

From: Steve Weege <sweege@inwater.org>
Sent: Tuesday, June 15, 2021 3:22 PM
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@fpl.com; audra.livergood@noaa.gov; Sciscente, Richard; Seth.Duston@fpl.com
Subject: [External_Sender] May 2021 FPL Marine Turtle Removal Monthly Report
Attachments: May 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
May 2021**

Dear Meghan,

Attached, please find the monthly summary of marine turtle removals for May 2021. This month we captured 17 *Caretta caretta* and three *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 this month.

The short-term outage that began in April concluded in the beginning of May. Consequently, flow rates in the intake canal system have returned to normal levels. Furthermore, the primary 5-inch barrier net encountered severe amounts of algae throughout the month. As such, 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. In addition, Underwater Engineering Services Inc. (UESI) divers inspected and cleaned the primary barrier as needed throughout the month. The 8-inch A-1-A net was also inspected and found to have detached from the bottom near the canal banks (likely a direct result of the water levels rising dramatically during the recent outage). UESI divers promptly repaired the net. Altogether, the primary barrier net has performed as designed and no turtles have been observed beyond the 5-inch net.

FPL's contracted biologists inspect the banks of the intake canal east of the 5-inch mesh barrier net for turtle tracks or other signs of nesting each morning during nesting season (March 1st -October 31st). On May 22nd, a loggerhead was found to have nested on the intake canal bank overnight. The egg chamber was found and the nest was relocated to the beach at 7:30 AM. The nest will be monitored daily and inventoried so that hatch success can be evaluated and reported to FWC.

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

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May 2021 Marine Turtle Captures.pdf	256986
Monthly Report Notes 2021.pdf	184746
FPL St. Lucie Capture Summary 2021.pdf	251538

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MARINE TURTLE REMOVALS ST. LUCIE PLANT INTAKE CANAL MAY 2021

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
5/11/2021	<i>Caretta caretta</i>		KKY236/KKY237	59.1	60.0	64.2	57.5	49.3	47.0	32.4	South net
5/19/2021	<i>Caretta caretta</i>	1	KKY238/KKY239	92.0	92.6	97.6	90.9	69.8	70.3	113.8	North net
5/22/2021	<i>Caretta caretta</i>	2	KKY240/KKY241	89.1	90.3	96.2	89.1	72.7	69.3	107.7	Hand capture
5/22/2021	<i>Caretta caretta</i>	3	KKY242/KKY243	87.6	88.4	91.7	80.6	65.5	62.8	90.2	Hand capture
5/23/2021	<i>Chelonia mydas</i>	4	KKY244	96.8	97.1	100.2	90.5	73.8	78.8	114.9	North net
5/23/2021	<i>Caretta caretta</i>	5	KKY245/KKY246	91.1	92.5	98.1	88.5	71.9	67.8	106.1	North net
5/23/2021	<i>Caretta caretta</i>		KKY247/KKY248	58.7	59.5	62.4	60.3	51.6	47.1	32.8	North net
5/23/2021	<i>Caretta caretta</i>	6	KKY249/KKY250	90.0	91.4	97.1	84.4	62.7	69.0	109.3	North net
5/24/2021	<i>Chelonia mydas</i>	7	KKY251/KKY252	91.9	92.4	95.6	86.8	72.0	74.7	94.3	North net
5/26/2021	<i>Caretta caretta</i>	8	KKY253/KKY254	89.2	89.9	93.4	81.5	67.8	68.2	105.7	South net
5/27/2021	<i>Caretta caretta</i>	9	422E742232	77.4	78.0	80.5	74.5	59.7	55.2	67.3	North net
5/27/2021	<i>Caretta caretta</i>	10	KKY256/KKY257	97.9	99.1	103.2	95.1	74.7	74.5	139.8	Dip net
5/27/2021	<i>Caretta caretta</i>		KKY258/KKY259	61.7	62.2	66.9	62.4	51.4	48.9	34.1	North net
5/28/2021	<i>Caretta caretta</i>	11	KKY260/KKY261	88.6	90.2	94.0	87.6	67.9	65.6	102.9	North net
5/29/2021	<i>Caretta caretta</i>	12	KKY262/KKY263	87.0	88.6	93.6	82.3	66.2	65.7	106.6	Hand capture

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCl (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
5/29/2021	<i>Caretta caretta</i>	13	KKY264/KKY265	99.6	100.3	104.5	96.3	72.9	76.1	139.1	Hand capture
5/29/2021	<i>Caretta caretta</i>		KKY266/KKY267	62.2	63.3	66.6	67.6	56.5	51.1	39.9	Hand capture
5/29/2021	<i>Chelonia mydas</i>	14	KKY268/KKY269	101.8	102.0	105.6	95.2	78.3	80.4	144.0	Hand capture
5/29/2021	<i>Caretta caretta</i>		KKY270/KKY271	52.8	54.4	56.8	56.8	46.1	45.6	25.9	Hand capture
5/30/2021	<i>Caretta caretta</i>		KKY255/KKY272	83.4	84.5	88.8	81.1	63.6	63.4	85.0	South net

NOTES

1. Adult female loggerhead. Tail length = 215 mm.
2. Adult female loggerhead. Tail length = 217 mm.
3. Adult male loggerhead. Tail length = 435 mm.
4. Adult male green turtle. Tail length = 445 mm. Deep moderate 5 cm fresh scrape in anterior carapace. Extensive scar tissue in proximal trailing edges of both front flippers (not tag scars). Only one Inconel tag inserted due to flipper damage.
5. Adult female loggerhead. Tail length = 240 mm.
6. Adult female loggerhead. Tail length = 250 mm.
7. Adult male green turtle. Tail length = 365 mm. Moderate fresh scrape above left eye.
8. Adult female loggerhead. Tail length = 240 mm. Healing mating wounds/scars in neck and front flippers.
9. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 5/30/89, 9/6/90, 10/11/90, 10/15/90, 2/23/91, 8/10/92, 8/27/92, 9/21/92, 1/6/93, 6/8/93, 12/29/93, 3/22/94, 10/31/94, 3/17/95, 4/20/95, 2/7/96, 4/7/96, 7/11/96, 7/23/96, 7/29/96, 9/22/96, 10/9/96, 6/13/97, 5/15/98, 4/15/00, 6/13/00, 9/8/00, 11/19/00, 11/15/01, 9/16/02, 4/30/03, 11/24/03, 3/31/04, 9/15/04, 10/25/04, 8/10/05, 8/16/06, 4/30/08, 9/26/08, 8/19/09, 12/28/12, 4/17/13, 9/2/14, 10/7/17, 11/7/17, 1/16/18, 2/12/19, 7/10/20, 12/14/20, and 5/27/21. Adult male loggerhead. Tail length = 450 mm. Sex determination based on tail length. Multiple tag scars in both front flippers (no new tags inserted).
10. Adult female loggerhead. Tail length = 235 mm. Turtle missing 40% of left front flipper (healed). Mating scar in neck.
11. Adult female loggerhead. Tail length = 282 mm.
12. Adult female loggerhead. Tail length = 253 mm. Mating scar in right axilla.
13. Adult female loggerhead. Tail length = 273 mm. Moderate fresh scrape in lower tomium. Turtle missing 60% of right front flipper (healed). Mating scars in neck and left axilla.
14. Adult female green turtle. Tail length = 300 mm. Mating wounds in neck and left axilla.

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	
	May-21	Year to Date	May-21	Year to Date	May-21	Year to Date	May-21	Year to Date	May-21	Year to Date	May-21	Year to Date
Captures	17	76	3	32	0	1	0	0	0	3	20	112
Causal Mortalities	0	0	0	0	0	0	0	0	0	0	0	0
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	0	11	0	1	0	1	0	0	0	0	0	13
Fresh Scrapes	May-	Year to Date	May-	Year to Date	May-	Year to Date	May-	Year to Date	May-	Year to Date	May-	Year to Date
None	4	14	0	6	0	1	0	0	0	1	4	22
Minor	13	60	1	24	0	0	0	0	0	2	14	86
Moderate	0	2	2	2	0	0	0	0	0	0	2	4
Severe	0	0	0	0	0	0	0	0	0	0	0	0
Percent with mod/sev scrapes	0.0%	2.6%	66.7%	6.3%	N/A	0.0%	N/A	N/A	N/A	0.0%	10.0%	3.6%