

NRR-PMDAPem Resource

From: Steve Weege <steveweege@gmail.com>
Sent: Saturday, April 01, 2017 3:41 PM
To: Meghan Koperski
Cc: Ed Hollowell; Jodie Gless; John Jones; Ken Frehafer; Marine Turtle Permit; Michael Bresette; EndangeredSpecies Resource; SCO@dep.state.fl.us; Vince Munne; Cody Mott; Jeff Guertin; Ryan Welsh; debbie.spring@noaa.gov; Eaton, Kristin; Jonathan Gorham; Terri.Taylor@fpl.com; William.Nurnberger@fpl.com; Audra Livergood - NOAA Federal
Subject: [External_Sender] March 2017 FPL Marine Turtle Removal Monthly Report
Attachments: March 2017 Marine Turtle Captures.pdf; Monthly Report Notes 2017.pdf; FPL St. Lucie Capture Summary 2017.pdf; Power Plant Causal Turtles.pdf

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

Subject: Marine Turtle Removal Monthly Summary March 2017

Dear Meghan,

Attached, please find the monthly summary of marine turtle removals for March 2017. This month, we captured eight (8) *Caretta caretta* and three (3) *Chelonia mydas* in the intake canal of the St. Lucie power plant on Hutchinson Island. One sea turtle was sent for rehabilitation and there was one mortality recorded during the month of March. As with all sea turtle strandings at the Saint Lucie Plant (alive or dead), the Florida Fish and Wildlife Conservation Commission (FWC) was consulted and a stranding form was filed with the state through the Sea Turtle Stranding and Salvage Network.

There was one loggerhead sea turtle sent for rehabilitation for non-causal injuries this month. On March 17th, an emaciated and lethargic subadult loggerhead was removed from the primary 5-inch barrier net. The plastron was deeply sunken in and ventral measurements were not taken due to the animal's condition. The FWC stranding coordinator transported the turtle to the Loggerhead Marinelife Center in Juno Beach for rehabilitation. This stranding was considered non-causal.

There was one non-causal green turtle mortality this month. On March 10th, a moderately decomposed juvenile green turtle was found floating in the intake canal during a routine power plant outage. The scales were sloughing off, there was a reddish purple discoloration of the ventral extremities due to postmortem blood pooling, and the carcass was foul. No other wounds or other abnormalities were noted. The turtle was too decomposed to necropsy; however, FWC was consulted and the animal was judged to have been entrained postmortem.

There was a brief period of severe algae entrainment during the month. Otherwise, the permanent 5-inch barrier net experienced only negligible loads of algae and jellyfish that entered into the intake canal system. Inwater Research Group biologists performed around the clock monitoring of the intake canal for a one week period following the algae intrusion event. Overall, the barrier net has performed as designed and no turtles have been observed beyond the 5-inch net. Bathymetric surveys of the intake and discharge canals were completed in March. Furthermore, the 30-day power plant refueling outage that began in late February concluded towards the end of this month.

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 2017. In addition, this spreadsheet tracks fresh scrapes incurred on captured turtles for the current month, as well as the entire year. An additional Excel spreadsheet tracks all causal injuries and mortalities incurred by sea turtles at the St. Lucie Plant since 2004.

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](tel:(772)349-7252)

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From: Steve Weege

Created By: steveweege@gmail.com

Recipients:

"Ed Hollowell" <Ed.Hollowell@fpl.com>
Tracking Status: None
"Jodie Gless" <Jodie_Gless@fpl.com>
Tracking Status: None
"John Jones" <John.Jones@fpl.com>
Tracking Status: None
"Ken Frehafer" <Ken_Frehafer@fpl.com>
Tracking Status: None
"Marine Turtle Permit" <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
"debbie.spring@noaa.gov" <debbie.spring@noaa.gov>
Tracking Status: None
"Eaton, Kristin" <Kristin.Eaton@fpl.com>
Tracking Status: None
"Jonathan Gorham" <jgorham@inwater.org>
Tracking Status: None
"Terri.Taylor@fpl.com" <Terri.Taylor@fpl.com>
Tracking Status: None
"William.Nurnberger@fpl.com" <William.Nurnberger@fpl.com>
Tracking Status: None
"Audra Livergood - NOAA Federal" <audra.livergood@noaa.gov>
Tracking Status: None
"Meghan Koperski" <Meghan.Koperski@myfwc.com>
Tracking Status: None

Post Office: mail.gmail.com

Files	Size	Date & Time
MESSAGE	3278	4/1/2017 3:40:59 PM
March 2017 Marine Turtle Captures.pdf		70146
Monthly Report Notes 2017.pdf	54929	
FPL St. Lucie Capture Summary 2017.pdf		78198
Power Plant Causal Turtles.pdf	87694	

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**MARINE TURTLE REMOVALS
ST. LUCIE PLANT INTAKE CANAL
MARCH 2017**

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
3/10/2017	<i>Chelonia mydas</i>	1	STW170310-01	55.5	56.1	60.6	52.6	46.1	46.9	22.8	Hand capture
3/12/2017	<i>Chelonia mydas</i>		MMA774/MMA775	53.1	53.5	55.5	47.2	40.3	43.7	17.1	South net
3/15/2017	<i>Chelonia mydas</i>		MMA776/MMA777	43.5	43.8	45.5	40.6	36.6	35.1	9.0	South net
3/17/2017	<i>Caretta caretta</i>	2	STW170317-02	62.2	63.2	67.0	64.8	51.5		27.0	Barrier net
3/18/2017	<i>Caretta caretta</i>		MMA778/MMA779	57.0	58.2	61.6	59.4	51.5	46.3	30.3	North net
3/19/2017	<i>Caretta caretta</i>		MMA780/MMA781	68.9	70.1	75.1	72.4	57.7	54.5	48.9	South net
3/26/2017	<i>Caretta caretta</i>		MMA782/MMA783	66.5	67.9	70.5	66.6	65.2	54.7	44.6	Hand capture
3/26/2017	<i>Caretta caretta</i>	3	MMA784/MMA785	96.6	97.4	101.4	89.3	71.4	68.9	120.4	South net
3/26/2017	<i>Caretta caretta</i>		MMA786/MMA787	59.3	60.5	64.4	63.7	52.5	46.7	35.1	North net
3/28/2017	<i>Caretta caretta</i>	4	MMA768/MMA769	62.5	63.4	67.8	63.9	51.0	47.1	32.2	North net
3/28/2017	<i>Caretta caretta</i>		MMA788/MMA789	68.9	70.1	73.3	67.2	56.0	53.4	40.6	South net

NOTES

1. DEAD (NON-CAUSAL MORTALITY). Stranding# STW170310-01. Moderately decomposed juvenile green turtle found floating in the intake canal during a power plant outage. Scales were sloughing off, there was a reddish purple discoloration of the ventral extremities due to postmortem blood pooling, and the carcass was foul. No wounds or other abnormalities noted. Too decomposed to necropsy. Consulted with FWC. Judged to have been entrained postmortem.
2. REHAB (NON-CAUSAL). Stranding# STW170317-02. Emaciated and lethargic subadult loggerhead removed from the 5-inch barrier net in the morning. The plastron was deeply sunken in; no ventral measurements were taken due to the animal's fragile condition. The turtle appeared to be moribund. Moderate fresh scrapes on top of head (skull exposed). FWC transported the turtle to the Loggerhead Marinelife Center in Juno Beach for rehabilitation.
3. Adult male. Tail length = 495 mm. Moderate fresh scrape just above nares.
4. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 2/24/17 and 3/28/17.

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	
	Mar-17	Year to Date	Mar-17	Year to Date	Mar-17	Year to Date	Mar-17	Year to Date	Mar-17	Year to Date	Mar-17	Year to Date
Captures	8	34	3	13	0	0	0	0	0	0	11	47
Causal Mortalities	0	0	0	0	0	0	0	0	0	0	0	0
Non-Causal Mortalities	0	0	1	1	0	0	0	0	0	0	1	1
Causal Injuries	0	0	0	0	0	0	0	0	0	0	0	0
Sent to Rehab	1	2	0	0	0	0	0	0	0	0	1	2
Fresh Scrapes												
None	0	7	0	4	0	0	0	0	0	0	0	11
Minor	6	25	3	9	0	0	0	0	0	0	9	34
Moderate	2	2	0	0	0	0	0	0	0	0	2	2
Severe	0	0	0	0	0	0	0	0	0	0	0	0
Percent with Mod/Sev Scrapes	25.0%	5.9%	0.0%	0.0%	N/A	N/A	N/A	N/A	N/A	N/A	18.2%	4.3%

St Lucie Power Plant Causal Turtles		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	**2017	Injury / Mortality Totals by Species	
Loggerhead	Total Captures	623	484	419	227	420	260	295	302	232	302	275	274	316	34	4,463	
	Injuries	0	1	*3	0	1	1	0	0	1	1	0	0	0	0	0	5
	Mortalities	1	0	*21	0	0	0	1	0	0	0	0	0	1	0	0	3
Green	Total Captures	286	428	267	101	299	161	444	217	127	197	134	181	159	13	3,014	
	Injuries	0	3	7	0	2	2	1	0	0	0	0	0	0	0	0	15
	Mortalities	1	1	1	1	2	0	3	1	2	2	0	4	0	0	0	18
Leatherback	Total Captures	2	0	1	1	0	1	2	0	2	2	0	2	1	0	14	
	Injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mortalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kemp's Ridley	Total Captures	1	3	3	0	2	0	7	0	0	0	2	7	6	0	31	
	Injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mortalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawksbill	Total Captures	2	2	2	1	4	2	3	2	1	2	3	1	4	0	29	
	Injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mortalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Injury & Mortality Yearly Totals		2	5	32	1	5	3	5	1	3	3	0	4	1	0	65	
Total Captures per Year		914	917	692	330	725	424	751	521	362	503	414	465	486	47	7,551	

* The loggerhead causal injuries and mortalities in 2006 were all hatchlings.

** 2017 is a partial year.