

From: Steve Weege <sweege@inwater.org>
Sent: Tuesday, January 18, 2022 8:24 AM
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; audra.livergood@noaa.gov; Sciscente, Richard; Seth.Duston@fpl.com
Subject: [External_Sender] December 2021 FPL Marine Turtle Removal Monthly Report
Attachments: December 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 December 2021

Dear Meghan,

Attached, please find the monthly summary of marine turtle removals for December 2021. This month we captured 16 *Caretta caretta*, 10 *Chelonia mydas*, and one *Lepidochelys kempii* in the intake canal of the St. Lucie power plant on Hutchinson Island. Three sea turtles were sent for rehabilitation (non-causal) and there was one causal mortality during the month of December. As with all sea turtle strandings at the Saint Lucie Plant, the Florida Fish and Wildlife Conservation Commission (FWC) was consulted and stranding forms were filed with the state through the Sea Turtle Stranding and Salvage Network.

Three sea turtles were sent to rehab for non-causal injuries this month. On December 4th, a small subadult loggerhead was hand captured in the intake canal with healing shark attack injuries. The turtle had significant soft tissue injuries and was underweight. It was taken to the Brevard Zoo in Melbourne for rehab. On December 17th, an emaciated adult female loggerhead was removed from the tangle nets in fair condition. This turtle was transported to the Gumbo Limbo Nature Center (GLNC) in Boca Raton for treatment of Debilitated Loggerhead Turtle Syndrome. On December 29th, an adult female loggerhead was caught in the tangle nets that had extensive boat strike injuries to its carapace and limbs (also taken to GLNC). Because these injuries/illnesses were unrelated to the power plant, all three strandings were classified as a non-causal.

There was one causal sea turtle mortality this month. On December 10th, a subadult loggerhead was found fresh dead on the 5-inch barrier net at the end of the day. The turtle had two unhealed prop wounds in its posterior carapace (gashes extended through both the carapace and plastron) and the pygals had also been chopped off by the action of the prop. In accordance with protocol, the animal was held on ice for necropsy and final causality determination by a licensed veterinarian. Despite being compromised, the turtle was determined to have drowned and was therefore deemed causal.

The primary 5-inch barrier net encountered negligible amounts of algae throughout the month. Altogether, the primary 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 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

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Sent Date: 1/18/2022 8:23:43 AM
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From: Steve Weege

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Files	Size	Date & Time
MESSAGE	3129	1/18/2022 8:24:15 AM

December 2021 Marine Turtle Captures.pdf		89941
Monthly Report Notes 2021.pdf	70506	
FPL St. Lucie Capture Summary 2021.pdf		86689

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**MARINE TURTLE REMOVALS
ST. LUCIE PLANT INTAKE CANAL
DECEMBER 2021**

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
12/2/2021	<i>Caretta caretta</i>	1	FFE473/FFE474	85.8	88.7	92.8	80.0	62.3	67.1	77.9	South net
12/2/2021	<i>Caretta caretta</i>		FFE475/FFE476	64.8	65.7	67.5	63.4	53.8	49.5	36.2	Dip net
12/3/2021	<i>Caretta caretta</i>		FFE477/FFE478	71.6	72.5	75.4	71.4	56.5	56.3	47.4	North net
12/3/2021	<i>Caretta caretta</i>		FFE479/FFE480	54.9	56.5	60.0	54.5	45.6	43.0	27.2	Dip net
12/3/2021	<i>Chelonia mydas</i>		IRG0418/IRG0419	27.2	28.8	30.0	24.4	22.8	23.6	2.8	Dip net
12/4/2021	<i>Chelonia mydas</i>	2	4A61073F34	75.0	75.4	78.5	68.0	56.8	60.8	52.0	Hand capture
12/4/2021	<i>Chelonia mydas</i>	3	FFE481/FFE482	92.0	92.6	96.5	86.1	71.1	73.1	121.8	Hand capture
12/4/2021	<i>Chelonia mydas</i>		FFE483/FFE484	77.0	77.9	80.1	74.0	61.7	61.9	55.1	Hand capture
12/4/2021	<i>Caretta caretta</i>		FFE485/FFE486	65.3	67.2	69.2	66.5	56.7	51.4	41.4	Hand capture
12/4/2021	<i>Chelonia mydas</i>		FFE487/FFE488	45.4	45.8	47.7	40.3	36.3	37.2	12.3	Hand capture
12/4/2021	<i>Lepidochelys kempii</i>	4	FFE489/FFE490	61.1	61.4	62.4	66.5	59.3	47.4	32.1	Hand capture
12/4/2021	<i>Caretta caretta</i>	5	SLG211204-001	59.6	60.2	64.3	62.9	51.4	45.9	30.4	Hand capture
12/10/2021	<i>Chelonia mydas</i>	6	FFE423/FFE424	39.8	40.2	41.9	35.1	31.0	32.2	8.0	North net
12/10/2021	<i>Chelonia mydas</i>		FFE491/FFE492	61.2	62.3	65.1	61.0	48.9	50.5	33.3	South net
12/10/2021	<i>Caretta caretta</i>	7	STW211210-001	66.5	67.6	70.8	65.9	55.2	51.4	38.2	Barrier net
12/13/2021	<i>Caretta caretta</i>		FFE493/FFE494	68.7	70.7	75.5	70.5	55.8	51.5	43.1	North net
12/14/2021	<i>Caretta caretta</i>		FFE495/FFE496	64.2	65.2	67.9	67.8	55.7	53.1	40.5	South net

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCl (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
12/15/2021	<i>Chelonia mydas</i>	8	FFE497/FFE498	41.7	42.3	44.2	39.5	33.0	33.4	11.1	South net
12/16/2021	<i>Chelonia mydas</i>	9	KKY060/KKY061	55.9	56.4	58.4	55.0	44.8	45.9	21.9	South net
12/17/2021	<i>Caretta caretta</i>	10	WEC211217-001	85.5	86.7	90.5	82.2	66.8	63.8	81.4	North net
12/18/2021	<i>Caretta caretta</i>		FFE499/FFE500	75.2	76.7	80.5	75.6	63.3	58.9	59.4	South net
12/19/2021	<i>Chelonia mydas</i>	11	FFE501/FFE502	53.2	53.5	54.9	50.7	43.0	44.1	19.6	South net
12/29/2021	<i>Caretta caretta</i>	12	FFE503/FFE504	84.0	85.7	89.1	87.1	70.5	65.2	93.6	South net
12/29/2021	<i>Caretta caretta</i>	13	FFE505/FFE506	94.3	94.7	100.5	90.6	62.8	67.9	103.8	North net
12/29/2021	<i>Caretta caretta</i>	14	FFE507/FFE508	92.0	92.2	96.4	90.2	67.4	68.9	105.8	North net
12/30/2021	<i>Caretta caretta</i>	15	FFE509/FFE510	87.7	89.2	91.8	90.2	75.8	66.4	87.2	North net
12/30/2021	<i>Caretta caretta</i>		FFE511/FFE512	58.0	59.3	61.7	63.0	53.9	48.8	35.6	South net

NOTES

1. Adult female loggerhead. Tail length = 176 mm. Healed boat strike injury in middle of carapace (17 cm prop scar across vertebral scutes).
2. 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, 5/5/16, 8/9/16, 7/26/17, 4/18/19, and 12/4/21. No new Inconel tags applied to turtle due to multiple tag scars.
3. Adult female green turtle. Tail length = 255 mm. Old shark rakings in both sides of carapace. Deep moderate 3.5 cm fresh scrape behind right eye.
4. Adult female Kemp's ridley. Tail length = 164 mm. Deep moderate fresh scrape in second vertebral scute.
5. REHAB (NON-CAUSAL). Stranding# SLG211204-001. Small subadult loggerhead hand captured in the intake canal with healing shark attack injuries. Turtle missing 40% of left rear flipper (necrotic tissue present). Healing shark bite wound in right axilla. Shark rakings in carapace and plastron. Turtle active but very underweight. Ecological Associates transported the turtle partway to the Brevard Zoo, Melbourne for rehab.
6. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 9/15/21, 10/31/21, and 12/10/21.
7. DEAD (CAUSAL MORTALITY). Stranding# STW211210-001. Subadult loggerhead found fresh dead on the 5-inch barrier net at the end of the day. Turtle was emaciated with two unhealed prop wounds in its posterior carapace (gashes extended through both the carapace and plastron). Pygals also chopped off by the prop. Turtle saved on ice for necropsy by Dr. Nancy Mettee, DVM. Forced submergence was still found to be the most likely cause of death.
8. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 1/31/20 and 12/15/21. Partially healed hooking wound in right axilla.
9. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 11/12/20 and 12/16/21. Possible hooking wound in right front flipper (healing).
10. REHAB (NON-CAUSAL). Stranding# WEC211217-001. Emaciated adult female loggerhead removed from the tangle nets in fair condition (tail length = 197 mm). Turtle transported to the Gumbo Limbo Nature Center in Boca Raton for rehab.
11. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 2/21/18 and 12/19/21. New Inconel tags inserted.
12. Adult female loggerhead. Tail length = 257 mm.
13. Adult male loggerhead. Tail length = 491 mm. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 10/24/01 and 12/29/21. Large healed indentation in left posterior carapace (likely from a healed boat strike). Healed constriction injury in left rear flipper.
14. REHAB (NON-CAUSAL). Stranding# WEC211229-001. Adult female loggerhead with six prop wounds running down its carapace and extensive flipper damage (tail length = 210 mm). The prop wounds in the carapace were healing and the flipper damage was completely healed. Turtle was tagged prior to rehab determination. Taken to Gumbo Limbo Nature Center, Boca Raton.
15. Adult male loggerhead. Tail length = 438 mm.

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-21	Year to Date	Dec-21	Year to Date	Dec-21	Year to Date	Dec-21	Year to Date	Dec-21	Year to Date	Dec-21	Year to Date
Captures	16	162	10	70	0	1	0	0	1	4	27	237
Causal Mortalities	1	1	0	1	0	0	0	0	0	0	1	2
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	3	16	0	2	0	1	0	0	0	0	3	19
Fresh Scrapes	Dec-21	Year to Date	Dec-21	Year to Date	Dec-21	Year to Date	Dec-21	Year to Date	Dec-21	Year to Date	Dec-21	Year to Date
None	4	27	3	11	0	1	0	0	0	1	7	40
Minor	12	133	5	54	0	0	0	0	0	2	17	189
Moderate	0	2	2	5	0	0	0	0	1	1	3	8
Severe	0	0	0	0	0	0	0	0	0	0	0	0
Percent with mod/sev scrapes	0.0%	1.2%	20.0%	7.1%	N/A	0.0%	N/A	N/A	100.0%	25.0%	11.1%	3.4%