	96	0	Syringodium filiforme	96
1994-10	8	3	I	92	92	0	Syringodium filiforme	92
1994-10	8	3	P	94	94	0	Halodule wrightii	6
1994-10	8	3	P	94	94	0	Syringodium filiforme	94
1994-10	8	4	I	100	100	0	Syringodium filiforme	100
1994-10	8	4	P	94	94	0	Syringodium filiforme	94
1994-10	8	5	I	93	93	0	Halodule wrightii	28
1994-10	8	5	I	93	93	0	Syringodium filiforme	93
1994-10	8	5	P	92	92	0	Halodule wrightii	26
1994-10	8	5	P	92	92	0	Syringodium filiforme	92
1994-10	8	6	I	100	100	0	Syringodium filiforme	100
1994-10	8	6	P	100	100	0	Syringodium filiforme	100
1994-10	8	7	I	100	100	0	Halodule wrightii	3
1994-10	8	7	I	100	100	0	Syringodium filiforme	100
1994-10	8	7	P	95	95	0	Halodule wrightii	5
1994-10	8	7	P	95	95	0	Syringodium filiforme	95
1994-10	8	8	I	88	88	0	Halodule wrightii	3
1994-10	8	8	I	88	88	0	Syringodium filiforme	88
1994-10	8	8	P	75	75	0	Syringodium filiforme	75
1994-10	8	9	I	98	98	0	Syringodium filiforme	98
1994-10	8	9	P	100	100	0	Syringodium filiforme	100
1994-10	8	10	I	99	99	0	Syringodium filiforme	99
1994-10	8	10	P	100	100	0	Halodule wrightii	2
1994-10	8	10	P	100	100	0	Syringodium filiforme	100
1995-08	8	1	I	38	38	0	Syringodium filiforme	38
1995-08	8	1	P	2	2	0	Syringodium filiforme	2
1995-08	8	2	I	94	94	0	Syringodium filiforme	94
1995-08	8	2	P	0	0	0	Syringodium filiforme	0
1995-08	8	3	I	8	8	0	Syringodium filiforme	8
1995-08	8	3	P	10	10	0	Syringodium filiforme	10
1995-08	8	4	I	75	75	0	Syringodium filiforme	75
1995-08	8	4	P	64	64	0	Syringodium filiforme	64
1995-08	8	5	I	16	16	0	Syringodium filiforme	16
1995-08	8	5	P	9	9	0	Syringodium filiforme	9
1995-08	8	6	I	61	61	0	Syringodium filiforme	61
1995-08	8	6	P	86	86	0	Syringodium filiforme	86
1995-08	8	7	I	95	95	0	Syringodium filiforme	95
1995-08	8	7	P	83	83	0	Syringodium filiforme	83
1995-08	8	8	I	71	71	0	Syringodium filiforme	71
1995-08	8	8	P	52	52	0	Syringodium filiforme	52
1995-08	8	9	I	89	89	0	Syringodium filiforme	89

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1995-08	8	9	P	86	86	0	Syringodium filiforme	86
1995-08	8	10	I	99	99	0	Syringodium filiforme	99
1995-08	8	10	P	91	91	0	Halodule wrightii	91
1995-08	8	10	P	91	91	0	Syringodium filiforme	13
1995-10	8	1	I	82	82	0	Syringodium filiforme	82
1995-10	8	1	P	87	87	0	Syringodium filiforme	87
1995-10	8	2	I	76	76	0	Syringodium filiforme	76
1995-10	8	2	P	80	80	0	Syringodium filiforme	80
1995-10	8	3	I	98	98	0	Syringodium filiforme	98
1995-10	8	3	P	90	90	0	Syringodium filiforme	90
1995-10	8	4	I	92	92	0	Syringodium filiforme	92
1995-10	8	4	P	91	91	0	Syringodium filiforme	91
1995-10	8	5	I	100	100	0	Syringodium filiforme	100
1995-10	8	5	P	62	62	0	Syringodium filiforme	62
1995-10	8	6	I	10	10	0	Syringodium filiforme	10
1995-10	8	6	P	22	22	0	Syringodium filiforme	22
1995-10	8	7	I	75	75	0	Syringodium filiforme	75
1995-10	8	7	P	92	92	0	Syringodium filiforme	92
1995-10	8	8	I	2	2	0	Syringodium filiforme	2
1995-10	8	8	P	18	18	0	Syringodium filiforme	18
1995-10	8	9	I	36	36	0	Syringodium filiforme	36
1995-10	8	9	P	7	7	0	Syringodium filiforme	7
1995-10	8	10	I	68	68	0	Syringodium filiforme	68
1995-10	8	10	P	1	1	0	Syringodium filiforme	1
1993-12	9	1	I	56	56	0	Syringodium filiforme	56
1993-12	9	1	P	94	94	0	Halophila englemannii	2
1993-12	9	1	P	94	94	0	Syringodium filiforme	94
1993-12	9	2	I	94	94	0	Syringodium filiforme	94
1993-12	9	2	P	96	96	0	Syringodium filiforme	96
1993-12	9	3	I	94	94	0	Halodule wrightii	6
1993-12	9	3	I	94	94	0	Syringodium filiforme	94
1993-12	9	3	P	93	93	0	Syringodium filiforme	93
1993-12	9	4	I	85	85	0	Syringodium filiforme	85
1993-12	9	4	P	80	80	1	Caulerpa prolifera	1
1993-12	9	4	P	80	80	1	Halophila englemannii	3
1993-12	9	4	P	80	80	1	Syringodium filiforme	80
1993-12	9	5	I	93	93	0	Syringodium filiforme	93
1993-12	9	5	P	86	86	0	Syringodium filiforme	86
1993-12	9	6	I	84	84	0	Halophila englemannii	2
1993-12	9	6	I	84	84	0	Syringodium filiforme	82
1993-12	9	6	P	92	92	0	Syringodium filiforme	92
1993-12	9	7	I	28	28	0	Syringodium filiforme	28
1993-12	9	7	P	89	89	0	Halophila englemannii	11
1993-12	9	7	P	89	89	0	Syringodium filiforme	78
1993-12	9	8	I	91	91	0	Halophila englemannii	10
1993-12	9	8	I	91	91	0	Syringodium filiforme	91
1993-12	9	8	P	79	79	0	Halophila englemannii	10
1993-12	9	8	P	79	79	0	Syringodium filiforme	79
1993-12	9	9	I	67	67	0	Syringodium filiforme	67
1993-12	9	9	P	89	89	0	Halophila englemannii	7
1993-12	9	9	P	89	89	0	Syringodium filiforme	89
1993-12	9	10	I	94	94	0	Syringodium filiforme	94
1993-12	9	10	P	90	90	0	Halophila englemannii	3
1993-12	9	10	P	90	90	0	Syringodium filiforme	90
1994-08	9	1	I	73	73	1	Halophila englemannii	3
1994-08	9	1	I	73	73	1	Syringodium filiforme	73

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-08	9	1	I	73	73	1	Udotea conglutinata	1
1994-08	9	1	P	100	100	4	Caulerpa prolifera	4
1994-08	9	1	P	100	100	4	Halophila englemannii	8
1994-08	9	1	P	100	100	4	Syringodium filiforme	100
1994-08	9	2	I	100	100	2	Caulerpa prolifera	2
1994-08	9	2	I	100	100	2	Halophila englemannii	8
1994-08	9	2	I	100	100	2	Syringodium filiforme	100
1994-08	9	2	P	11	11	1	Caulerpa prolifera	1
1994-08	9	2	P	11	11	1	Syringodium filiforme	11
1994-08	9	3	I	97	97	0	Halophila englemannii	2
1994-08	9	3	I	97	97	0	Syringodium filiforme	97
1994-08	9	3	P	71	71	0	Halophila englemannii	5
1994-08	9	3	P	71	71	0	Syringodium filiforme	71
1994-08	9	4	I	95	95	3	Caulerpa prolifera	3
1994-08	9	4	I	95	95	3	Syringodium filiforme	95
1994-08	9	4	P	93	93	0	Syringodium filiforme	93
1994-08	9	5	I	100	100	0	Syringodium filiforme	100
1994-08	9	5	P	96	96	0	Syringodium filiforme	96
1994-08	9	6	I	98	98	0	Syringodium filiforme	98
1994-08	9	6	P	100	92	20	Caulerpa prolifera	18
1994-08	9	6	P	100	92	20	Halophila englemannii	38
1994-08	9	6	P	100	92	20	Syringodium filiforme	92
1994-08	9	6	P	100	92	20	Udotea conglutinata	2
1994-08	9	7	I	96	96	0	Syringodium filiforme	96
1994-08	9	7	P	93	93	8	Halophila englemannii	46
1994-08	9	7	P	93	93	8	Syringodium filiforme	88
1994-08	9	7	P	93	93	8	Udotea conglutinata	8
1994-08	9	8	I	100	100	0	Syringodium filiforme	100
1994-08	9	8	P	96	96	5	Caulerpa prolifera	5
1994-08	9	8	P	96	96	5	Halophila englemannii	60
1994-08	9	8	P	96	96	5	Syringodium filiforme	81
1994-08	9	9	I	100	100	3	Caulerpa prolifera	3
1994-08	9	9	I	100	100	3	Halophila englemannii	12
1994-08	9	9	I	100	100	3	Syringodium filiforme	100
1994-08	9	9	P	96	96	20	Caulerpa prolifera	15
1994-08	9	9	P	96	96	20	Halophila englemannii	32
1994-08	9	9	P	96	96	20	Syringodium filiforme	87
1994-08	9	9	P	96	96	20	Udotea conglutinata	5
1994-08	9	10	I	96	96	0	Halophila englemannii	29
1994-08	9	10	I	96	96	0	Syringodium filiforme	95
1994-08	9	10	P	98	98	13	Caulerpa prolifera	9
1994-08	9	10	P	98	98	13	Halophila englemannii	42
1994-08	9	10	P	98	98	13	Syringodium filiforme	86
1994-08	9	10	P	98	98	13	Udotea conglutinata	4
1994-10	9	1	I	98	98	0	Halophila englemannii	2
1994-10	9	1	I	98	98	0	Syringodium filiforme	98
1994-10	9	1	P	92	92	0	Syringodium filiforme	92
1994-10	9	2	I	95	95	0	Halophila englemannii	12
1994-10	9	2	I	95	95	0	Syringodium filiforme	95
1994-10	9	2	P	98	98	0	Halophila englemannii	2
1994-10	9	2	P	98	98	0	Syringodium filiforme	98
1994-10	9	3	I	100	100	0	Halophila englemannii	10
1994-10	9	3	I	100	100	0	Syringodium filiforme	100
1994-10	9	3	P	97	97	0	Syringodium filiforme	97
1994-10	9	4	I	98	98	2	Halophila englemannii	8
1994-10	9	4	I	98	98	2	Syringodium filiforme	98

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-10	9	4	I	98	98	2	Udotea conglutinata	2
1994-10	9	4	P	92	92	0	Syringodium filiforme	92
1994-10	9	5	I	100	100	0	Halophila englemannii	8
1994-10	9	5	I	100	100	0	Syringodium filiforme	100
1994-10	9	5	P	85	85	2	Syringodium filiforme	85
1994-10	9	5	P	85	85	2	Udotea conglutinata	2
1994-10	9	6	I	100	100	0	Syringodium filiforme	100
1994-10	9	6	P	100	100	0	Halophila englemannii	14
1994-10	9	6	P	100	100	0	Syringodium filiforme	100
1994-10	9	7	I	97	97	0	Syringodium filiforme	97
1994-10	9	7	P	95	95	0	Halophila englemannii	2
1994-10	9	7	P	95	95	0	Syringodium filiforme	95
1994-10	9	8	I	100	100	0	Halophila englemannii	4
1994-10	9	8	I	100	100	0	Syringodium filiforme	100
1994-10	9	8	P	97	97	0	Halodule wrightii	5
1994-10	9	8	P	97	97	0	Halophila englemannii	8
1994-10	9	8	P	97	97	0	Syringodium filiforme	89
1994-10	9	9	I	99	99	0	Syringodium filiforme	99
1994-10	9	9	P	80	80	0	Halophila englemannii	1
1994-10	9	9	P	80	80	0	Syringodium filiforme	80
1994-10	9	10	I	98	98	0	Syringodium filiforme	98
1994-10	9	10	P	84	84	0	Halophila englemannii	5
1994-10	9	10	P	84	84	0	Syringodium filiforme	84
1995-08	9	1	I	100	100	0	Syringodium filiforme	100
1995-08	9	1	P	100	100	0	Syringodium filiforme	100
1995-08	9	2	I	100	100	0	Syringodium filiforme	100
1995-08	9	2	P	90	90	0	Syringodium filiforme	90
1995-08	9	3	I	99	99	0	Syringodium filiforme	99
1995-08	9	3	P	98	98	0	Syringodium filiforme	98
1995-08	9	4	I	98	98	0	Syringodium filiforme	98
1995-08	9	4	P	92	92	0	Halophila englemannii	2
1995-08	9	4	P	92	92	0	Syringodium filiforme	90
1995-08	9	5	I	98	98	0	Syringodium filiforme	98
1995-08	9	5	P	100	100	0	Syringodium filiforme	100
1995-08	9	6	I	99	99	0	Syringodium filiforme	99
1995-08	9	6	P	86	86	0	Syringodium filiforme	86
1995-08	9	7	I	100	100	0	Halodule wrightii	4
1995-08	9	7	I	100	100	0	Syringodium filiforme	98
1995-08	9	7	P	100	100	0	Syringodium filiforme	100
1995-08	9	8	I	97	97	0	Syringodium filiforme	97
1995-08	9	8	P	92	92	0	Syringodium filiforme	92
1995-08	9	9	I	98	98	0	Syringodium filiforme	98
1995-08	9	9	P	98	98	0	Syringodium filiforme	98
1995-08	9	10	I	99	99	0	Halophila englemannii	3
1995-08	9	10	I	99	99	0	Syringodium filiforme	96
1995-08	9	10	P	100	100	0	Syringodium filiforme	100
1995-10	9	1	I	98	98	0	Syringodium filiforme	98
1995-10	9	1	P	92	92	0	Syringodium filiforme	92
1995-10	9	2	I	100	100	0	Syringodium filiforme	100
1995-10	9	2	P	97	97	0	Syringodium filiforme	97
1995-10	9	3	I	100	100	0	Syringodium filiforme	100
1995-10	9	3	P	100	100	0	Syringodium filiforme	100
1995-10	9	4	I	89	89	0	Syringodium filiforme	89
1995-10	9	4	P	100	100	0	Syringodium filiforme	100
1995-10	9	5	I	100	100	0	Syringodium filiforme	100
1995-10	9	5	P	97	97	0	Syringodium filiforme	97

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1995-10	9	6	I	95	95	0	Syringodium filiforme	95
1995-10	9	6	P	96	96	0	Syringodium filiforme	96
1995-10	9	7	I	100	100	0	Syringodium filiforme	100
1995-10	9	7	P	96	96	0	Syringodium filiforme	96
1995-10	9	8	I	92	92	0	Syringodium filiforme	92
1995-10	9	8	P	100	100	0	Syringodium filiforme	100
1995-10	9	9	I	100	100	0	Syringodium filiforme	100
1995-10	9	9	P	88	88	0	Syringodium filiforme	88
1995-10	9	10	I	91	91	0	Syringodium filiforme	91
1995-10	9	10	P	97	97	0	Syringodium filiforme	97
1993-12	10	1	I	24	24	0	Halophila englemannii	17
1993-12	10	1	I	24	24	0	Syringodium filiforme	7
1993-12	10	1	P	90	90	4	Caulerpa prolifera	4
1993-12	10	1	P	90	90	4	Syringodium filiforme	90
1993-12	10	2	I	78	78	0	Syringodium filiforme	78
1993-12	10	2	P	77	77	8	Caulerpa prolifera	8
1993-12	10	2	P	77	77	8	Syringodium filiforme	77
1993-12	10	3	I	84	84	4	Caulerpa prolifera	4
1993-12	10	3	I	84	84	4	Syringodium filiforme	84
1993-12	10	3	P	84	68	16	Caulerpa prolifera	16
1993-12	10	3	P	84	68	16	Syringodium filiforme	84
1993-12	10	4	I	59	59	0	Syringodium filiforme	59
1993-12	10	4	P	80	80	0	Syringodium filiforme	80
1993-12	10	5	I	68	68	6	Caulerpa prolifera	6
1993-12	10	5	I	68	68	6	Syringodium filiforme	68
1993-12	10	5	P	77	77	0	Syringodium filiforme	77
1993-12	10	6	I	60	58	2	Caulerpa prolifera	2
1993-12	10	6	I	60	58	2	Syringodium filiforme	58
1993-12	10	6	P	6	6	0	Syringodium filiforme	6
1993-12	10	7	I	0	0	0	Bare	0
1993-12	10	7	P	13	13	0	Syringodium filiforme	13
1993-12	10	8	I	19	19	0	Syringodium filiforme	19
1993-12	10	8	P	87	87	5	Caulerpa prolifera	5
1993-12	10	8	P	87	87	5	Syringodium filiforme	87
1993-12	10	9	I	76	76	0	Syringodium filiforme	76
1993-12	10	9	P	100	100	0	Halophila englemannii	3
1993-12	10	9	P	100	100	0	Syringodium filiforme	100
1993-12	10	10	I	94	94	0	Syringodium filiforme	94
1993-12	10	10	P	100	100	0	Syringodium filiforme	100
1994-08	10	1	I	52	30	22	Caulerpa prolifera	22
1994-08	10	1	I	52	30	22	Syringodium filiforme	30
1994-08	10	1	P	74	42	32	Caulerpa prolifera	32
1994-08	10	1	P	74	42	32	Syringodium filiforme	42
1994-08	10	2	I	100	100	7	Caulerpa prolifera	7
1994-08	10	2	I	100	100	7	Syringodium filiforme	100
1994-08	10	2	P	92	55	40	Caulerpa prolifera	40
1994-08	10	2	P	92	55	40	Syringodium filiforme	55
1994-08	10	3	I	96	89	9	Caulerpa prolifera	9
1994-08	10	3	I	96	89	9	Syringodium filiforme	89
1994-08	10	3	P	99	6	99	Caulerpa prolifera	99
1994-08	10	3	P	99	6	99	Syringodium filiforme	6
1994-08	10	4	I	100	36	66	Caulerpa prolifera	66
1994-08	10	4	I	100	36	66	Syringodium filiforme	35
1994-08	10	4	P	100	47	96	Caulerpa prolifera	96
1994-08	10	4	P	100	47	96	Syringodium filiforme	47
1994-08	10	5	I	100	100	0	Syringodium filiforme	100

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-08	10	5	P	100	64	36	Caulerpa prolifera	36
1994-08	10	5	P	100	64	36	Syringodium filiforme	64
1994-08	10	6	I	100	100	8	Caulerpa prolifera	8
1994-08	10	6	I	100	100	8	Syringodium filiforme	100
1994-08	10	6	P	100	74	90	Caulerpa prolifera	90
1994-08	10	6	P	100	74	90	Syringodium filiforme	74
1994-08	10	6	P	100	74	90	Udotea conglutinata	2
1994-08	10	7	I	100	100	46	Caulerpa prolifera	46
1994-08	10	7	I	100	100	46	Syringodium filiforme	100
1994-08	10	7	P	100	50	80	Caulerpa prolifera	80
1994-08	10	7	P	100	50	80	Syringodium filiforme	50
1994-08	10	7	P	100	50	80	Udotea conglutinata	2
1994-08	10	8	I	100	94	89	Caulerpa prolifera	89
1994-08	10	8	I	100	94	89	Syringodium filiforme	94
1994-08	10	8	I	100	94	89	Udotea conglutinata	5
1994-08	10	8	P	99	11	99	Caulerpa prolifera	99
1994-08	10	8	P	99	11	99	Syringodium filiforme	11
1994-08	10	9	I	100	99	10	Caulerpa prolifera	10
1994-08	10	9	I	100	99	10	Syringodium filiforme	99
1994-08	10	9	P	99	0	99	Caulerpa prolifera	99
1994-08	10	10	I	100	98	86	Caulerpa prolifera	86
1994-08	10	10	I	100	98	86	Syringodium filiforme	98
1994-08	10	10	P	99	40	89	Caulerpa prolifera	89
1994-08	10	10	P	99	40	89	Syringodium filiforme	40
1995-08	10	1	I	92	92	0	Syringodium filiforme	92
1995-08	10	1	P	38	20	18	Caulerpa prolifera	18
1995-08	10	1	P	38	20	18	Syringodium filiforme	20
1995-08	10	2	I	52	52	1	Caulerpa prolifera	1
1995-08	10	2	I	52	52	1	Syringodium filiforme	52
1995-08	10	2	P	40	32	8	Caulerpa prolifera	8
1995-08	10	2	P	40	32	8	Syringodium filiforme	32
1995-08	10	3	I	36	36	0	Syringodium filiforme	36
1995-08	10	3	P	21	18	3	Caulerpa prolifera	3
1995-08	10	3	P	21	18	3	Syringodium filiforme	18
1995-08	10	4	I	26	26	0	Syringodium filiforme	26
1995-08	10	4	P	38	38	0	Syringodium filiforme	38
1995-08	10	5	I	20	20	0	Syringodium filiforme	20
1995-08	10	5	P	44	44	0	Syringodium filiforme	44
1995-08	10	6	I	32	32	0	Syringodium filiforme	32
1995-08	10	6	P	12	12	0	Syringodium filiforme	12
1995-08	10	7	I	76	76	0	Syringodium filiforme	76
1995-08	10	7	P	52	52	0	Syringodium filiforme	52
1995-08	10	8	I	96	4	96	Caulerpa prolifera	96
1995-08	10	8	I	96	4	96	Halodule wrightii	1
1995-08	10	8	I	96	4	96	Halophila englemannii	1
1995-08	10	8	P	60	60	0	Halodule wrightii	1
1995-08	10	8	P	60	60	0	Syringodium filiforme	59
1995-08	10	9	I	87	87	0	Halodule wrightii	1
1995-08	10	9	I	87	87	0	Syringodium filiforme	87
1995-08	10	9	P	88	88	0	Syringodium filiforme	88
1995-08	10	10	I	75	75	0	Syringodium filiforme	75
1995-08	10	10	P	95	95	0	Halodule wrightii	1
1995-08	10	10	P	95	95	0	Syringodium filiforme	95
1995-10	10	1	I	0	0	0	Bare	0
1995-10	10	1	P	0	0	0	Bare	0
1995-10	10	2	I	65	65	0	Syringodium filiforme	65

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1995-10	10	2	P	21	21	0	Syringodium filiforme	21
1995-10	10	3	I	53	53	0	Syringodium filiforme	53
1995-10	10	3	P	45	45	0	Syringodium filiforme	45
1995-10	10	4	I	28	28	0	Syringodium filiforme	28
1995-10	10	4	P	60	60	0	Syringodium filiforme	60
1995-10	10	5	I	58	58	0	Syringodium filiforme	58
1995-10	10	5	P	38	38	0	Syringodium filiforme	38
1995-10	10	6	I	95	95	0	Syringodium filiforme	95
1995-10	10	6	P	50	50	0	Syringodium filiforme	50
1995-10	10	7	I	23	23	0	Syringodium filiforme	23
1995-10	10	7	P	64	64	0	Syringodium filiforme	64
1995-10	10	8	I	72	72	0	Syringodium filiforme	72
1995-10	10	8	P	95	95	0	Syringodium filiforme	95
1995-10	10	9	I	78	78	0	Syringodium filiforme	78
1995-10	10	9	P	24	24	0	Syringodium filiforme	24
1995-10	10	10	I	82	82	0	Syringodium filiforme	82
1995-10	10	10	P	17	17	0	Syringodium filiforme	17
1993-12	11	1	I	100	100	0	Syringodium filiforme	100
1993-12	11	1	P	99	99	0	Syringodium filiforme	99
1993-12	11	2	I	100	100	0	Syringodium filiforme	100
1993-12	11	2	P	100	100	0	Halophila englemannii	1
1993-12	11	2	P	100	100	0	Syringodium filiforme	100
1993-12	11	3	I	99	99	0	Syringodium filiforme	99
1993-12	11	3	P	97	97	0	Syringodium filiforme	97
1993-12	11	4	I	100	100	0	Syringodium filiforme	100
1993-12	11	4	P	98	98	0	Syringodium filiforme	98
1993-12	11	5	I	94	94	0	Syringodium filiforme	94
1993-12	11	5	P	100	100	0	Syringodium filiforme	100
1993-12	11	6	I	95	95	0	Syringodium filiforme	95
1993-12	11	6	P	93	93	0	Halophila englemannii	2
1993-12	11	6	P	93	93	0	Syringodium filiforme	93
1993-12	11	7	I	95	95	0	Syringodium filiforme	95
1993-12	11	7	P	100	100	0	Syringodium filiforme	100
1993-12	11	8	I	100	100	0	Syringodium filiforme	100
1993-12	11	8	P	100	100	0	Syringodium filiforme	100
1993-12	11	9	I	100	100	0	Syringodium filiforme	100
1993-12	11	9	P	100	100	0	Syringodium filiforme	100
1993-12	11	10	I	100	100	0	Syringodium filiforme	100
1993-12	11	10	P	96	96	0	Syringodium filiforme	96
1994-08	11	1	I	100	100	0	Syringodium filiforme	100
1994-08	11	1	P	98	98	0	Halophila englemannii	2
1994-08	11	1	P	98	98	0	Syringodium filiforme	98
1994-08	11	2	I	100	100	0	Syringodium filiforme	100
1994-08	11	2	P	100	100	0	Syringodium filiforme	100
1994-08	11	3	I	100	100	0	Syringodium filiforme	100
1994-08	11	3	P	100	100	0	Syringodium filiforme	100
1994-08	11	4	I	100	100	0	Syringodium filiforme	100
1994-08	11	4	P	100	100	0	Syringodium filiforme	100
1994-08	11	5	I	100	100	0	Syringodium filiforme	100
1994-08	11	5	P	100	100	0	Syringodium filiforme	100
1994-08	11	6	I	100	100	0	Syringodium filiforme	100
1994-08	11	6	P	100	100	0	Syringodium filiforme	100
1994-08	11	7	I	100	100	0	Syringodium filiforme	100
1994-08	11	7	P	100	100	0	Syringodium filiforme	100
1994-08	11	8	I	100	100	0	Syringodium filiforme	100
1994-08	11	8	P	100	100	0	Syringodium filiforme	100

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-08	11	9	I	100	100	0	Syringodium filiforme	100
1994-08	11	9	P	100	100	0	Syringodium filiforme	100
1994-08	11	10	I	100	100	0	Syringodium filiforme	100
1994-08	11	10	P	100	100	0	Syringodium filiforme	100
1994-10	11	1	I	100	100	0	Syringodium filiforme	100
1994-10	11	1	P	100	100	0	Syringodium filiforme	100
1994-10	11	2	I	100	100	0	Syringodium filiforme	100
1994-10	11	2	P	100	100	0	Syringodium filiforme	100
1994-10	11	3	I	100	100	0	Syringodium filiforme	100
1994-10	11	3	P	100	100	0	Syringodium filiforme	100
1994-10	11	4	I	100	100	0	Syringodium filiforme	100
1994-10	11	4	P	99	99	0	Syringodium filiforme	99
1994-10	11	5	I	100	100	0	Syringodium filiforme	100
1994-10	11	5	P	100	100	0	Syringodium filiforme	100
1994-10	11	6	I	100	100	0	Syringodium filiforme	100
1994-10	11	6	P	100	100	0	Syringodium filiforme	100
1994-10	11	7	I	100	100	0	Syringodium filiforme	100
1994-10	11	7	P	99	99	0	Syringodium filiforme	99
1994-10	11	8	I	100	100	0	Syringodium filiforme	100
1994-10	11	8	P	100	100	0	Syringodium filiforme	100
1994-10	11	9	I	100	100	0	Syringodium filiforme	100
1994-10	11	9	P	100	100	0	Syringodium filiforme	100
1994-10	11	10	I	100	100	0	Syringodium filiforme	100
1994-10	11	10	P	100	100	0	Syringodium filiforme	100
1995-08	11	1	I	90	90	0	Syringodium filiforme	90
1995-08	11	1	P	100	100	0	Syringodium filiforme	100
1995-08	11	2	I	100	100	0	Syringodium filiforme	100
1995-08	11	2	P	100	100	0	Syringodium filiforme	100
1995-08	11	3	I	100	100	0	Syringodium filiforme	100
1995-08	11	3	P	100	100	0	Syringodium filiforme	100
1995-08	11	4	I	100	100	0	Syringodium filiforme	100
1995-08	11	4	P	100	100	0	Syringodium filiforme	100
1995-08	11	5	I	100	100	0	Syringodium filiforme	100
1995-08	11	5	P	100	100	0	Syringodium filiforme	100
1995-08	11	6	I	100	100	0	Syringodium filiforme	100
1995-08	11	6	P	99	99	0	Syringodium filiforme	99
1995-08	11	7	I	100	100	0	Syringodium filiforme	100
1995-08	11	7	P	100	100	0	Syringodium filiforme	100
1995-08	11	8	I	98	98	0	Syringodium filiforme	98
1995-08	11	8	P	99	99	0	Syringodium filiforme	99
1995-08	11	9	I	100	100	0	Syringodium filiforme	100
1995-08	11	9	P	100	100	0	Syringodium filiforme	100
1995-08	11	10	I	100	100	0	Syringodium filiforme	100
1995-08	11	10	P	100	100	0	Syringodium filiforme	100
1995-10	11	1	I	95	95	0	Syringodium filiforme	95
1995-10	11	1	P	80	80	0	Syringodium filiforme	80
1995-10	11	2	I	96	96	0	Syringodium filiforme	96
1995-10	11	2	P	100	100	0	Syringodium filiforme	100
1995-10	11	3	I	100	100	0	Syringodium filiforme	100
1995-10	11	3	P	100	100	0	Syringodium filiforme	100
1995-10	11	4	I	100	100	0	Syringodium filiforme	100
1995-10	11	4	P	100	100	0	Syringodium filiforme	100
1995-10	11	5	I	96	96	0	Syringodium filiforme	96
1995-10	11	5	P	100	100	0	Syringodium filiforme	100
1995-10	11	6	I	97	97	0	Syringodium filiforme	97
1995-10	11	6	P	96	96	0	Syringodium filiforme	96

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1995-10	11	7	I	100	100	0	Syringodium filiforme	100
1995-10	11	7	P	100	100	0	Syringodium filiforme	100
1995-10	11	8	I	100	100	0	Syringodium filiforme	100
1995-10	11	8	P	100	100	0	Syringodium filiforme	100
1995-10	11	9	I	100	100	0	Syringodium filiforme	100
1995-10	11	9	P	100	100	0	Syringodium filiforme	100
1995-10	11	10	I	100	100	0	Syringodium filiforme	100
1995-10	11	10	P	97	97	0	Syringodium filiforme	97
1993-12	12	1	I	100	100	0	Halodule wrightii	100
1993-12	12	1	I	100	100	0	Syringodium filiforme	100
1993-12	12	1	P	88	88	0	Syringodium filiforme	88
1993-12	12	2	I	98	92	6	Caulerpa prolifera	6
1993-12	12	2	I	98	92	6	Syringodium filiforme	92
1993-12	12	2	P	88	88	0	Syringodium filiforme	88
1993-12	12	3	I	70	68	2	Caulerpa prolifera	2
1993-12	12	3	I	70	68	2	Halodule wrightii	34
1993-12	12	3	I	70	68	2	Syringodium filiforme	34
1993-12	12	3	P	89	88	1	Caulerpa prolifera	1
1993-12	12	3	P	89	88	1	Syringodium filiforme	88
1993-12	12	4	I	100	80	20	Caulerpa prolifera	20
1993-12	12	4	I	100	80	20	Syringodium filiforme	80
1993-12	12	4	P	88	66	12	Caulerpa prolifera	12
1993-12	12	4	P	88	66	12	Syringodium filiforme	66
1993-12	12	5	I	97	97	0	Syringodium filiforme	97
1993-12	12	5	P	94	93	1	Caulerpa prolifera	1
1993-12	12	5	P	94	93	1	Syringodium filiforme	93
1993-12	12	6	I	100	99	1	Caulerpa prolifera	1
1993-12	12	6	I	100	99	1	Syringodium filiforme	99
1993-12	12	6	P	96	96	0	Syringodium filiforme	96
1993-12	12	7	I	97	97	0	Syringodium filiforme	97
1993-12	12	7	P	95	95	0	Syringodium filiforme	95
1993-12	12	8	I	89	89	0	Syringodium filiforme	89
1993-12	12	8	P	95	95	0	Syringodium filiforme	95
1993-12	12	9	I	96	96	0	Syringodium filiforme	96
1993-12	12	9	P	78	78	0	Syringodium filiforme	78
1993-12	12	10	I	98	98	0	Syringodium filiforme	98
1993-12	12	10	P	92	92	0	Syringodium filiforme	92
1994-08	12	1	I	100	100	0	Syringodium filiforme	100
1994-08	12	1	P	100	100	0	Syringodium filiforme	100
1994-08	12	2	I	100	100	0	Syringodium filiforme	100
1994-08	12	2	P	100	100	0	Syringodium filiforme	100
1994-08	12	3	I	99	99	0	Syringodium filiforme	99
1994-08	12	3	P	99	99	0	Syringodium filiforme	99
1994-08	12	4	I	90	90	0	Syringodium filiforme	90
1994-08	12	4	P	90	90	0	Syringodium filiforme	90
1994-08	12	5	I	70	70	0	Syringodium filiforme	70
1994-08	12	5	P	100	100	0	Syringodium filiforme	100
1994-08	12	6	I	100	100	0	Syringodium filiforme	100
1994-08	12	6	P	100	100	0	Syringodium filiforme	100
1994-08	12	7	I	100	100	0	Syringodium filiforme	100
1994-08	12	7	P	100	100	0	Syringodium filiforme	100
1994-08	12	8	I	100	100	0	Syringodium filiforme	100
1994-08	12	8	P	100	100	0	Syringodium filiforme	100
1994-08	12	9	I	100	100	0	Syringodium filiforme	100
1994-08	12	9	P	100	100	0	Syringodium filiforme	100
1994-08	12	10	I	96	96	0	Syringodium filiforme	96

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-08	12	10	P	100	100	0	Syringodium filiforme	100
1994-10	12	1	I	100	100	0	Syringodium filiforme	100
1994-10	12	1	P	98	98	0	Syringodium filiforme	98
1994-10	12	2	I	100	100	0	Syringodium filiforme	100
1994-10	12	2	P	99	99	0	Syringodium filiforme	99
1994-10	12	3	I	93	93	3	Caulerpa prolifera	3
1994-10	12	3	I	93	93	3	Syringodium filiforme	93
1994-10	12	3	P	92	92	2	Caulerpa prolifera	2
1994-10	12	3	P	92	92	2	Halodule wrightii	25
1994-10	12	3	P	92	92	2	Syringodium filiforme	65
1994-10	12	4	I	90	90	0	Syringodium filiforme	90
1994-10	12	4	P	100	100	0	Syringodium filiforme	100
1994-10	12	5	I	100	100	0	Syringodium filiforme	100
1994-10	12	5	P	100	100	0	Syringodium filiforme	100
1994-10	12	6	I	100	100	0	Syringodium filiforme	100
1994-10	12	6	P	100	100	0	Syringodium filiforme	100
1994-10	12	7	I	100	100	2	Caulerpa prolifera	2
1994-10	12	7	I	100	100	2	Syringodium filiforme	100
1994-10	12	7	P	100	100	3	Caulerpa prolifera	3
1994-10	12	7	P	100	100	3	Syringodium filiforme	100
1994-10	12	8	I	100	100	0	Syringodium filiforme	100
1994-10	12	8	P	100	100	0	Syringodium filiforme	100
1994-10	12	9	I	100	100	0	Syringodium filiforme	100
1994-10	12	9	P	21	21	0	Syringodium filiforme	21
1994-10	12	10	I	100	100	0	Syringodium filiforme	100
1994-10	12	10	P	100	100	0	Syringodium filiforme	100
1995-08	12	1	I	81	81	0	Syringodium filiforme	81
1995-08	12	1	P	88	88	0	Syringodium filiforme	88
1995-08	12	2	I	100	100	0	Syringodium filiforme	100
1995-08	12	2	P	92	92	0	Syringodium filiforme	92
1995-08	12	3	I	100	100	0	Syringodium filiforme	100
1995-08	12	3	P	98	98	0	Syringodium filiforme	98
1995-08	12	4	I	98	98	0	Syringodium filiforme	98
1995-08	12	4	P	100	100	0	Syringodium filiforme	100
1995-08	12	5	I	97	97	0	Syringodium filiforme	97
1995-08	12	5	P	94	94	0	Syringodium filiforme	94
1995-08	12	6	I	92	92	0	Syringodium filiforme	92
1995-08	12	6	P	94	94	0	Syringodium filiforme	94
1995-08	12	7	I	92	92	0	Syringodium filiforme	92
1995-08	12	7	P	100	100	0	Syringodium filiforme	100
1995-08	12	8	I	97	97	0	Syringodium filiforme	97
1995-08	12	8	P	92	92	0	Syringodium filiforme	92
1995-08	12	9	I	96	96	0	Syringodium filiforme	96
1995-08	12	9	P	97	97	0	Syringodium filiforme	97
1995-08	12	10	I	96	96	0	Syringodium filiforme	96
1995-08	12	10	P	97	97	0	Syringodium filiforme	97
1995-10	12	1	I	90	90	0	Syringodium filiforme	90
1995-10	12	1	P	80	80	0	Syringodium filiforme	80
1995-10	12	2	I	92	92	1	Caulerpa prolifera	1
1995-10	12	2	I	92	92	1	Syringodium filiforme	92
1995-10	12	2	P	30	30	1	Caulerpa prolifera	1
1995-10	12	2	P	30	30	1	Syringodium filiforme	30
1995-10	12	3	I	96	96	1	Caulerpa prolifera	1
1995-10	12	3	I	96	96	1	Syringodium filiforme	96
1995-10	12	3	P	100	100	0	Syringodium filiforme	100
1995-10	12	4	I	100	100	0	Syringodium filiforme	100

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1995-10	12	4	P	100	100	0	Syringodium filiforme	100
1995-10	12	5	I	97	97	0	Syringodium filiforme	97
1995-10	12	5	P	94	94	0	Syringodium filiforme	94
1995-10	12	6	I	97	97	0	Syringodium filiforme	97
1995-10	12	6	P	100	100	0	Syringodium filiforme	100
1995-10	12	7	I	95	95	0	Syringodium filiforme	95
1995-10	12	7	P	85	85	0	Syringodium filiforme	85
1995-10	12	8	I	88	88	0	Syringodium filiforme	88
1995-10	12	8	P	92	92	0	Syringodium filiforme	92
1995-10	12	9	I	95	95	0	Syringodium filiforme	95
1995-10	12	9	P	94	94	0	Syringodium filiforme	94
1995-10	12	10	I	98	98	0	Syringodium filiforme	98
1995-10	12	10	P	91	91	0	Syringodium filiforme	91
1993-12	13	1	I	96	96	15	Caulerpa prolifera	15
1993-12	13	1	I	96	96	15	Halodule wrightii	96
1993-12	13	1	I	96	96	15	Thalassia testudinum	5
1993-12	13	1	P	82	76	6	Caulerpa prolifera	6
1993-12	13	1	P	82	76	6	Halodule wrightii	78
1993-12	13	2	I	94	10	84	Caulerpa mexicana	78
1993-12	13	2	I	94	10	84	Caulerpa prolifera	6
1993-12	13	2	I	94	10	84	Thalassia testudinum	10
1993-12	13	2	P	68	55	13	Caulerpa mexicana	13
1993-12	13	2	P	68	55	13	Halodule wrightii	55
1993-12	13	2	P	68	55	13	Thalassia testudinum	3
1993-12	13	3	I	53	16	37	Caulerpa mexicana	37
1993-12	13	3	I	53	16	37	Thalassia testudinum	16
1993-12	13	3	P	55	0	55	Caulerpa mexicana	55
1993-12	13	4	I	97	0	97	Caulerpa mexicana	27
1993-12	13	4	I	97	0	97	Caulerpa prolifera	70
1993-12	13	4	P	100	0	100	Caulerpa mexicana	20
1993-12	13	4	P	100	0	100	Caulerpa prolifera	80
1993-12	13	5	I	50	0	50	Caulerpa mexicana	30
1993-12	13	5	I	50	0	50	Caulerpa prolifera	20
1993-12	13	5	P	72	0	72	Caulerpa mexicana	72
1993-12	13	6	I	90	0	90	Caulerpa mexicana	10
1993-12	13	6	I	90	0	90	Caulerpa prolifera	80
1993-12	13	6	P	60	0	60	Caulerpa mexicana	60
1993-12	13	7	I	70	0	70	Caulerpa prolifera	70
1993-12	13	7	P	70	0	70	Caulerpa prolifera	70
1993-12	13	8	I	42	0	42	Caulerpa prolifera	42
1993-12	13	8	P	40	0	40	Caulerpa mexicana	40
1993-12	13	9	I	95	0	95	Caulerpa mexicana	95
1993-12	13	9	P	60	20	40	Caulerpa mexicana	40
1993-12	13	9	P	60	20	40	Halodule wrightii	20
1993-12	13	10	I	90	0	90	Caulerpa mexicana	90
1993-12	13	10	P	85	75	10	Caulerpa prolifera	10
1993-12	13	10	P	85	75	10	Halodule wrightii	75
1994-08	13	1	P/I	99	0	99	Caulerpa prolifera	99
1994-08	13	2	P/I	65	1	66	Caulerpa prolifera	65
1994-08	13	2	P/I	65	1	66	Thalassia testudinum	1
1994-08	13	3	P/I	74	74	0	Thalassia testudinum	74
1994-08	13	4	P/I	95	7	88	Caulerpa prolifera	88
1994-08	13	4	P/I	95	7	88	Thalassia testudinum	7
1994-08	13	5	P/I	28	0	28	Caulerpa mexicana	7
1994-08	13	5	P/I	28	0	28	Caulerpa prolifera	21
1994-08	13	6	P/I	65	31	34	Caulerpa mexicana	16

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-08	13	6	P/I	65	31	34	Caulerpa prolifera	18
1994-08	13	6	P/I	65	31	34	Halophila englemannii	21
1994-08	13	6	P/I	65	31	34	Thalassia testudinum	10
1994-08	13	7	P/I	87	0	87	Caulerpa mexicana	87
1994-08	13	8	P/I	56	0	56	Caulerpa mexicana	56
1994-08	13	9	P/I	97	0	97	Caulerpa prolifera	97
1994-08	13	10	P/I	94	0	94	Caulerpa prolifera	94
1994-08	13	11	P/I	96	96	18	Caulerpa prolifera	18
1994-08	13	11	P/I	96	96	18	Halodule wrightii	41
1994-08	13	11	P/I	96	96	18	Thalassia testudinum	55
1994-08	13	12	P/I	100	61	65	Caulerpa mexicana	8
1994-08	13	12	P/I	100	61	65	Caulerpa prolifera	57
1994-08	13	12	P/I	100	61	65	Thalassia testudinum	61
1994-08	13	13	P/I	87	67	16	Caulerpa mexicana	9
1994-08	13	13	P/I	87	67	16	Caulerpa prolifera	7
1994-08	13	13	P/I	87	67	16	Halodule wrightii	15
1994-08	13	13	P/I	87	67	16	Thalassia testudinum	42
1994-08	13	14	P/I	100	0	100	Caulerpa mexicana	100
1994-08	13	14	P/I	100	0	100	Caulerpa prolifera	29
1994-08	13	15	P/I	100	0	100	Caulerpa mexicana	100
1994-08	13	15	P/I	100	0	100	Caulerpa prolifera	2
1994-10	13	1	I	99	81	18	Caulerpa mexicana	18
1994-10	13	1	I	99	81	18	Halodule wrightii	1
1994-10	13	1	I	99	81	18	Thalassia testudinum	81
1994-10	13	1	P	99	90	77	Caulerpa prolifera	77
1994-10	13	1	P	99	90	77	Halodule wrightii	90
1994-10	13	2	I	96	96	8	Caulerpa mexicana	8
1994-10	13	2	I	96	96	8	Thalassia testudinum	96
1994-10	13	2	P	96	80	69	Caulerpa mexicana	60
1994-10	13	2	P	96	80	69	Caulerpa prolifera	9
1994-10	13	2	P	96	80	69	Halodule wrightii	8
1994-10	13	2	P	96	80	69	Thalassia testudinum	72
1994-10	13	3	I	72	8	64	Caulerpa mexicana	64
1994-10	13	3	I	72	8	64	Thalassia testudinum	8
1994-10	13	3	P	94	23	84	Caulerpa mexicana	52
1994-10	13	3	P	94	23	84	Caulerpa prolifera	32
1994-10	13	3	P	94	23	84	Halodule wrightii	11
1994-10	13	3	P	94	23	84	Thalassia testudinum	12
1994-10	13	4	I	68	57	11	Caulerpa mexicana	1
1994-10	13	4	I	68	57	11	Caulerpa prolifera	10
1994-10	13	4	I	68	57	11	Halodule wrightii	57
1994-10	13	4	P	92	0	92	Caulerpa mexicana	78
1994-10	13	4	P	92	0	92	Caulerpa prolifera	16
1994-10	13	5	P	25	25	5	Caulerpa prolifera	5
1994-10	13	5	P	25	25	5	Halodule wrightii	25
1994-10	13	6	P	70	60	19	Caulerpa mexicana	4
1994-10	13	6	P	70	60	19	Caulerpa prolifera	15
1994-10	13	6	P	70	60	19	Halodule wrightii	59
1994-10	13	6	P	70	60	19	Halophila englemannii	1
1994-10	13	7	I	40	40	7	Caulerpa mexicana	1
1994-10	13	7	I	40	40	7	Caulerpa prolifera	6
1994-10	13	7	I	40	40	7	Halodule wrightii	40
1994-10	13	7	P	70	70	6	Caulerpa mexicana	6
1994-10	13	7	P	70	70	6	Halodule wrightii	70
1994-10	13	7	P	70	70	6	Halophila englemannii	1
1994-10	13	8	I	20	20	10	Caulerpa mexicana	10

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-10	13	8	I	20	20	10	Halodule wrightii	20
1994-10	13	8	P	80	80	10	Caulerpa mexicana	5
1994-10	13	8	P	80	80	10	Caulerpa prolifera	5
1994-10	13	8	P	80	80	10	Halodule wrightii	80
1994-10	13	9	I	30	30	0	Halodule wrightii	30
1994-10	13	9	I	30	30	0	Halophila englemannii	5
1994-10	13	9	P	83	83	0	Halodule wrightii	83
1994-10	13	10	I	50	50	1	Caulerpa mexicana	1
1994-10	13	10	I	50	50	1	Halodule wrightii	40
1994-10	13	10	I	50	50	1	Halophila englemannii	10
1994-10	13	10	P	20	20	10	Caulerpa prolifera	10
1994-10	13	10	P	20	20	10	Halodule wrightii	20
1995-08	13	1	I	100	100	29	Caulerpa mexicana	9
1995-08	13	1	I	100	100	29	Caulerpa prolifera	20
1995-08	13	1	I	100	100	29	Halodule wrightii	100
1995-08	13	1	P	100	100	33	Caulerpa mexicana	8
1995-08	13	1	P	100	100	33	Caulerpa prolifera	29
1995-08	13	1	P	100	100	33	Halodule wrightii	100
1995-08	13	2	I	99	99	21	Caulerpa mexicana	1
1995-08	13	2	I	99	99	21	Caulerpa prolifera	21
1995-08	13	2	I	99	99	21	Halodule wrightii	99
1995-08	13	2	P	86	86	68	Caulerpa mexicana	8
1995-08	13	2	P	86	86	68	Caulerpa prolifera	60
1995-08	13	2	P	86	86	68	Halodule wrightii	86
1995-08	13	3	I	93	9	93	Caulerpa prolifera	93
1995-08	13	3	I	93	9	93	Halophila englemannii	9
1995-08	13	3	P	51	3	51	Caulerpa prolifera	51
1995-08	13	3	P	51	3	51	Halodule wrightii	3
1995-08	13	4	I	100	3	100	Caulerpa mexicana	2
1995-08	13	4	I	100	3	100	Caulerpa prolifera	100
1995-08	13	4	I	100	3	100	Halodule wrightii	3
1995-08	13	4	P	84	6	84	Caulerpa mexicana	3
1995-08	13	4	P	84	6	84	Caulerpa prolifera	84
1995-08	13	4	P	84	6	84	Halodule wrightii	6
1995-08	13	5	I	87	4	85	Caulerpa prolifera	85
1995-08	13	5	I	87	4	85	Halodule wrightii	4
1995-08	13	5	P	88	9	88	Caulerpa mexicana	14
1995-08	13	5	P	88	9	88	Caulerpa prolifera	88
1995-08	13	5	P	88	9	88	Halodule wrightii	9
1995-08	13	6	I	74	4	70	Caulerpa mexicana	60
1995-08	13	6	I	74	4	70	Caulerpa prolifera	10
1995-08	13	6	I	74	4	70	Halophila englemannii	4
1995-08	13	6	P	90	0	90	Caulerpa prolifera	90
1995-08	13	7	I	66	5	61	Caulerpa prolifera	61
1995-08	13	7	I	66	5	61	Halodule wrightii	5
1995-08	13	7	P	30	5	25	Caulerpa mexicana	5
1995-08	13	7	P	30	5	25	Caulerpa prolifera	20
1995-08	13	7	P	30	5	25	Halodule wrightii	5
1995-08	13	8	I	96	0	96	Caulerpa prolifera	96
1995-08	13	8	P	90	90	90	Caulerpa prolifera	90
1995-08	13	8	P	90	90	90	Halodule wrightii	90
1995-08	13	9	I	73	2	71	Caulerpa prolifera	71
1995-08	13	9	I	73	2	71	Halodule wrightii	2
1995-08	13	9	P	41	0	41	Caulerpa mexicana	3
1995-08	13	9	P	41	0	41	Caulerpa prolifera	38
1995-08	13	10	I	35	5	30	Caulerpa mexicana	30

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1995-08	13	10	I	35	5	30	Thalassia testudinum	5
1995-08	13	10	P	66	8	58	Caulerpa mexicana	50
1995-08	13	10	P	66	8	58	Caulerpa prolifera	8
1995-08	13	10	P	66	8	58	Halodule wrightii	5
1995-08	13	10	P	66	8	58	Halophila englemannii	3
1995-10	13	1	I	2	0	2	Caulerpa prolifera	2
1995-10	13	1	P	20	16	4	Caulerpa mexicana	4
1995-10	13	1	P	20	16	4	Halodule wrightii	16
1995-10	13	2	I	18	0	18	Caulerpa mexicana	15
1995-10	13	2	I	18	0	18	Caulerpa prolifera	3
1995-10	13	2	P	40	0	40	Caulerpa mexicana	30
1995-10	13	2	P	40	0	40	Caulerpa prolifera	10
1995-10	13	3	I	74	0	74	Caulerpa prolifera	74
1995-10	13	3	P	30	0	30	Caulerpa prolifera	30
1995-10	13	4	I	79	0	79	Caulerpa mexicana	14
1995-10	13	4	I	79	0	79	Caulerpa prolifera	79
1995-10	13	4	P	20	0	20	Caulerpa prolifera	20
1995-10	13	5	I	85	0	85	Caulerpa mexicana	83
1995-10	13	5	I	85	0	85	Caulerpa prolifera	2
1995-10	13	5	P	96	77	71	Caulerpa prolifera	71
1995-10	13	5	P	96	77	71	Halodule wrightii	77
1995-10	13	6	I	26	3	23	Caulerpa prolifera	23
1995-10	13	6	I	26	3	23	Halodule wrightii	3
1995-10	13	6	P	32	0	32	Caulerpa prolifera	32
1995-10	13	7	I	86	3	86	Caulerpa prolifera	86
1995-10	13	7	I	86	3	86	Halodule wrightii	3
1995-10	13	7	P	90	0	90	Caulerpa prolifera	90
1995-10	13	8	I	89	0	89	Caulerpa prolifera	89
1995-10	13	8	P	90	18	72	Caulerpa prolifera	72
1995-10	13	8	P	90	18	72	Thalassia testudinum	18
1995-10	13	9	I	76	0	76	Caulerpa prolifera	76
1995-10	13	9	P	100	20	80	Caulerpa mexicana	2
1995-10	13	9	P	100	20	80	Caulerpa prolifera	80
1995-10	13	9	P	100	20	80	Halodule wrightii	20
1993-12	14	1	I	69	69	0	Halodule wrightii	69
1993-12	14	1	P	100	100	0	Halodule wrightii	100
1993-12	14	2	I	98	98	0	Halodule wrightii	98
1993-12	14	2	P	100	100	0	Halodule wrightii	100
1993-12	14	3	I	95	95	0	Halodule wrightii	95
1993-12	14	3	P	82	82	0	Halodule wrightii	82
1993-12	14	4	I	97	97	0	Halodule wrightii	97
1993-12	14	4	P	73	73	0	Halodule wrightii	73
1993-12	14	5	I	95	95	0	Halodule wrightii	95
1993-12	14	5	P	95	95	0	Halodule wrightii	95
1993-12	14	6	I	93	93	2	Caulerpa prolifera	2
1993-12	14	6	I	93	93	2	Halodule wrightii	91
1993-12	14	6	P	97	97	0	Halodule wrightii	97
1993-12	14	7	I	93	93	0	Halodule wrightii	93
1993-12	14	7	P	96	96	0	Halodule wrightii	96
1993-12	14	8	I	95	95	0	Halodule wrightii	95
1993-12	14	8	P	89	89	0	Halodule wrightii	89
1993-12	14	9	I	83	83	0	Halodule wrightii	3
1993-12	14	9	I	83	83	0	Thalassia testudinum	83
1993-12	14	9	P	77	77	0	Thalassia testudinum	77
1993-12	14	10	I	100	100	0	Halodule wrightii	100
1993-12	14	10	P	98	98	0	Halodule wrightii	98

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1994-08	14	1	I	97	97	4	Halimeda incrassata	4
1994-08	14	1	I	97	97	4	Halodule wrightii	97
1994-08	14	1	P	91	91	0	Halodule wrightii	89
1994-08	14	1	P	91	91	0	Thalassia testudinum	2
1994-08	14	2	I	77	77	0	Halodule wrightii	77
1994-08	14	2	P	92	92	0	Halodule wrightii	92
1994-08	14	3	I	85	85	0	Halodule wrightii	85
1994-08	14	3	P	90	90	0	Halodule wrightii	90
1994-08	14	4	I	97	97	0	Halodule wrightii	97
1994-08	14	4	P	81	81	0	Halodule wrightii	81
1994-08	14	5	I	13	13	0	Halodule wrightii	13
1994-08	14	5	P	93	93	0	Halodule wrightii	93
1994-08	14	6	I	100	100	0	Halodule wrightii	100
1994-08	14	6	P	100	100	0	Halodule wrightii	100
1994-08	14	7	I	100	100	0	Halodule wrightii	100
1994-08	14	7	P	100	100	0	Halodule wrightii	100
1994-08	14	8	I	100	100	0	Halodule wrightii	100
1994-08	14	8	P	100	100	0	Halodule wrightii	100
1994-08	14	9	I	100	100	0	Halodule wrightii	100
1994-08	14	9	P	90	90	0	Thalassia testudinum	90
1994-08	14	10	I	100	100	0	Halodule wrightii	100
1994-08	14	10	P	11	11	0	Thalassia testudinum	89
1994-10	14	1	I	84	84	0	Halodule wrightii	84
1994-10	14	1	P	96	96	0	Halodule wrightii	96
1994-10	14	2	I	72	72	0	Halodule wrightii	72
1994-10	14	2	I	72	72	0	Thalassia testudinum	2
1994-10	14	2	P	91	91	0	Thalassia testudinum	91
1994-10	14	3	I	84	84	0	Halodule wrightii	84
1994-10	14	3	P	67	67	0	Halodule wrightii	67
1994-10	14	4	I	99	99	0	Halodule wrightii	99
1994-10	14	4	P	96	96	0	Halodule wrightii	96
1994-10	14	5	I	97	97	0	Halodule wrightii	97
1994-10	14	5	P	99	99	0	Halodule wrightii	99
1994-10	14	6	I	98	98	0	Halodule wrightii	98
1994-10	14	6	P	95	95	0	Halodule wrightii	95
1994-10	14	7	I	97	97	0	Halodule wrightii	97
1994-10	14	7	P	76	76	0	Halodule wrightii	76
1994-10	14	8	I	86	86	0	Halodule wrightii	86
1994-10	14	8	P	87	88	1	Caulerpa prolifera	1
1994-10	14	8	P	87	88	1	Halodule wrightii	87
1994-10	14	9	I	88	88	0	Halodule wrightii	88
1994-10	14	9	P	88	88	0	Halodule wrightii	88
1994-10	14	10	I	91	91	0	Halodule wrightii	91
1994-10	14	10	P	79	79	0	Halodule wrightii	79
1995-08	14	1	I	63	63	0	Halodule wrightii	63
1995-08	14	1	P	72	72	0	Halodule wrightii	72
1995-08	14	2	I	99	99	0	Halodule wrightii	99
1995-08	14	2	P	90	90	0	Halodule wrightii	90
1995-08	14	3	I	98	98	0	Halodule wrightii	98
1995-08	14	3	P	89	89	0	Halodule wrightii	89
1995-08	14	4	I	100	100	0	Halodule wrightii	100
1995-08	14	4	P	98	98	0	Halodule wrightii	98
1995-08	14	5	I	99	99	0	Halodule wrightii	99
1995-08	14	5	P	100	100	0	Halodule wrightii	100
1995-08	14	6	I	100	100	0	Halodule wrightii	100
1995-08	14	6	P	86	86	0	Halodule wrightii	86

Appendix Table IV. Continued.

Date	Station	Rep.	Perimeter/ Interior (P/I)	Total Vegetation	Total Seagrass	Total Algae	Species	Cover
1995-08	14	7	I	96	96	0	Halodule wrightii	96
1995-08	14	7	P	88	88	0	Halodule wrightii	88
1995-08	14	8	I	91	91	0	Halodule wrightii	42
1995-08	14	8	I	91	91	0	Thalassia testudinum	69
1995-08	14	8	P	99	99	0	Halodule wrightii	82
1995-08	14	8	P	99	99	0	Thalassia testudinum	22
1995-08	14	9	I	94	94	0	Thalassia testudinum	94
1995-08	14	9	P	95	95	0	Thalassia testudinum	95
1995-08	14	10	I	93	93	0	Thalassia testudinum	93
1995-08	14	10	P	95	95	0	Thalassia testudinum	95
1995-10	14	1	I	100	100	0	Halodule wrightii	100
1995-10	14	1	P	100	100	0	Halodule wrightii	100
1995-10	14	2	I	98	98	0	Halodule wrightii	98
1995-10	14	2	I	98	98	0	Thalassia testudinum	1
1995-10	14	2	P	94	94	0	Halodule wrightii	94
1995-10	14	3	I	98	98	0	Halodule wrightii	98
1995-10	14	3	P	100	100	0	Halodule wrightii	100
1995-10	14	4	I	30	30	0	Halodule wrightii	30
1995-10	14	4	P	0	0	0	Bare	0
1995-10	14	5	I	86	86	0	Halodule wrightii	86
1995-10	14	5	P	20	20	0	Halodule wrightii	20
1995-10	14	6	I	95	95	0	Halodule wrightii	95
1995-10	14	6	P	93	93	0	Halodule wrightii	93
1995-10	14	7	I	93	93	0	Halodule wrightii	93
1995-10	14	7	P	90	90	0	Halodule wrightii	90
1995-10	14	8	I	75	75	0	Halodule wrightii	40
1995-10	14	8	I	75	75	0	Thalassia testudinum	35
1995-10	14	8	P	75	75	0	Thalassia testudinum	75
1995-10	14	9	I	77	77	0	Halodule wrightii	77
1995-10	14	9	P	58	58	0	Halodule wrightii	58
1995-10	14	10	I	96	96	0	Halodule wrightii	96
1995-10	14	10	P	86	86	0	Halodule wrightii	86
1993-12	15	1	I	95	95	0	Thalassia testudinum	95
1993-12	15	1	P	90	90	0	Thalassia testudinum	90
1993-12	15	2	I	95	95	0	Thalassia testudinum	95
1993-12	15	2	P	88	88	0	Thalassia testudinum	88
1993-12	15	3	I	89	89	0	Halodule wrightii	18
1993-12	15	3	I	89	89	0	Thalassia testudinum	86
1993-12	15	3	P	28	28	0	Thalassia testudinum	28
1993-12	15	4	I	100	100	0	Halodule wrightii	100
1993-12	15	4	P	89	89	0	Halodule wrightii	89
1993-12	15	5	I	100	100	0	Halodule wrightii	100
1993-12	15	5	P	100	100	0	Halodule wrightii	100
1993-12	15	6	I	100	100	0	Halodule wrightii	100
1993-12	15	6	P	78	78	0	Halodule wrightii	78
1993-12	15	7	I	100	100	0	Halodule wrightii	100
1993-12	15	7	P	100	100	0	Halodule wrightii	100
1993-12	15	8	I	100	100	0	Halodule wrightii	100
1993-12	15	8	P	75	75	15	Caulerpa prolifera	15
1993-12	15	8	P	75	75	15	Halodule wrightii	75
1993-12	15	9	I	100	100	0	Halodule wrightii	100
1993-12	15	9	P	100	100	0	Halodule wrightii	100
1993-12	15	10	I	98	98	0	Halodule wrightii	98
1993-12	15	10	P	100	100	0	Halodule wrightii	100
1994-08	15	1	P	90	90	0	Halodule wrightii	90
1994-08	15	2	I	94	94	0	Halodule wrightii	94

Appendix Table V. Dry weight biomass from .25cmX.25cm quadrats.

Date	Station	Rep.	Spp.	Biomass (g)
1994	1	1	Halodule wrightii	1.53
1994	1	2	Halodule wrightii	1.66
1994	1	3	Halodule wrightii	.55
1994	1	4	Halodule wrightii	1.37
1994	1	5	Halodule wrightii	.98
1994	1	6	Halodule wrightii	3.74
1995	1	1	Halodule wrightii	.61
1995	1	2	Halodule wrightii	.26
1995	1	3	Halodule wrightii	1.05
1995	1	4	Halodule wrightii	1.43
1995	1	5	Halodule wrightii	.53
1995	1	6	Halodule wrightii	.67
1994	2	1	Halodule wrightii	.63
1994	2	2	Halodule wrightii	1.06
1994	2	3	Halodule wrightii	.70
1994	2	4	Halodule wrightii	.97
1994	2	5	Halodule wrightii	.87
1994	2	6	Halodule wrightii	.67
1995	2	1	Halodule wrightii	.30
1995	2	2	Halodule wrightii	.51
1995	2	3	Halodule wrightii	.08
1995	2	4	Halodule wrightii	.27
1995	2	5	Halodule wrightii	.53
1995	2	6	Halodule wrightii	.24
1994	3	1	Halodule wrightii	.48
1994	3	2	Halodule wrightii	.12
1994	3	3	Halodule wrightii	.56
1994	3	4	Halodule wrightii	.40
1994	3	5	Halodule wrightii	1.18
1994	3	6	Halodule wrightii	.39
1995	3	1	Halodule wrightii	.73
1995	3	2	Halodule wrightii	.19
1995	3	3	Halodule wrightii	.43
1995	3	4	Halodule wrightii	.61
1995	3	5	Halodule wrightii	.09
1995	3	6	Halodule wrightii	.49
1994	4	1	Drift Algae	4.96
1994	4	1	Syringodium filiforme	4.14
1994	4	2	Syringodium filiforme	1.51
1994	4	3	Syringodium filiforme	1.90
1994	4	4	Drift Algae	5.30
1994	4	4	Syringodium filiforme	2.76
1994	4	5	Syringodium filiforme	2.27
1994	4	6	Syringodium filiforme	3.49
1995	4	1	Halimeda	.43
1995	4	1	Syringodium filiforme	1.12
1995	4	2	Drift Algae	.63
1995	4	2	Syringodium filiforme	1.84
1995	4	3	Drift Algae	.05
1995	4	3	Syringodium filiforme	3.29

Appendix Table V. Continued.

Date	Station	Rep.	Spp.	Biomass (g)
1995	4	4	Syringodium filiforme	2.47
1995	4	5	Drift Algae	.08
1995	4	5	Syringodium filiforme	2.86
1995	4	6	Halimeda	.01
1995	4	6	Syringodium filiforme	1.62
1994	5	1	Halodule wrightii	.50
1994	5	2	Halodule wrightii	.16
1994	5	3	Halodule wrightii	1.13
1994	5	4	Halodule wrightii	.29
1994	5	5	Halodule wrightii	.35
1994	5	6	Halodule wrightii	.75
1995	5	1	None	.00
1995	5	2	Caulerpa mexicana	.15
1995	5	3	Caulerpa mexicana	.03
1995	5	4	Halodule wrightii	.06
1995	5	5	Halodule wrightii	.11
1995	5	6	Halodule wrightii	.05
1994	6	1	Halodule wrightii	1.15
1994	6	2	Halodule wrightii	.43
1994	6	3	Drift Algae	1.96
1994	6	3	Halodule wrightii	.70
1994	6	4	Halodule wrightii	2.04
1994	6	5	Halodule wrightii	.51
1994	6	6	Halodule wrightii	.83
1995	6	1	Drift Algae	.23
1995	6	1	Halodule wrightii	1.75
1995	6	2	Halodule wrightii	1.16
1995	6	3	Drift Algae	.85
1995	6	3	Halodule wrightii	3.77
1995	6	4	Halodule wrightii	1.24
1995	6	5	Halodule wrightii	2.22
1995	6	6	Drift Algae	.44
1995	6	6	Halodule wrightii	2.18
1995	6	6	Halophila englemannii	.15
1994	7	1	Halodule wrightii	.83
1994	7	2	Halodule wrightii	1.31
1994	7	3	Halodule wrightii	1.51
1994	7	4	Halodule wrightii	1.55
1994	7	4	Halophila englemannii	.19
1994	7	5	Halodule wrightii	.73
1994	7	5	Halophila englemannii	.69
1994	7	6	Halodule wrightii	.94
1995	7	1	Halodule wrightii	2.39
1995	7	2	Halodule wrightii	4.40
1995	7	3	Halodule wrightii	1.49
1995	7	4	Drift Algae	.51
1995	7	4	Halodule wrightii	1.92
1995	7	4	Halophila englemannii	.02
1995	7	5	Drift Algae	.36
1995	7	5	Halodule wrightii	.48

Appendix Table V. Continued.

Date	Station	Rep.	Spp.	Biomass (g)
1995	7	6	Drift Algae	.19
1995	7	6	Halodule wrightii	3.64
1994	8	1	Drift Algae	.56
1994	8	1	Halodule wrightii	1.25
1994	8	1	Halophila englemannii	.21
1994	8	1	Syringodium filiforme	3.66
1994	8	2	Drift Algae	.08
1994	8	2	Syringodium filiforme	5.74
1994	8	3	Drift Algae	2.23
1994	8	3	Halodule wrightii	1.18
1994	8	3	Halophila englemannii	.32
1994	8	3	Syringodium filiforme	.73
1994	8	4	Drift Algae	.18
1994	8	4	Halodule wrightii	2.03
1994	8	4	Halophila englemannii	.09
1994	8	5	Drift Algae	6.08
1994	8	5	Halodule wrightii	2.02
1994	8	5	Syringodium filiforme	.94
1994	8	6	Halodule wrightii	.99
1994	8	6	Halophila englemannii	.04
1994	8	6	Syringodium filiforme	1.44
1995	8	1	Drift Algae	1.05
1995	8	1	Syringodium filiforme	.54
1995	8	2	Drift Algae	1.65
1995	8	2	Syringodium filiforme	2.00
1995	8	3	Drift Algae	.68
1995	8	3	Syringodium filiforme	1.86
1995	8	4	None	.00
1995	8	5	Syringodium filiforme	.01
1995	8	6	Drift Algae	17.77
1995	8	6	Syringodium filiforme	.13
1994	9	1	Halophila englemannii	.11
1994	9	1	Syringodium filiforme	3.29
1994	9	2	Drift Algae	.11
1994	9	2	Halodule wrightii	.17
1994	9	2	Halophila englemannii	.56
1994	9	2	Syringodium filiforme	4.09
1994	9	3	Halophila englemannii	.38
1994	9	3	Syringodium filiforme	3.85
1994	9	4	Drift Algae	1.40
1994	9	4	Syringodium filiforme	5.52
1994	9	5	Drift Algae	.31
1994	9	5	Syringodium filiforme	5.58
1994	9	6	Halophila englemannii	.21
1994	9	6	Syringodium filiforme	4.61
1995	9	1	Caulerpa prolifera	.02
1995	9	1	Drift Algae	1.74
1995	9	1	Syringodium filiforme	2.05
1995	9	2	Caulerpa prolifera	.06
1995	9	2	Drift Algae	2.94

Appendix Table V. Continued.

Date	Station	Rep.	Spp.	Biomass (g)
1995	9	2	Halodule wrightii	.24
1995	9	2	Syringodium filiforme	.77
1995	9	3	Caulerpa prolifera	.01
1995	9	3	Drift Algae	1.24
1995	9	3	Syringodium filiforme	1.69
1995	9	4	Syringodium filiforme	1.81
1995	9	5	Drift Algae	1.34
1995	9	5	Syringodium filiforme	3.79
1995	9	6	Syringodium filiforme	2.84
1994	10	1	Caulerpa prolifera	.61
1994	10	1	Syringodium filiforme	4.41
1994	10	2	Caulerpa prolifera	.78
1994	10	2	Drift Algae	14.16
1994	10	2	Syringodium filiforme	5.23
1994	10	3	Caulerpa prolifera	2.80
1994	10	3	Syringodium filiforme	5.85
1994	10	4	Caulerpa prolifera	.52
1994	10	4	Syringodium filiforme	2.77
1994	10	5	Caulerpa prolifera	3.67
1994	10	5	Drift Algae	14.42
1994	10	5	Halophila englemannii	.24
1994	10	6	Caulerpa prolifera	.38
1994	10	6	Syringodium filiforme	2.06
1995	10	1	Caulerpa prolifera	1.65
1995	10	1	Drift Algae	5.99
1995	10	1	Halophila englemannii	.49
1995	10	1	Syringodium filiforme	1.86
1995	10	1	Udotea	.59
1995	10	2	Caulerpa prolifera	1.28
1995	10	2	Drift Algae	5.54
1995	10	2	Syringodium filiforme	3.29
1995	10	3	Drift Algae	17.06
1995	10	3	Syringodium filiforme	.86
1995	10	4	Drift Algae	19.32
1995	10	4	Syringodium filiforme	2.39
1995	10	5	Drift Algae	71.90
1995	10	5	Syringodium filiforme	.19
1995	10	6	Caulerpa prolifera	.36
1995	10	6	Drift Algae	10.28
1995	10	6	Syringodium filiforme	1.84
1994	11	1	Syringodium filiforme	9.12
1994	11	2	Syringodium filiforme	7.84
1994	11	3	Syringodium filiforme	6.77
1994	11	4	Syringodium filiforme	11.45
1994	11	5	Syringodium filiforme	6.97
1994	11	6	Syringodium filiforme	5.37
1995	11	1	Syringodium filiforme	3.42
1995	11	2	Syringodium filiforme	4.20
1995	11	3	Syringodium filiforme	3.44
1995	11	4	Drift Algae	2.96

Appendix Table V. Continued.

Date	Station	Rep.	Spp.	Biomass (g)
1995	11	4	Syringodium filiforme	.65
1995	11	5	Syringodium filiforme	1.10
1995	11	6	Syringodium filiforme	3.36
1994	12	1	Caulerpa prolifera	.02
1994	12	1	Syringodium filiforme	5.96
1994	12	2	Caulerpa prolifera	.04
1994	12	2	Syringodium filiforme	8.36
1994	12	3	Drift Algae	13.16
1994	12	3	Halodule wrightii	4.97
1994	12	3	Syringodium filiforme	1.45
1994	12	4	Caulerpa prolifera	.17
1994	12	4	Drift Algae	32.31
1994	12	4	Syringodium filiforme	9.63
1994	12	5	Caulerpa prolifera	.31
1994	12	5	Drift Algae	5.62
1994	12	5	Syringodium filiforme	2.25
1994	12	6	Caulerpa prolifera	.06
1994	12	6	Drift Algae	17.30
1994	12	6	Syringodium filiforme	13.30
1995	12	1	Caulerpa prolifera	.17
1995	12	1	Drift Algae	.66
1995	12	1	Syringodium filiforme	1.31
1995	12	2	Syringodium filiforme	.33
1995	12	3	Caulerpa mexicana	.04
1995	12	3	Drift Algae	1.40
1995	12	3	Syringodium filiforme	2.10
1995	12	4	Caulerpa prolifera	.06
1995	12	4	Drift Algae	1.44
1995	12	4	Syringodium filiforme	.77
1995	12	5	Caulerpa prolifera	.01
1995	12	5	Drift Algae	2.08
1995	12	5	Syringodium filiforme	1.66
1995	12	6	Drift Algae	.29
1995	12	6	Syringodium filiforme	1.86
1994	13	1	Caulerpa prolifera	2.58
1994	13	1	Drift Algae	2.34
1994	13	1	Thalassia testudinum	7.34
1994	13	2	Caulerpa mexicana	20.91
1994	13	2	Drift Algae	2.11
1994	13	3	Caulerpa prolifera	2.15
1994	13	3	Drift Algae	3.19
1994	13	3	Thalassia testudinum	3.14
1994	13	4	Caulerpa mexicana	18.84
1994	13	4	Caulerpa prolifera	.86
1994	13	4	Drift Algae	32.43
1994	13	4	Thalassia testudinum	1.70
1994	13	5	Caulerpa mexicana	19.90
1994	13	5	Caulerpa prolifera	.70
1994	13	5	Drift Algae	1.74
1994	13	5	Thalassia testudinum	1.56

Appendix Table V. Continued.

Date	Station	Rep.	Spp.	Biomass (g)
1994	13	6	Caulerpa mexicana	4.78
1994	13	6	Caulerpa prolifera	.59
1994	13	6	Drift Algae	4.68
1994	13	6	Thalassia testudinum	.66
1995	13	1	Caulerpa mexicana	.33
1995	13	1	Caulerpa prolifera	1.15
1995	13	1	Drift Algae	.37
1995	13	1	Halodule wrightii	2.34
1995	13	1	Halophila englemannii	.26
1995	13	2	Caulerpa prolifera	.72
1995	13	3	Caulerpa mexicana	.02
1995	13	3	Caulerpa prolifera	.19
1995	13	4	Caulerpa mexicana	.26
1995	13	4	Halodule wrightii	.66
1995	13	5	Caulerpa prolifera	1.55
1995	13	5	Halophila englemannii	.06
1995	13	6	Caulerpa prolifera	1.55
1995	13	6	Drift Algae	.01
1995	13	6	Halodule wrightii	.24
1995	13	6	Thalassia testudinum	.07
1994	14	1	Drift Algae	1.34
1994	14	1	Halodule wrightii	.85
1994	14	1	Syringodium filiforme	.37
1994	14	2	Drift Algae	3.01
1994	14	2	Halodule wrightii	.86
1994	14	3	Halodule wrightii	.41
1994	14	3	Syringodium filiforme	.53
1994	14	4	Drift Algae	4.13
1994	14	4	Halodule wrightii	.37
1994	14	4	Syringodium filiforme	.30
1994	14	5	Drift Algae	.32
1994	14	5	Halodule wrightii	.95
1994	14	6	Drift Algae	10.23
1994	14	6	Halodule wrightii	.55
1994	14	6	Syringodium filiforme	3.92
1995	14	1	Halodule wrightii	2.45
1995	14	2	Halodule wrightii	3.56
1995	14	3	Halodule wrightii	5.16
1995	14	4	Halodule wrightii	2.96
1995	14	5	Halodule wrightii	2.43
1995	14	6	Halodule wrightii	1.78
1994	15	1	Halodule wrightii	1.06
1994	15	1	Thalassia testudinum	.21
1994	15	2	Drift Algae	.09
1994	15	2	Halodule wrightii	1.39
1994	15	3	Halodule wrightii	8.35
1994	15	4	Drift Algae	4.56
1994	15	4	Halodule wrightii	7.63
1994	15	5	Drift Algae	.79
1994	15	5	Halodule wrightii	5.27

Appendix Table V. Continued.

Date	Station	Rep.	Spp.	Biomass (g)
1994	15	6	Halodule wrightii	2.20
1994	15	6	Thalassia testudinum	1.03
1995	15	1	Drift Algae	.80
1995	15	1	Halodule wrightii	2.38
1995	15	1	Syringodium filiforme	.01
1995	15	1	Thalassia testudinum	.01
1995	15	2	Caulerpa prolifera	.09
1995	15	2	Drift Algae	2.87
1995	15	2	Halodule wrightii	3.05
1995	15	2	Thalassia testudinum	.04
1995	15	3	Halodule wrightii	.65
1995	15	3	Syringodium filiforme	.01
1995	15	4	Drift Algae	.81
1995	15	4	Halodule wrightii	3.23
1995	15	5	Halodule wrightii	1.07
1995	15	6	Drift Algae	.53
1995	15	6	Halodule wrightii	1.47

Appendix Table VI. Biomass data and productivity (mg/m2/day) of grass clip samples.

Year	Station	Rep.	Species	Productivity (mg/m2/day)	Shoots/m2	Growth Days	Wt./Shoot (µg)	Sample Wt. (µg)
1994	1	1	Halodule wrightii	196	299	14	92	275
1994	1	2	Halodule wrightii	543	499	14	152	762
1994	1	3	Halodule wrightii	604	499	14	170	848
1994	1	4	Halodule wrightii	627	499	14	176	881
1994	1	5	Halodule wrightii	403	399	14	142	566
1994	1	6	Halodule wrightii	803	598	14	188	1128
1995	1	1	Halodule wrightii	1225	1595	14	108	1720
1995	1	2	Halodule wrightii	964	1196	14	113	1353
1995	1	3	Halodule wrightii	508	798	14	89	713
1995	1	4	Halodule wrightii	266	499	14	75	374
1995	1	5	Halodule wrightii	1008	1795	14	79	1416
1995	1	6	Halodule wrightii	1182	1595	14	104	1660
1994	2	1	Halodule wrightii	274	299	14	128	385
1994	2	2	Halodule wrightii	121	199	14	85	170
1994	2	3	Halodule wrightii	325	698	14	65	456
1994	2	4	Halodule wrightii	154	299	14	72	216
1994	2	5	Halodule wrightii	153	399	14	54	215
1995	2	1	Halodule wrightii	278	598	14	65	390
1995	2	2	Halodule wrightii	574	1097	14	73	806
1995	2	3	Halodule wrightii	613	1196	14	72	861
1995	2	4	Halodule wrightii	781	1296	14	84	1096
1995	2	6	Halodule wrightii	736	1396	14	74	1034
1994	3	1	Halodule wrightii	55	299	14	26	77
1994	3	2	Halodule wrightii	64	199	14	45	90
1994	3	3	Halodule wrightii	22	100	14	31	31
1994	3	4	Halodule wrightii	210	499	14	59	295
1994	3	5	Halodule wrightii	66	199	14	47	93
1995	3	1	Halodule wrightii	770	798	14	135	1081
1995	3	2	Halodule wrightii	667	1196	14	78	937
1995	3	3	Halodule wrightii	1102	997	14	155	1548
1995	3	4	Halodule wrightii	1102	1196	14	129	1547
1995	3	5	Halodule wrightii	1085	1894	14	80	1524
1995	3	6	Halodule wrightii	716	499	14	201	1005

Appendix Table VI. Continued.

Year	Station	Rep.	Species	Productivity (mg/m2/day)	Shoots/m2	Growth Days	Wt./Shoot (µg)	Sample Wt. (µg)
1994	4	1	Syringodium filiforme	466	320	14	204	1428
1994	4	2	Syringodium filiforme	714	274	14	365	2190
1994	4	3	Syringodium filiforme	417	183	14	320	1279
1994	4	4	Syringodium filiforme	428	228	14	262	1312
1994	4	5	Syringodium filiforme	147	137	14	150	451
1995	4	1	Syringodium filiforme	2212	1196	11	203	2441
1995	4	3	Syringodium filiforme	2837	1595	11	196	3130
1995	4	4	Syringodium filiforme	4148	2493	11	183	4577
1995	4	5	Syringodium filiforme	3516	2493	11	155	3879
1995	4	6	Syringodium filiforme	4373	3290	11	146	4825
1994	5	1	Halodule wrightii	86	299	15	43	130
1994	5	2	Halodule wrightii	60	100	15	90	90
1994	5	3	Halodule wrightii	68	100	15	103	103
1994	5	4	Halodule wrightii	33	100	15	49	49
1994	5	5	Halodule wrightii	58	199	15	44	88
1994	5	6	Halodule wrightii	134	399	15	50	201
1995	5	1	Halodule wrightii	266	499	13	69	347
1995	5	2	Halodule wrightii	54	100	13	71	71
1995	5	3	Halodule wrightii	122	199	13	80	159
1995	5	4	None	0	0	13	N/A	0
1995	5	5	Halodule wrightii	230	598	13	50	300
1995	5	6	Halodule wrightii	232	598	13	50	302
1994	6	1	Halodule wrightii	352	499	14	99	494
1994	6	2	Halodule wrightii	571	299	14	267	802
1994	6	3	Halodule wrightii	306	399	14	108	430
1994	6	4	Halodule wrightii	110	199	14	77	154
1994	6	5	Halodule wrightii	354	399	14	124	497
1994	6	6	Halodule wrightii	409	499	14	115	575
1995	6	1	Halodule wrightii	551	698	13	103	719
1995	6	2	Halodule wrightii	1045	1196	13	114	1362
1995	6	3	Halodule wrightii	449	598	13	98	586
1995	6	4	Halodule wrightii	630	399	13	205	821
1995	6	5	Halodule wrightii	1818	798	13	296	2371
1995	6	6	Halodule wrightii	182	399	13	59	237

Appendix Table VI. Continued.

Year	Station	Rep.	Species	Productivity (mg/m2/day)	Shoots/m2	Growth Days	Wt./Shoot (µg)	Sample Wt. (µg)
1994	7	1	Halodule wrightii	216	199	14	152	304
1994	7	2	Halodule wrightii	111	199	14	78	156
1994	7	3	Halodule wrightii	324	598	14	76	455
1994	7	4	Halodule wrightii	210	598	14	49	295
1994	7	5	Halodule wrightii	175	299	14	82	246
1995	7	2	Halodule wrightii	847	798	13	138	1105
1995	7	3	Halodule wrightii	893	798	13	146	1165
1995	7	4	Halodule wrightii	1251	1496	13	109	1631
1995	7	5	Halodule wrightii	212	399	13	69	277
1995	7	6	Halodule wrightii	1340	1396	13	125	1747
1994	8	1	Halodule wrightii	214	199	12	129	258
1994	8	2	Halodule wrightii	422	399	12	127	508
1994	8	3	Halodule wrightii	660	798	12	99	794
1994	8	4	Halodule wrightii	520	1097	12	57	626
1994	8	5	Halodule wrightii	764	698	12	131	919
1995	8	1	Syringodium filiforme	534	499	11	118	589
1995	8	2	Halodule wrightii	1216	1196	11	112	1342
1995	8	3	Halodule wrightii	834	1396	11	66	920
1995	8	4	Syringodium filiforme	1078	1097	11	108	1189
1995	8	5	Syringodium filiforme	1951	1396	11	154	2153
1995	8	6	Halodule wrightii	609	897	11	75	672
1994	9	1	Syringodium filiforme	1115	776	14	201	3420
1994	9	2	Syringodium filiforme	670	411	14	228	2054
1994	9	3	Syringodium filiforme	633	411	14	216	1941
1994	9	4	Syringodium filiforme	1285	959	14	188	3940
1994	9	5	Syringodium filiforme	334	411	14	114	1023
1995	9	1	Syringodium filiforme	198	274	13	94	565
1995	9	2	Syringodium filiforme	283	228	13	161	806
1995	9	3	Syringodium filiforme	1967	548	13	467	5601
1995	9	4	Syringodium filiforme	414	320	13	168	1178
1995	9	5	Syringodium filiforme	314	274	13	149	894
1995	9	6	Syringodium filiforme	130	183	13	92	369
1994	10	1	Syringodium filiforme	348	365	14	133	1066
1994	10	2	Syringodium filiforme	642	822	14	109	1968

Appendix Table VI. Continued.

Year	Station	Rep.	Species	Productivity (mg/m2/day)	Shoots/m2	Growth Days	Wt./Shoot (µg)	Sample Wt. (µg)
1994	10	3	Syringodium filiforme	604	868	14	97	1851
1994	10	4	Syringodium filiforme	141	365	14	54	433
1994	10	5	Syringodium filiforme	431	457	14	132	1322
1995	10	2	Syringodium filiforme	404	274	13	192	1149
1995	10	3	Syringodium filiforme	840	548	13	199	2392
1995	10	4	Syringodium filiforme	803	685	13	152	2287
1995	10	5	Syringodium filiforme	293	274	13	139	834
1995	10	6	Syringodium filiforme	1011	822	13	160	2879
1994	11	1	Syringodium filiforme	182	91	12	239	478
1994	11	2	Syringodium filiforme	311	91	12	409	818
1994	11	3	Syringodium filiforme	635	274	12	278	1668
1994	11	4	Syringodium filiforme	375	91	12	493	986
1995	11	1	Syringodium filiforme	479	228	14	294	1469
1995	11	2	Syringodium filiforme	1388	320	14	608	4257
1995	11	3	Syringodium filiforme	1145	411	14	390	3510
1995	11	4	Syringodium filiforme	386	365	14	148	1183
1995	11	5	None	0	0	14	N/A	0
1995	11	6	Syringodium filiforme	598	274	14	306	1835
1994	12	1	Syringodium filiforme	80	137	14	82	246
1994	12	2	Syringodium filiforme	575	228	14	353	1764
1994	12	3	Syringodium filiforme	348	274	14	178	1068
1994	12	4	Syringodium filiforme	385	320	14	169	1181
1994	12	5	Syringodium filiforme	135	274	14	69	413
1995	12	1	Syringodium filiforme	1100	822	14	187	3372
1995	12	2	Syringodium filiforme	810	731	14	155	2484
1995	12	3	Syringodium filiforme	1213	1324	14	128	3720
1995	12	4	Syringodium filiforme	931	822	14	159	2855
1995	12	5	Syringodium filiforme	872	731	14	167	2673
1995	12	6	Syringodium filiforme	1543	1279	14	169	4732
1994	13	1	Halodule wrightii	383	598	14	90	538
1994	13	2	Halodule wrightii	283	299	14	133	398
1994	13	3	Halodule wrightii	51	199	14	36	72
1994	13	4	Halodule wrightii	175	399	14	62	246
1994	13	5	Halodule wrightii	36	199	14	26	51

Appendix Table VI. Continued.

Year	Station	Rep.	Species	Productivity (mg/m2/day)	Shoots/m2	Growth Days	Wt./Shoot (µg)	Sample Wt. (µg)
1995	13	1	Halodule wrightii	182	399	13	59	237
1995	13	2	Halodule wrightii	281	399	13	92	367
1995	13	3	None	0	0	13	N/A	0
1995	13	4	Halodule wrightii	589	598	13	128	768
1995	13	5	Halodule wrightii	221	499	13	58	288
1995	13	6	Halodule wrightii	346	499	13	90	451
1994	14	1	Halodule wrightii	617	598	12	124	743
1994	14	2	Halodule wrightii	714	299	12	286	859
1994	14	3	Halodule wrightii	1022	798	12	154	1230
1994	14	4	Halodule wrightii	449	199	12	270	540
1995	14	1	Halodule wrightii	824	798	13	134	1074
1995	14	2	Halodule wrightii	826	1196	13	90	1077
1995	14	3	Halodule wrightii	557	499	13	145	726
1995	14	4	Halodule wrightii	864	1097	13	102	1127
1995	14	5	Halodule wrightii	703	1196	13	76	916
1995	14	6	Halodule wrightii	508	1097	13	60	662
1994	15	1	Halodule wrightii	443	299	12	178	533
1994	15	2	Halodule wrightii	389	598	12	78	468
1994	15	3	Halodule wrightii	572	1296	12	53	688
1994	15	4	Halodule wrightii	739	698	12	127	889
1994	15	5	Halodule wrightii	469	299	12	188	565
1995	15	1	Halodule wrightii	352	365	14	135	1078
1995	15	2	Halodule wrightii	256	274	14	131	785
1995	15	3	Halodule wrightii	1080	1370	14	110	3310
1995	15	4	Halodule wrightii	427	639	14	94	1310
1995	15	5	Halodule wrightii	970	1370	14	99	2974
1995	15	6	Halodule wrightii	911	1187	14	107	2792