

NRR-PMDAPem Resource

From: Steve Weege <steveweege@gmail.com>
Sent: Tuesday, June 07, 2016 10:10 AM
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; Kristin.Eaton@fpl.com; Jonathan Gorham
Subject: [External_Sender] May 2016 FPL Marine Turtle Removal Monthly Report
Attachments: May 2016 Marine Turtle Captures.pdf; Monthly Report Notes 2016.pdf; FPL St Lucie Capture Summary 2016.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

May 2016

Dear Meghan,

Attached, please find the monthly summary of marine turtle removals for May 2016. This month, we captured twenty-one (21) *Caretta caretta* and three (3) *Chelonia mydas* in the intake canal of the St. Lucie power plant on Hutchinson Island. Only one sea turtle was sent for rehabilitation and there were no mortalities recorded during the month of May. The one stranding recovered this month was non-causal. As with all strandings, the Florida Fish and Wildlife Conservation Commission (FWC) was consulted and the appropriate form was filed with the state through the Sea Turtle Stranding and Salvage Network.

One loggerhead turtle was sent to a rehabilitation facility for non-causal injuries this month. On May 9th, an underweight and lethargic subadult loggerhead turtle was hand captured in the intake canal. The turtle also had a small open gash in the carapace from an unknown cause. After consultation with FWC, Inwater Research Group biologists transported the turtle partway to the Miami Seaquarium in Key Biscayne, FL for rehabilitation. This live stranding was considered non-causal.

Throughout the month, the permanent 5-inch barrier net experienced light-to-severe loads of the gelatinous comb jellies and only negligible amounts of algae entered into the intake canal system. Overall, the barrier net has performed as designed and no turtles have been observed beyond the 5-inch net.

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 2016. In addition, this spreadsheet also 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 2003.

Please feel free to contact me with any questions.

Sincerely,

Steve

Steve Weege

Sr. Environmental Specialist

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MESSAGE	2440	6/7/2016 10:10:00 AM
May 2016 Marine Turtle Captures.pdf		73795
Monthly Report Notes 2016.pdf	56395	
FPL St Lucie Capture Summary 2016.pdf		77645
Power Plant Causal Turtles.pdf	87826	

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**MARINE TURTLE REMOVALS
ST. LUCIE PLANT INTAKE CANAL
MAY 2016**

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
5/3/2016	<i>Caretta caretta</i>		LLS507/LLS508	59.4	61.1	67.3	50.0	62.0	45.9	31.2	South net
5/3/2016	<i>Caretta caretta</i>		LLS509/LLS510	64.3	65.3	75.9	69.0	57.2	49.3	48.2	North net
5/5/2016	<i>Chelonia mydas</i>	1	4A61073F34	53.2	53.5	56.8	47.7	40.0	42.3	17.7	South net
5/5/2016	<i>Caretta caretta</i>		LLS512/LLS513	61.6	62.8	67.8	66.3	54.4	51.0	36.4	South net
5/5/2016	<i>Caretta caretta</i>		LLS514/LLS515	62.1	63.2	67.7	67.3	54.8	46.7	33.4	South net
5/7/2016	<i>Caretta caretta</i>		LLS516/LLS517	68.3	64.5	74.4	72.7	58.3	53.4	51.5	South net
5/7/2016	<i>Chelonia mydas</i>	2	LLS525	59.2	59.6	62.9	56.8	48.1	49.1	26.5	South net
5/8/2016	<i>Chelonia mydas</i>		LLS518/LLS519	63.8	64.8	68.4	55.6	46.4	54.7	32.5	Hand capture
5/9/2016	<i>Caretta caretta</i>	3	JRG160509-01	76.0	77.2	82.2	78.0	58.8	58.0	50.8	Hand capture
5/11/2016	<i>Caretta caretta</i>	4	LLS520/LLS521	87.4	88.5	91.5	83.5	69.4	64.8	86.2	South net
5/11/2016	<i>Caretta caretta</i>		LLS522/LLS523	67.1	68.3	72.1	70.1	57.4	54.2	45.2	South net
5/13/2016	<i>Caretta caretta</i>	5	LLS524/LLS526	95.2	98.0	105.4	96.1	74.5	74.9	147.5	Hand capture
5/13/2016	<i>Caretta caretta</i>		LLS527	62.7	64.5	70.8	67.9	55.1	51.9	45.6	Hand capture
5/13/2016	<i>Caretta caretta</i>	6	LLS529/LLS532	100.6	100.7	104.9	101.4	77.4	81.4	152.0	North net
5/13/2016	<i>Caretta caretta</i>		LLS530/LLS531	53.6	53.9	57.5	69.8	59.6	50.1	43.3	Hand capture

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCl (cm)	CMCW (cm)	SMCW (cm)	SMP L (cm)	Weight (kg)	Method
5/13/2016	<i>Caretta caretta</i>	7	LLS533/LLS534	88.3	90.8	94.8	88.0	66.8	66.3	88.6	South net
5/14/2016	<i>Caretta caretta</i>	8	LLS535/LLS536	91.1	92.8	100.0	88.3	66.9	69.5	93.6	North net
5/20/2016	<i>Caretta caretta</i>		982000406128337	66.1	67.5	72.2	71.2	57.9	52.4	52.3	Hand capture
5/20/2016	<i>Caretta caretta</i>		LLS537/LLS538	61.4	63.1	68.3	64.2	52.8	49.1	35.3	Hand capture
5/25/2016	<i>Caretta caretta</i>	9	LLS539/LLS540	97.0	99.4	106.1	100.8	73.7	76.7	153.3	North net
5/28/2016	<i>Caretta caretta</i>		LLS541/LLS542	82.8	84.1	90.0	88.5	67.0	68.0	93.8	North net
5/29/2016	<i>Caretta caretta</i>		LLS543/LLS544	51.5	53.0	56.6	55.0	45.3	41.5	21.3	North net
5/31/2016	<i>Caretta caretta</i>	10	LLS545/LLS546	94.6	94.6	102.8	94.3	71.6	71.6	130.4	South net
5/31/2016	<i>Caretta caretta</i>		LLS547/LLS548	81.8	82.6	93.0	93.5	75.5	66.0	105.7	South net

NOTES

1. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 10/15/08, 3/23/10, 10/29/11, 12/27/11, 12/17/12, 1/22/14, 1/13/15 and 5/5/16. No new Inconel tags inserted due to multiple tag scars. Minor healed flipper damage.
2. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 11/25/08, 11/4/09, 9/12/10, 9/7/11, 10/31/11, 5/30/12, 1/15/13, 6/30/14, 7/22/14 and 5/7/16.
3. REHAB (NON-CAUSAL). Stranding# JRG160509-01. Underweight and lethargic subadult loggerhead. Open gash measuring 2cm by 7cm in left margin of carapace. Inwater Research Group biologists facilitated transfer to the Miami Seaquarium rehab facility in Key Biscayne, FL.
4. Adult male. Tail length = 450 mm. Large curved claws and soft plastron. Skull exposed from moderate fresh scrape to top of head.
5. Adult female. Tail length = 290 mm. Old healed gashes in posterior carapace (apparent prop scars). Small 1cm healing cut in neck (possible mating scar). Bone exposed from moderate fresh scrape to lower left side of face/jaw.
6. Adult female. Tail length = 250 mm.
7. Adult female. Tail length = 222 mm. Mating scars underneath neck.
8. Adult female. Tail length = 240 mm.
9. Adult female. Tail length = 245 mm. Sea urchin spines in roof of mouth.
10. Adult female. Tail length = 195 mm. Minor healed carapace and flipper damage.

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>Ereimochelys imbricata</i>)		Leatherbacks (<i>Dermochelys coriacea</i>)		Kemp's ridley (<i>Lepidochelys kempii</i>)		Overall Totals	
	May-16	Year to Date	May-16	Year to Date	May-16	Year to Date	May-16	Year to Date	May-16	Year to Date	May-16	Year to Date
Captures	21	158	3	106	0	1	0	1	0	6	24	272
Causal Mortalities	0	0	0	0	0	0	0	0	0	0	0	0
Non-Causal Mortalities	0	0	0	8	0	0	0	0	0	0	0	8
Causal Injuries	0	0	0	0	0	0	0	0	0	0	0	0
Sent to Rehab	1	10	0	5	0	1	0	0	0	2	1	18
Fresh Scrapes												
None	3	21	0	20	0	0	0	0	0	0	3	41
Minor	15	125	3	72	0	1	0	0	0	6	18	204
Moderate	3	12	0	14	0	0	0	1	0	0	3	27
Severe	0	0	0	0	0	0	0	0	0	0	0	0
Percent with Mod/Sev Scrapes	14.3%	7.6%	0.0%	13.2%	N/A	0.0%	N/A	100.0%	N/A	0.0%	12.5%	9.9%

St Lucie Power Plant Causal Turtles		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	**2016	Injury / Mortality Totals by Species
Loggerhead	Total Captures	538	623	484	419	227	420	260	295	302	232	302	275	274	158	4,809
	Injuries	0	0	1	*3	0	1	1	0	0	1	1	0	0	0	5
	Mortalities	0	1	0	*21	0	0	0	1	0	0	0	0	0	0	2
Green	Total Captures	394	286	428	267	101	299	161	444	217	127	197	134	181	106	3,342
	Injuries	1	0	3	7	0	2	2	1	0	0	0	0	0	0	16
	Mortalities	1	1	1	1	1	2	0	3	1	2	2	0	4	0	19
Leatherback	Total Captures	4	2	0	1	1	0	1	2	0	2	2	0	2	1	18
	Injuries	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
Kemp's Ridley	Total Captures	2	1	3	3	0	2	0	7	0	0	0	2	7	6	33
	Injuries	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
Hawksbill	Total Captures	6	2	2	2	1	4	2	3	2	1	2	3	1	1	32
	Injuries	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
Injury & Mortality Yearly Totals		2	2	5	32	1	5	3	5	1	3	3	0	4	0	66
Total Captures per Year		944	914	917	692	330	725	424	751	521	362	503	414	465	272	8,234

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

** 2016 is a partial year.