

NRR-PMDAPEm Resource

From: Steve Weege [steveewege@gmail.com]
Sent: Wednesday, July 01, 2015 10:06 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; Max Toebe
Subject: [External_Sender] June 2015 FPL Marine Turtle Removal Monthly Report
Attachments: June 2015 Marine Turtle Captures.rtf; Monthly Report Notes 2015.pdf; Power Plant Causal Turtles.pdf; FPL St. Lucie Capture Summary 2015.pdf

Mrs. Meghan Koperski

Tequesta Field Laboratory

19100 SE Federal Highway

Tequesta, FL 33469

Subject: Marine Turtle Removal Monthly Summary

June 2015

Dear Meghan,

Attached, please find the monthly summary of marine turtle removals for June 2015. This month, we captured forty-three (43) *Caretta caretta* and four (4) *Chelonia mydas* in the intake canal of the St. Lucie power plant on Hutchinson Island. There were no mortalities and only one sea turtle was sent for rehabilitation in June. 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 sea turtle that was sent to a rehabilitation facility for non-causal injuries this month. On June 21st, a subadult loggerhead was hand captured in the FPL intake canal with a 3ft section of 50lb monofilament fishing line coming out of its mouth and throat. After consultation with FWC, Inwater Research Group personnel transported the turtle to the Loggerhead Marinelifelife Center in Juno Beach for rehabilitation. X-rays revealed an ingested fishing hook which was successfully removed from its stomach. The animal is currently being treated with fluids and antibiotics as it continues to recover. This stranding event was not considered causal to power plant operations.

Throughout the month, the 5-inch barrier net experienced severe loads of comb jellyfish that entered into the intake canal system, whereas algae entrainment was light. Overall, there was no significant impact on the barrier net system and the new barrier net has performed as designed; 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 2015. 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 2002.

Please feel free to contact me with any questions.

Sincerely,

Steve

Steve Weege

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Files	Size	Date & Time
MESSAGE	2678	7/1/2015 10:06:15 AM
June 2015 Marine Turtle Captures.rtf		156659
Monthly Report Notes 2015.pdf	58576	
Power Plant Causal Turtles.pdf	83769	
FPL St. Lucie Capture Summary 2015.pdf		73847

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**MARINE TURTLE REMOVALS
ST. LUCIE PLANT INTAKE CANAL
JUNE 2015**

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
6/1/2015	<i>Caretta caretta</i>		LLH692/LLH693	57.8	59.6	63.3	64.2	52.0	47.1	32.4	North net
6/1/2015	<i>Caretta caretta</i>	1	LLH694/LLH695	91.5	91.8	98.8	86.8	72.2	70.8	107.5	South net
6/1/2015	<i>Caretta caretta</i>		LLH696/LLH697	62.6	63.9	69.3	67.5	56.7	49.7	40.2	South net
6/3/2015	<i>Caretta caretta</i>		LLH699/LLH700	67.1	68.3	74.1	70.0	54.9	52.3	40.5	South net
6/3/2015	<i>Caretta caretta</i>	2	LLH701/LLH702	84.0	85.5	93.6	89.1	69.1	65.9	100.4	South net
6/5/2015	<i>Caretta caretta</i>	3	LLH703/LLH704	96.5	97.9	108.0	100.1	78.4	76.5	143.3	South net
6/5/2015	<i>Caretta caretta</i>		LLH705/LLH706	78.4	80.3	86.8	80.5	60.4	62.7	67.1	South net
6/5/2015	<i>Caretta caretta</i>	4	LLH707/LLH708	93.6	96.2	103.4	90.1	71.7	68.6	112.1	South net
6/6/2015	<i>Chelonia mydas</i>	5	LLH709/LLH710	92.5	92.8	97.5	92.6	75.3	73.2	102.8	South net
6/6/2015	<i>Caretta caretta</i>	6	LLH711/LLH712	89.6	90.3	98.1	88.6	66.4	67.2	100.4	Hand capture
6/6/2015	<i>Caretta caretta</i>		LLH713/LLH714	64.7	66.0	71.7	66.4	53.8	49.5	38.8	Hand capture
6/6/2015	<i>Caretta caretta</i>		LLH715/LLH716	67.1	67.7	73.4	74.1	57.6	51.4	47.2	North net
6/7/2015	<i>Caretta caretta</i>		LLH717/LLH718	60.4	61.9	65.7	64.6	53.7	48.3	33.7	South net
6/7/2015	<i>Caretta caretta</i>		LLH719/LLH720	65.8	67.0	70.9	68.8	58.4	54.0	42.6	North net
6/8/2015	<i>Caretta caretta</i>	7	LLH721/LLH722	90.3	92.3	99.1	92.4	73.7	71.0	112.6	North net

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
6/8/2015	<i>Caretta caretta</i>	8	LLH723/LLH724	87.6	89.4	97.2	87.0	70.8	67.3	94.0	North net
6/13/2015	<i>Caretta caretta</i>		LLH725/LLH726	58.8	60.1	64.7	63.7	53.0	48.1	35.4	South net
6/14/2015	<i>Caretta caretta</i>		LLH727/LLH728	64.4	65.5	70.8	68.2	57.1	51.4	43.0	Hand capture
6/14/2015	<i>Caretta caretta</i>		LLH729/LLH730	82.1	83.3	91.2	80.5	61.5	62.9	72.3	Hand capture
6/14/2015	<i>Caretta caretta</i>		LLH731/LLH732	61.3	62.8	68.3	66.0	54.5	49.0	37.2	Hand capture
6/15/2015	<i>Chelonia mydas</i>	9	EEP686	52.0	52.1	55.7	51.3	41.5	42.3	19.0	Hand capture
6/15/2015	<i>Caretta caretta</i>		LLH733/LLH734	79.4	79.6	84.0	84.3	66.5	64.6	88.7	Hand capture
6/15/2015	<i>Caretta caretta</i>	10	LLH735/LLH736	88.6	91.1	97.7	89.6	68.6	68.2	103.9	Hand capture
6/15/2015	<i>Caretta caretta</i>	11	LLH737/LLH738	83.4	85.0	90.5	80.4	62.8	63.8	76.9	Hand capture
6/15/2015	<i>Caretta caretta</i>		LLH739/LLH740	64.6	65.4	69.9	66.7	56.2	49.3	43.2	Hand capture
6/15/2015	<i>Caretta caretta</i>	12	LLH741/LLH742	84.4	85.8	93.5	82.8	67.7	65.3	83.5	Hand capture
6/15/2015	<i>Caretta caretta</i>		LLH743/LLH744	78.1	79.7	86.5	77.4	61.5	59.6	69.2	Hand capture
6/16/2015	<i>Caretta caretta</i>		LLH745/LLH746	82.2	83.0	85.7	82.5	63.0	64.1	79.7	North net
6/17/2015	<i>Caretta caretta</i>	13	LLH747/LLH748	94.5	94.9	101.5	100.1	79.7	74.2	132.2	Hand capture
6/17/2015	<i>Caretta caretta</i>		LLH749/LLH750	69.0	70.3	75.4	71.0	58.3	55.2	48.3	Hand capture
6/17/2015	<i>Chelonia mydas</i>	14	LLH751	49.7	49.8	53.8	48.0	38.4	41.0	16.1	Hand capture
6/17/2015	<i>Chelonia mydas</i>	15	LLH752/LLH753	44.8	45.5	48.2	43.9	36.4	36.5	13.0	Hand capture
6/19/2015	<i>Caretta caretta</i>		LLH754/LLH755	70.9	72.2	77.0	71.9	60.3	56.5	50.5	South net
6/20/2015	<i>Caretta caretta</i>	16	LLH756/LLH757		80.4	89.5	81.0	65.5	64.5	83.4	Hand capture
6/20/2015	<i>Caretta caretta</i>		LLH758/LLH759	63.3	64.4	67.9	68.6	56.1	50.7	38.3	Hand capture

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCl (cm)	CMCW (cm)	SMCW (cm)	SMP L (cm)	Weight (kg)	Method
6/21/2015	<i>Caretta caretta</i>		LLH760/LLH761	82.6	83.3	89.3	86.4	66.4	61.7	89.5	Hand capture
6/21/2015	<i>Caretta caretta</i>		LLH762/LLH763	80.1	81.2	85.6	76.4	64.1	61.4	68.8	Hand capture
6/21/2015	<i>Caretta caretta</i>	17	STW150621-01	66.6	68.7	72.3	72.4	57.1	55.7	50.9	Hand capture
6/23/2015	<i>Caretta caretta</i>		LLH764/LLH765	74.1	75.9	81.8	72.8	57.4	55.4	56.1	Hand capture
6/23/2015	<i>Caretta caretta</i>	18	LLH766/LLH767	89.9	91.2	95.8	90.9	73.2	70.7	109.4	Hand capture
6/24/2015	<i>Caretta caretta</i>	19	LLH768/LLH769	89.1	90.9	97.8	92.3	75.0	71.7	107.0	South net
6/24/2015	<i>Caretta caretta</i>	20	LLH770/LLH771	87.0	87.4	93.2	84.9	70.2	65.0	95.0	North net
6/25/2015	<i>Caretta caretta</i>		LLH772/LLH773	56.5	57.7	61.1	61.5	49.7	45.0	29.4	North net
6/26/2015	<i>Caretta caretta</i>	21	LLH774/LLH775	99.4	99.8	106.9	95.2	72.6	77.6	147.1	North net
6/27/2015	<i>Caretta caretta</i>		LLH776/LLH777	78.4	81.3	86.5	81.7	63.1	60.6	72.5	South net
6/28/2015	<i>Caretta caretta</i>	22	LLH778/LLH779	95.2	95.7	104.1	96.4	76.4	71.9	132.3	North net
6/29/2015	<i>Caretta caretta</i>	23	LLH780/LLH781	90.4	90.7	98.9	89.6	67.7	71.8	108.0	South net

NOTES

1. Adult female. Tail length = 189 mm.
2. Adult female. Tail length = 181 mm. Shark rakings evident on left anterior carapace.
3. Adult female. Tail length = 205 mm.
4. Adult male. Tail length = 420 mm. Moderate fresh scrape to upper right eyelid.
5. Adult male. Tail length = 410 mm. Possible healing hooking wound in right side of jaw.
6. Adult female. Tail length = 233 mm. Moderate fresh scrape on right side of head (skull exposed).
7. Adult female. Tail length = 217 mm.
8. Adult female. Tail length = 177 mm.
9. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 8/5/08, 5/10/11, 6/13/11, 7/25/11, 7/7/12, 2/5/13, 3/20/13, 5/7/14, 1/3/15, 4/16/15 and 6/15/15. PAPHILLOMAS (Balazs Tumor Score = 2 {moderate}, Total Tumor Score = 10).
10. Adult female. Tail length = 209 mm. STRANGE TAG (PIT tag #466B0F424C). Tagging information sent to Peter Eliazar at the Archie Carr Center for Sea Turtle Research (UF). Moderate fresh scrape in left anterior carapace.
11. Adult female. Tail length = 223 mm. Mating scar in ventral surface of neck (3cm x 7cm).
12. Adult female. Tail length = 177 mm.
13. Adult female. Tail length = 228 mm. Shark attack victim. Large arc-shaped bite out of right posterior carapace (36cm in diameter). Turtle also missing 30% of right rear flipper. Injuries are old/healed.
14. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 5/31/12, 4/27/13, 11/5/13, 1/21/14, 7/3/14 and 6/17/15. PAPHILLOMAS (Balazs Tumor Score = 1 {light}, Total Tumor Score = 1). One small tumor on rear flipper. New Inconel tag inserted today.
15. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 9/21/13, 1/29/14 and 6/17/15. PAPHILLOMAS (Balazs Tumor Score = 1 {light}, Total Tumor Score = 1). New Inconel tags inserted on this capture event.
16. Carapace damage prevented biologists from obtaining a straight minimum carapace length (SMCL). Two cracks originating from between the pygals and splitting through the carapace. The wounds extend through the bone at the anterior end and are in the process of healing (not from entrapment).
17. REHAB (NON-CAUSAL). Stranding# STW150621-01. Subadult loggerhead hand captured in the FPL intake canal with a 3ft section of 50lb monofilament fishing line coming out of its mouth/throat. After consultation with the Florida Fish & Wildlife Conservation Commission, Inwater Research Group personnel transported the turtle to the Loggerhead Marinelife Center in Juno Beach for rehabilitation.
18. Adult female. Tail length = 258 mm. Possible old boat strike trauma; Large healed gash in right posterior carapace measuring 40cm long by 5cm wide. Mating wounds on neck.
19. Adult female. Tail length = 205 mm. Moderate fresh scrape above left eye.
20. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 6/28/05 and 6/24/15. Adult female. Tail length = 200 mm.
21. Adult female. Tail length = 191 mm. Mating scar on ventral side of neck.
22. Adult female. Tail length = 256 mm.
23. Adult female. Tail length = 226 mm. Deep moderate fresh scrape above left eye.

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

St Lucie Power Plant Causal Turtles		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	**2015	Injury / Mortality Totals by Species
Loggerhead	Total Captures	341	538	623	484	419	227	420	260	295	302	232	303	275	168	4,887
	Injuries	0	0	0	1	*3	0	1	1	0	0	1	1	0	0	5
	Mortalities	0	0	1	0	*21	0	0	0	0	1	0	0	0	0	2
Green	Total Captures	292	394	286	428	267	101	299	161	444	217	127	196	134	86	3,432
	Injuries	0	1	0	3	7	0	2	2	1	0	0	0	0	0	16
	Mortalities	2	1	1	1	1	1	2	0	3	1	2	2	0	1	18
Leatherback	Total Captures	0	4	2	0	1	1	0	1	2	0	2	2	0	2	17
	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	0	2	1	3	3	0	2	0	7	0	0	0	2	6	26
	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	3	6	2	2	2	1	4	2	3	2	1	2	3	0	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
Injury & Mortality Yearly Totals		2	2	2	5	32	1	5	3	5	1	3	3	0	1	65
Total Captures per Year		636	944	914	917	692	330	725	424	751	521	362	503	414	262	8,395

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

** 2015 is a partial year.

	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	
	Jun-15	Year to Date	Jun-15	Year to Date	Jun-15	Year to Date	Jun-15	Year to Date	Jun-15	Year to Date	Jun-15	Year to Date
Captures	43	168	4	86	0	0	0	2	0	6	47	262
Causal Mortalities	0	0	0	1	0	0	0	0	0	0	0	1
Non-causal Mortalities	0	0	0	2	0	0	0	0	0	0	0	2
Causal Injuries	0	0	0	0	0	0	0	0	0	0	0	0
Sent to rehab	1	6	0	0	0	0	0	0	0	0	1	6
Fresh Scrapes												
None	2	16	0	12	0	0	0	0	0	0	2	28
Minor	31	99	4	42	0	0	1	0	0	3	35	145
Moderate	10	11	0	2	0	0	0	0	0	0	10	13
Severe	0	0	0	0	0	0	0	0	0	0	0	0
Percent with mod/sev scrapes	23.3%	6.5%	0.0%	2.3%	N/A	N/A	N/A	0.0%	N/A	0.0%	21.3%	5.0%