

NRR-PMDAPEm Resource

From: Steve Weege <steveweege@gmail.com>
Sent: Thursday, February 02, 2017 8:17 AM
To: 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; Terri.Taylor@fpl.com
Subject: [External_Sender] January 2017 FPL Marine Turtle Removal Monthly Report
Attachments: January 2017 Marine Turtle Captures.pdf; Monthly Report Notes 2017.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 January 2017

Dear Meghan,

Attached, please find the monthly summary of marine turtle removals for January 2017. This month, we captured fourteen (14) *Caretta caretta* and seven (7) *Chelonia mydas* in the intake canal of the St. Lucie power plant on Hutchinson Island. There were no mortalities or sea turtles sent for rehabilitation in January.

Throughout the month, the permanent 5-inch barrier net experienced negligible loads of algae and jellyfish that 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 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

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From: Steve Weege

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Files	Size	Date & Time
MESSAGE	1550	2/2/2017 8:16:50 AM
January 2017 Marine Turtle Captures.pdf		76296
Monthly Report Notes 2017.pdf	58492	
FPL St Lucie Capture Summary 2016.pdf		79460
Power Plant Causal Turtles.pdf	93803	

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

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
1/2/2017	<i>Caretta caretta</i>		MMA722/MMA723	60.9	62.1	65.9	62.0	49.6	44.6	27.6	North net
1/3/2017	<i>Chelonia mydas</i>		MMA724	27.1	27.2	27.7	22.6	21.1	22.8	2.6	Dip net
1/4/2017	<i>Chelonia mydas</i>	1	MMA725	51.7	52.4	56.5	47.5	40.2	42.6	18.7	North net
1/5/2017	<i>Chelonia mydas</i>	2	4A591B0149	54.2	54.5	58.1	50.4	42.4	44.3	21.0	Dip net
1/5/2017	<i>Caretta caretta</i>		MMA726/MMA727	59.5	60.5	65.5	64.0	49.5	47.1	33.1	North net
1/6/2017	<i>Caretta caretta</i>	3	4331296A4C	71.5	73.2	76.6	74.7	58.9	54.8	48.3	Hand capture
1/7/2017	<i>Chelonia mydas</i>	4	LLS436/MMA732	53.2	53.6	56.0	49.9	41.9	42.7	18.0	North net
1/7/2017	<i>Chelonia mydas</i>	5	MMA594/MMA733	47.6	48.3	49.8	42.4	37.4	37.5	12.7	North net
1/7/2017	<i>Caretta caretta</i>	6	MMA728/MMA729	83.2	85.3	91.0	84.4	67.6	64.4	84.3	Hand capture
1/7/2017	<i>Caretta caretta</i>		MMA730/MMA731	59.4	60.5	64.4	61.0	49.4	45.9	28.5	Hand capture
1/8/2017	<i>Caretta caretta</i>		MMA734/MMA735	73.0	74.1	79.2	77.1	62.5	57.3	57.6	North net
1/11/2017	<i>Caretta caretta</i>	7	MMA736/MMA737	63.1	63.7	69.5	64.0	50.5	47.1	36.2	North net
1/11/2017	<i>Caretta caretta</i>		MMA738/MMA739	61.1	62.9	68.1	67.4	54.7	48.5	35.4	North net
1/11/2017	<i>Caretta caretta</i>	8	MMA740/MMA741	84.7	85.9	91.4	78.3	62.8	64.5	88.0	North net
1/14/2017	<i>Caretta caretta</i>		MMA742/MMA743	63.3	66.1	73.5	69.0	57.9	53.9	48.9	North net

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCl (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
1/15/2017	<i>Chelonia mydas</i>		MMA744	27.1	27.4	27.9	23.5	22.2	22.5	2.4	Hand capture
1/18/2017	<i>Caretta caretta</i>	9	MMA747/MMA748	71.1	71.9	75.2	68.7	58.1	54.0	47.0	Hand capture
1/20/2017	<i>Chelonia mydas</i>	10	LLP383	57.9	58.2	60.9	52.5	46.6	48.5	24.8	Hand capture
1/20/2017	<i>Caretta caretta</i>		MMA745/MMA746	60.1	61.4	64.5	62.1	52.5	49.2	33.7	Hand capture
1/23/2017	<i>Caretta caretta</i>	11	MMA749/MMA750	64.0	65.8	70.0	69.6	60.9	53.3	47.4	North net
1/30/2017	<i>Caretta caretta</i>		MMA753/MMA754	65.3	66.6	70.0	66.4	56.4	50.3	43.1	North net

NOTES

1. PAPHILLOMAS (Balazs Tumor Score = 2 {moderate}, Total Tumor Score = 18). Healing hooking wound in dorsal side of neck.
2. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 10/29/08, 1/17/14, 5/7/14, 1/27/15, 3/1/15, 12/23/15, 1/30/16, 6/2/16 and 1/5/17.
3. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 8/18/07, 8/21/07, 8/24/07, 9/2/07, 9/10/07, 10/25/07, 12/17/07, 1/25/08, 4/6/08, 4/30/08, 7/13/08, 8/24/08, 9/13/08, 10/6/08, 10/18/08, 4/17/09, 6/17/09, 8/13/09, 10/27/09, 6/11/10, 9/15/10, 9/15/11, 10/21/11, 11/30/11, 7/7/12, 3/20/13, 11/4/15, 12/27/16 and 1/6/17. No new Inconel tags were inserted due to the presence of multiple tag scars.
4. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 4/17/16, 9/21/16 and 1/7/17.
5. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 7/30/16, 9/17/16 and 1/7/17.
6. Adult female. Tail length = 185 mm. Partially healed shark bite wounds on all four flippers, head, neck and plastron. Turtle was active and had a good relative body condition index.
7. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 7/24/07 and 1/11/17. New Inconel tags were applied on this capture event.
8. Adult male. Tail length = 235 mm. Large curved claws on front flippers (male). Large notch and scar tissue in right front flipper from an old entanglement injury. Held for FPL Turtle Excluder Device testing (new protocol, turtle #4 was kept three days).
9. Held for FPL Turtle Excluder Device testing (new protocol, turtle #5 was held for three days).
10. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 11/6/08, 5/18/11, 10/11/11, 6/14/13, 6/23/14, 3/11/15, 1/3/16 and 1/20/17. Minor healed flipper damage.
11. Old healed shark bite marks on right side of carapace. Held for FPL Turtle Excluder Device testing (new protocol, turtle #6 was held for three days).

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	
	Dec-16	Year to Date	Dec-16	Year to Date	Dec-16	Year to Date	Dec-16	Year to Date	Dec-16	Year to Date	Dec-16	Year to Date
Captures	10	316	4	159	0	4	0	1	0	0	14	486
Causal Mortalities	0	1	0	0	0	0	0	0	0	0	0	1
Non-Causal Mortalities	0	0	0	8	0	0	0	0	0	0	0	8
Causal Injuries Sent to Rehab	1	17	0	6	0	1	0	0	0	0	1	26
Fresh Scrapes												
None	1	43	0	29	0	1	0	0	0	0	1	73
Minor	8	248	4	113	0	3	0	0	0	0	12	370
Moderate	1	25	0	17	0	0	0	1	0	0	1	43
Severe	0	0	0	0	0	0	0	0	0	0	0	0
Percent with Mod/Sev Scrapes	10.0%	7.9%	0.0%	10.7%	N/A	0.0%	N/A	100.0%	N/A	0.0%	7.1%	8.8%

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	14	4,443
	Injuries	0	1	*3	0	1	1	0	0	1	1	0	0	0	0	5
	Mortalities	1	0	*21	0	0	0	1	0	0	0	0	0	1	0	3
Green	Total Captures	286	428	267	101	299	161	444	217	127	197	134	181	159	7	3,008
	Injuries	0	3	7	0	2	2	1	0	0	0	0	0	0	0	15
	Mortalities	1	1	1	1	2	0	3	1	2	2	0	4	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
	Mortalities	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
	Mortalities	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
	Mortalities	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	21	7,525

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

**2017 is a partial year.