

From: Steve Weege <sweege@inwater.org>
Sent: Tuesday, December 21, 2021 8:01 AM
To: Koperski, Meghan
Cc: Ed Hollowell; Jodie_Gless@fpl.com; Ken_Frehafer@fpl.com; Marine Turtle Permits; Michael Bresette; EndangeredSpecies Resource; SCO@dep.state.fl.us; Vince Munne; Cody Mott; Jeff Guertin; Ryan Welsh; Eaton, Kristin; Jonathon Gorham; William Nurnberger; audra.livergood@noaa.gov; Sciscente, Richard; Seth.Duston@fpl.com
Subject: [External_Sender] November 2021 FPL Marine Turtle Removal Monthly Report
Attachments: November 2021 Marine Turtle Captures.pdf; Monthly Report Notes 2021.pdf; FPL St. Lucie Capture Summary 2021.pdf

Mrs. Meghan Koperski
Tequesta Field Laboratory
19100 SE Federal Highway
Tequesta, FL 33469

Subject: Marine Turtle Removal Monthly Summary November 2021

Dear Meghan,

Attached, please find the monthly summary of marine turtle removals for November 2021. This month we captured six *Caretta caretta* and 14 *Chelonia mydas* in the intake canal of the St. Lucie power plant on Hutchinson Island. One sea turtle was sent for rehabilitation (non-causal) and there was one causal mortality during the month of November. As with all sea turtle strandings at the Saint Lucie Plant, the Florida Fish and Wildlife Conservation Commission (FWC) was consulted and stranding forms were filed with the state through the Sea Turtle Stranding and Salvage Network.

One sea turtle was sent to rehab for non-causal injuries this month. On November 28th, an underweight subadult loggerhead was captured in the tangle nets. This turtle appeared to be suffering from Debilitated Loggerhead Turtle Syndrome and was taken to the Brevard Zoo in Melbourne for rehabilitation. Because the illness was unrelated to the power plant, this was classified as a non-causal stranding.

There was one causal sea turtle mortality this month. On November 23rd, an emaciated juvenile green turtle with severe papillomatosis was recovered from the primary barrier net. The turtle was emaciated with tumors occluding both eyes. In accordance with protocol, the animal was held on ice for necropsy and final causality determination by a licensed veterinarian. Despite being severely compromised, the turtle was determined to have drowned and was therefore deemed causal.

The primary 5-inch barrier net encountered moderate-to-severe amounts of algae and jellyfish this past month. IRG biologists performed around-the-clock monitoring of the intake canal and barrier net system either as warranted by sufficiently high debris intrusion levels or whenever directed by FPL oversight personnel. Furthermore, Underwater Engineering Services Inc. divers inspected and cleaned the 5-inch and the A-1-A barrier nets as needed. Even still, one juvenile green turtle was recovered from the power plant intake wells. This turtle was in good condition and likely passed through the holes that were uncovered in the primary barrier net the previous month (prior to their discovery and prompt repair).

The tag numbers and morphometric data for all turtles captured during the month have been included with this report (see attachments/addendums). Also included is a spreadsheet for all captures, mortalities, injuries, and causal events delineated by species and by month for 2021. In addition, this spreadsheet tracks fresh scrapes incurred on captured turtles for the current month, as well as the entire year.

Please feel free to contact me with any questions.

Sincerely,

Steve
Steve Weege
Sr. Environmental Specialist
Inwater Research Group, Inc.
4160 NE Hyline Dr.
Jensen Beach, FL 34957
sweege@inwater.org
(772) 349-7252

Hearing Identifier: NRR_DRMA
Email Number: 1479

Mail Envelope Properties (CAOA4+RKZRTB0Lp8hvc29sRjbPWAAQy5JONo=H=RtX6cPje50g)

Subject: [External_Sender] November 2021 FPL Marine Turtle Removal Monthly Report
Sent Date: 12/21/2021 8:00:57 AM
Received Date: 12/21/2021 8:01:39 AM
From: Steve Weege

Created By: sweege@inwater.org

Recipients:

"Ed Hollowell" <Ed.Hollowell@fpl.com>
Tracking Status: None
"Jodie_Gless@fpl.com" <Jodie_Gless@fpl.com>
Tracking Status: None
"Ken_Frehafer@fpl.com" <Ken_Frehafer@fpl.com>
Tracking Status: None
"Marine Turtle Permits" <MTP@myfwc.com>
Tracking Status: None
"Michael Bresette" <mbresette@inwater.org>
Tracking Status: None
"EndangeredSpecies Resource" <EndangeredSpecies.Resource@nrc.gov>
Tracking Status: None
"SCO@dep.state.fl.us" <SCO@dep.state.fl.us>
Tracking Status: None
"Vince Munne" <Vince.Munne@fpl.com>
Tracking Status: None
"Cody Mott" <cmott@inwater.org>
Tracking Status: None
"Jeff Guertin" <jguertin@gmail.com>
Tracking Status: None
"Ryan Welsh" <rwelsh@inwater.org>
Tracking Status: None
"Eaton, Kristin" <Kristin.Eaton@fpl.com>
Tracking Status: None
"Jonathon Gorham" <jgorham@inwater.org>
Tracking Status: None
"William Nurnberger" <William.Nurnberger@fpl.com>
Tracking Status: None
"audra.livergood@noaa.gov" <audra.livergood@noaa.gov>
Tracking Status: None
"Sciscente, Richard" <Richard.Sciscente@fpl.com>
Tracking Status: None
"Seth.Duston@fpl.com" <Seth.Duston@fpl.com>
Tracking Status: None
"Koperski, Meghan" <Meghan.Koperski@myfwc.com>
Tracking Status: None

Post Office: mail.gmail.com

Files	Size	Date & Time
MESSAGE	3044	12/21/2021 8:01:39 AM

November 2021 Marine Turtle Captures.pdf		87482
Monthly Report Notes 2021.pdf	67946	
FPL St. Lucie Capture Summary 2021.pdf		85098

Options

Priority: Normal

Return Notification: No

Reply Requested: No

Sensitivity: Normal

Expiration Date:

MARINE TURTLE REMOVALS ST. LUCIE PLANT INTAKE CANAL NOVEMBER 2021

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
11/7/2021	<i>Caretta caretta</i>	1	FFE448/FFE449	76.1	77.4	82.1	76.2	62.8	57.9	65.8	South net
11/8/2021	<i>Chelonia mydas</i>	2	FFE450/FFE451	44.1	44.8	46.3	41.0	37.2	37.6	11.5	South net
11/13/2021	<i>Chelonia mydas</i>		IRG0410/IRG0411	29.0	29.5	30.3	27.0	24.4	24.8	3.1	Dip net
11/14/2021	<i>Chelonia mydas</i>		IRG0412/IRG0413	28.0	28.7	29.5	26.5	24.5	23.9	3.0	Dip net
11/15/2021	<i>Caretta caretta</i>		FFE452/FFE453	78.3	81.2	83.9	75.5	60.9	57.9	64.6	South net
11/15/2021	<i>Chelonia mydas</i>		IRG0414/IRG0415	25.0	25.4	26.4	21.9	20.2	21.3	2.1	Dip net
11/16/2021	<i>Chelonia mydas</i>		FFE454/FFE455	72.5	73.5	75.5	67.4	56.1	59.6	53.4	South net
11/16/2021	<i>Chelonia mydas</i>	3	KKL0842	44.7	45.0	46.4	39.7	34.8	36.5	12.2	South net
11/18/2021	<i>Chelonia mydas</i>		FFE456/FFE457	74.6	75.5	78.5	66.9	54.9	60.0	48.7	South net
11/19/2021	<i>Chelonia mydas</i>		FFE458/FFE459	79.5	80.0	82.0	73.9	60.6	64.6	62.9	South net
11/20/2021	<i>Caretta caretta</i>		FFE460/FFE461	57.2	58.6	61.0	62.0	52.0	46.1	32.2	North net
11/22/2021	<i>Caretta caretta</i>		FFE462/FFE463	71.0	72.8	74.9	71.3	56.8	57.3	51.4	South net
11/22/2021	<i>Chelonia mydas</i>	4	FFE464	43.3	44.1	45.2	38.7	35.6	35.6	9.7	South net
11/23/2021	<i>Chelonia mydas</i>	5	CRM211123-001	31.6	31.8	33.3	27.6	24.6	25.6	2.8	Barrier net
11/23/2021	<i>Chelonia mydas</i>		FFE465/FFE466	58.8	59.7	60.5	53.0	46.3	49.0	26.4	South net
11/24/2021	<i>Caretta caretta</i>		FFE167/FFE468	65.3	67.0	71.1	66.9	56.2	51.0	48.3	South net
11/28/2021	<i>Caretta caretta</i>	6	JRG211128-001	66.7	67.5	71.6	68.1	54.6	52.0	36.5	South net

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCl (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
11/29/2021	<i>Chelonia mydas</i>		FFE469/FFE470	39.9	40.3	41.9	34.2	30.7	32.7	7.9	South net
11/29/2021	<i>Chelonia mydas</i>		FFE471/FFE472	29.2	30.2	31.5	26.5	23.5	24.3	3.7	Dip net
11/30/2021	<i>Chelonia mydas</i>	7	IRG0416/IRG0417	25.8	26.3	27.5	24.0	21.7	21.6	1.9	Intake well

NOTES

1. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 6/6/15 and 11/7/21. Multiple old shark rakings on plastron and carapace.
2. PAPILLOMAS (Balazs Tumor Score = 1 {light}, Total Tumor Score = 1).
3. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 9/26/19 and 11/16/21.
4. PAPILLOMAS (Balazs Tumor Score = 1 {light}, Total Tumor Score = 2). No tag inserted in left front flipper due to adjacent fibropapilloma tumors. One extra left costal scute.
5. DEAD (CAUSAL MORTALITY). Stranding# CRM211123-001. PAPILLOMAS (Balazs Tumor Score = 3 {severe}, Total Tumor Score = 41). Emaciated juvenile green turtle with severe fibropapillomatosis recovered postmortem from the primary barrier net. Tumors occluded both eyes. Turtle was held on ice for necropsy and final causality determination. Despite being severely compromised, the turtle was determined to have drowned and was therefore deemed causal.
6. REHAB (NON-CAUSAL). Stranding# JRG211128-001. Underweight subadult loggerhead taken to the Brevard Zoo in Melbourne for rehabilitation.
7. Turtle was removed from FPL intake wells. Slightly underweight but active. Released in good condition.

SMCL = Straight Minimum Carapace Length

SMCL = Straight Standard Carapace Length

CSCL = Curved Standard Carapace Length

CMCW = Curved Maximum Carapace Width

SMCW = Straight Maximum Carapace Width

SMPL = Straight Midline Plastron Length

	Loggerheads (<i>Caretta caretta</i>)		Green turtles (<i>Chelonia mydas</i>)		Hawksbills (<i>Eretmochelys imbricata</i>)		Leatherbacks (<i>Dermochelys coriacea</i>)		Kemp's ridley (<i>Lepidochelys kempii</i>)		Overall Totals	
	Nov-21	Year to Date	Nov-21	Year to Date	Nov-21	Year to Date	Nov-21	Year to Date	Nov-21	Year to Date	Nov-21	Year to Date
Captures	6	146	14	60	0	1	0	0	0	3	20	210
Causal Mortalities	0	0	1	1	0	0	0	0	0	0	1	1
Non-causal Mortalities	0	1	0	0	0	0	0	0	0	0	0	1
Causal Injuries	0	0	0	1	0	0	0	0	0	0	0	1
Sent to rehab	1	13	0	2	0	1	0	0	0	0	1	16
Fresh Scrapes	Nov-	Year to Date	Nov-	Year to Date	Nov-	Year to Date	Nov-	Year to Date	Nov-	Year to Date	Nov-	Year to Date
None	1	23	1	8	0	1	0	0	0	1	2	33
Minor	5	121	12	49	0	0	0	0	0	2	17	172
Moderate	0	2	1	3	0	0	0	0	0	0	1	5
Severe	0	0	0	0	0	0	0	0	0	0	0	0
Percent with mod/sev scrapes	0.0%	1.4%	7.1%	5.0%	N/A	0.0%	N/A	N/A	N/A	0.0%	5.0%	2.4%