

From: agarstin@inwater.org
Sent: Monday, November 20, 2023 9:15 PM
To: 'Koperski, Meghan'
Cc: 'Eldridge, Jodie'; 'Marine Turtle Permits'; 'Michael Bresette';
EndangeredSpecies Resource; 'SCO'; 'Vince Munne'; 'Eaton, Kristin';
'William Nurnberger'; audra.livergood@noaa.gov; 'Cody Mott'; 'Ryan
Welsh'; 'Jeff Guertin'; 'Annessia Michaels'; 'Andrea Fisher';
Robert.Craven@fpl.com; Damon.Hobson@fpl.com;
Andrew.McHenry@fpl.com; Timothy.Falkiewicz@fpl.com
Subject: [External_Sender] October 2023 FPL Marine Turtle Removal Monthly
Report
Attachments: fpl st lucie capture summary 2023.pdf; monthly report notes 2023.pdf;
October Marine Turtle Captures.pdf

Mrs. Meghan Koperski
Tequesta Field Laboratory
19100 SE Federal Highway
Tequesta, FL 33469

**Subject: Marine Turtle Removal Monthly Summary
October 2023**

Dear Meghan,

Attached, please find the monthly summary of marine turtle removals for October 2023. This month we captured 20 *Caretta caretta* and 37 *Chelonia mydas* in the intake canal of the St. Lucie power plant on Hutchinson Island. One sea turtle was sent for rehabilitation (non-causal), and there were no mortalities recorded this month. As with all sea turtle strandings at the St. 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.

One sea turtle was sent to rehab for non-causal injuries this month. On October 23rd, a sub-adult loggerhead was encountered with a 10 x 4 cm wound and a 5 cm wound with bone tissue exposed, both on the plastron. This turtle was taken to the Loggerhead Marinelife Center in Juno Beach for rehab. Because these injuries were unrelated to the power plant, they were classified as non-causal strandings.

The primary 5-inch barrier net encountered negligible-to-light amounts of algae and negligible-to-severe amounts of jellyfish this past month. IRG 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. Furthermore, Underwater Engineering Services (UESI) divers inspected and cleaned the 5-inch barrier net as needed. 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 2023. 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,

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Subject: [External_Sender] October 2023 FPL Marine Turtle Removal Monthly Report
Sent Date: 11/20/2023 9:14:31 PM
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From: agarstin@inwater.org

Created By: agarstin@inwater.org

Recipients:

"Eldridge, Jodie" <Jodie.Eldridge@nexteraenergy.com>

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Tracking Status: None

Post Office: inwater.org

Files	Size	Date & Time
MESSAGE	2382	11/20/2023 9:14:58 PM
fpl st lucie capture summary 2023.pdf		249862
monthly report notes 2023.pdf	188512	
October Marine Turtle Captures.pdf		383298

Options

Priority:	Normal
Return Notification:	No
Reply Requested:	No
Sensitivity:	Normal
Expiration Date:	

	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>		Olive ridley <i>(Lepidochelys olivacea)</i>		Overall Totals	
	Oct-23	Year to Date	Oct-23	Year to Date	Oct-23	Year to Date	Oct-23	Year to Date	Oct-23	Year to Date	Oct-23	Year to Date	Oct-23	Year to Date
Captures	20	342	37	405	0	1	0	2	0	4	0	1	57	755
Causal Mortalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-Causal Mortalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Causal Injuries	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Sent to rehab	1	8	0	7	0	0	0	0	0	0	0	0	1	15
Fresh Scrapes	Oct-23	Year to Date	Oct-23	Year to Date	Oct-23	Year to Date	Oct-23	Year to Date	Oct-23	Year to Date	Oct-23	Year to Date	Oct-23	Year to Date
None	1	17	0	26	0	1	0	0	0	0	0	0	1	44
Minor	19	313	37	358	0	0	0	2	0	4	0	1	56	678
Moderate	0	12	0	21	0	0	0	0	0	0	0	0	0	33
Severe	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent with mod/sev scrapes	0.0%	3.5%	0.0%	5.2%	NA	0.0%	NA	0.0%	NA	0.0%	NA	0.0%	0.0%	4.4%

NOTES

1. PAPILOMAS (Balazs Tumor Score = 1 {light}, Total Tumor Score = 2). Healed notches on posterior carapace and distal RFF. Extra vertebral scute.
2. RECAPTURE, from: 1/31/22. Missing 20% LRF, healed. Extra vertebral and right costal scute. No new inconel tags applied due to tag scars.
3. RECAPTURE, from: 11/22/19, 5/6/23, 5/17/23.
4. RECAPTURE, from: 10/2/23. Kyphotic carapace. Missing 30% of LRF, healed. Healed notch on distal LFF.
5. RECAPTURE, from: 4/20/23, 8/18/23. New inconel tags applied to both FFs.
6. RECAPTURE, from 10/7/17, 9/30/22, 9/23/23. Large indentation in right anterior carapace from previous healed injury. Vomited jellyfish.
7. RECAPTURE, from: 10/19/21, 5/3/22, 10/22/22, 11/12/22, 1/15/23, 2/21/23, 4/1/23, 4/27/23, 7/8/23, 9/7/23. PAPILOMAS (Balazs Tumor Score = 1 {light}, Total Tumor Score = 5). LRF 10% missing, healed.
8. RECAPTURE, from 5/20/22, 11/13/22, 11/16/22. PAPILOMAS (Balazs Tumor Score = 1 {light}, Total Tumor Score = 6). Paps at flipper tag sites. Pap on ventral base of RFF, bulbous and at injury site, healed.
9. RECAPTURE, from 6/16/22, 8/4/22, 8/31/23. Tags were both re-crimped.
10. RECAPTURE, from 8/11/23.
11. Adult male loggerhead. TL= 439 mm. Healed notch missing from LFF. Multiple healed propeller stikes on carapace.
12. RECAPTURE, from 10/29/08, 1/17/14, 5/7/14, 1/27/15, 3/1/15, 12/23/15, 1/30/16, 6/2/16, 1/5/17, 6/1/17, 9/27/17, 1/2/18, 7/3/18, 8/28/18, 4/18/19, 10/4/19, 11/30/20, 1/23/21, 12/12/22, 5/6/23, 5/15/23. Missing 10% RRF, healed. No new inconel tags due to multiple tag scars.
13. RECAPTURE, from 5/20/22, 11/13/22, 11/16/22, 10/12/23. PAPILOMAS (Balazs Tumor Score = 1 {light}, Total Tumor Score = 5). Bulbous end at old injury site, healed.
14. RECAPTURE, from 12/13/20, 12/2/22, 2/7/23. Turtle missing 5% LFF.
15. RECAPTURE, from 5/17/23.
16. RECAPTURE, from 10/9/11, 1/8/12, 2/5/12, 5/24/12, 7/5/12, 4/3/13, 4/20/13, 8/31/13, 10/5/20, 8/12/23. Multiple tag scars in both front flippers.
17. Adult female loggerhead. TL= 175 mm. Flipper damage - missing (healing) 50% LFF, missing (healing) 40% RFF. Healing wounds on ventral side of LFF and LRF. Healing wound on dorsal side of RFF. Old shark rakings on plastron.
18. REHAB (NON-CAUSAL): STSSN#. Turtle transported to LMC for 10 x 4 cm healing wound and 5 cm with bone exposed and 5 cm open wound to plastron. No tags inserted due to transport to rehab. Healed notch in RFF. 25% RRF and 5% LRF missing, healed. CMCL: 79.3 cm OB.
19. RECAPTURE, from 2/15/15, 1/28/22. PAPILOMAS (Balazs Tumor Score = 1 {light}, Total Tumor Score = 1). FFT495 newly applied to RFF.
20. RECAPTURE, from: 10/2/23, 10/5/23. Kyphotic carapace. Missing 30% of LRF, healed.
21. RECAPTURE, from 7/19/18, 12/10/18, 3/31/19, 12/9/19, 1/7/20, 2/15/20, 5/5/20, 8/11/20, 10/25/20, 1/13/21, 4/22/21, 1/5/22, 3/17/22, 10/6/22, 12/22/22, 4/8/23, 6/2/23, 6/9/23. 5% missing healed LFF. 15% missing healed LRF, 30% missing healed RRF. Small healed notches on left pygal. No new metal tag applied to LFF due to extensive tag scarring.
22. RECAPTURE, from 8/4/02, 9/17/02, 11/5/02, 4/15/03, 7/1/03, 2/16/04, 4/11/05, 6/19/06, 9/16/06, 8/15/07, 8/7/08, 7/28/09, 11/9/09, 12/3/12, 12/2/13, 2/13/14. No new Inconel tags inserted due to tag scars.
23. RECAPTURE, from: 10/19/21, 5/3/22, 10/22/22, 11/12/22, 1/15/23, 2/21/23, 4/1/23, 4/27/23, 7/8/23, 9/7/23, 10/8/23. PAPILOMAS (Balazs Tumor Score = 1 {light}, Total Tumor Score = 6). Healed wound on LRF.

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

MARINE TURTLE REMOVALS ST. LUCIE PLANT INTAKE CANAL

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSSL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
10/1/2023	<i>Chelonia mydas</i>	1	FFT436/FFT437	60.0	60.0	64.0	58.2	49.1	53.9	33.2	North net
10/2/2023	<i>Chelonia mydas</i>		FFT439/FFT438	32.1	32.6	34.0	28.1	25.9	26.8	4.3	South net
10/2/2023	<i>Chelonia mydas</i>		IRG0239/IRG0240	26.5	26.9	27.7	23.7	21.9	23.4	2.4	Dip net
10/2/2023	<i>Chelonia mydas</i>		FFT440/FFT441	50.8	51.9	55.7	47.3	38.1	41.9	16.1	North net
10/3/2023	<i>Chelonia mydas</i>		FFT442/FFT443	61.5	62.0	66.2	52.6	43.9	49.6	30.7	South net
10/4/2023	<i>Chelonia mydas</i>	2	/	33.8	33.9	35.3	30.4	27.3	28.5	4.8	South net
10/5/2023	<i>Chelonia mydas</i>	3	FFS033/FFS034	49.6	49.8	53.0	48.1	38.5	41.6	16.8	South net
10/5/2023	<i>Chelonia mydas</i>	4	FFT440/FFT441	50.8	51.6	55.9	47.4	38.1	42.0	16.0	South net
10/5/2023	<i>Chelonia mydas</i>		FFT444/FFT445	29.7	30.1	31.2	26.8	24.3	24.3	3.1	South net
10/5/2023	<i>Caretta caretta</i>	5	FFT446/FFT447	77.0	77.5	84.8	76.9	60.9	60.0	67.2	North net
10/5/2023	<i>Chelonia mydas</i>		FFT448/FFT449	63.5	63.9	69.5	60.2	49.7	52.5	32.9	South net
10/6/2023	<i>Chelonia mydas</i>	6	FFT410/FFT411	47.3	47.6	49.7	42.7	36.2	40.4	14.7	Dip net
10/6/2023	<i>Chelonia mydas</i>		FFT450/FFT451	32.6	32.8	34.0	30.0	26.9	27.5	4.7	Dip net
10/6/2023	<i>Chelonia mydas</i>		FFT452/FFT453	30.6	31.0	32.4	26.5	23.9	26.0	3.7	Dip net
10/6/2023	<i>Chelonia mydas</i>		FFT454/FFT455	40.7	40.7	43.2	39.4	34.1	33.8	9.3	Dip net
10/6/2023	<i>Chelonia mydas</i>		IRG0241/IRG0242	28.5	29.4	30.5	27.1	24.0	23.8	2.9	Dip net
10/6/2023	<i>Chelonia mydas</i>		IRG0243/IRG0244	26.9	27.1	28.2	22.3	20.6	22.2	2.4	Dip net
10/7/2023	<i>Chelonia mydas</i>		FFT456/FFT457	42.0	42.5	44.3	36.7	31.3	34.3	8.8	South net
10/7/2023	<i>Chelonia mydas</i>		FFT458/FFT459	44.3	44.6	46.4	40.2	34.6	36.3	10.9	Dip net
10/7/2023	<i>Chelonia mydas</i>		FFT460/FFT461	56.7	57.2	60.6	55.5	45.2	46.7	24.1	South net
10/7/2023	<i>Chelonia mydas</i>		IRG0246/IRG0247	26.7	27.4	28.9	24.9	23.2	23.0	2.6	Dip net
10/8/2023	<i>Caretta caretta</i>	7	FFE439/FFE440	68.0	69.6	73.0	67.7	54.1	51.6	44.4	North net
10/11/2023	<i>Chelonia mydas</i>		FFT462/FFT463	73.4	74.2	78.4	74.1	59.5	60.4	58.3	South net
10/11/2023	<i>Caretta caretta</i>		FFT464/FFT465	63.5	64.8	68.2	65.5	51.5	49.9	35.9	North net
10/12/2023	<i>Chelonia mydas</i>	8	FFE635/FFE636	44.9	45.6	47.5	40.9	34.1	36.9	12.2	North net
10/12/2023	<i>Chelonia mydas</i>	9	FFT334/FFT335	40.6	40.7	43.3	36.7	31.0	33.0	9.3	North net

10/13/2023	<i>Chelonia mydas</i>		FFT466/FFT468	50.1	50.7	53.0	45.2	38.1	39.9	16.3	South net
10/13/2023	<i>Chelonia mydas</i>		IRG0249/IRG0250	28.0	28.6	30.0	26.9	23.2	22.8	2.3	Dip net
10/14/2023	<i>Caretta caretta</i>	10	FFT282/	70.6	71.7	77.8	69.8	56.6	53.2	52.2	South net
10/15/2023	<i>Chelonia mydas</i>		/FFT470	32.1	32.3	34.2	29.6	26.1	26.5	4.4	Dip net
10/16/2023	<i>Chelonia mydas</i>		FFT471/FFT472	46.8	46.9	49.2	44.4	37.8	39.1	13.4	South net
10/16/2023	<i>Caretta caretta</i>	11	FFT473/FFT474	90.6	91.5	97.9	89.6	62.6	63.7	90.8	South net
10/16/2023	<i>Caretta caretta</i>		FFT475/FFT476	77.8	79.5	86.5	78.6	64.2	59.1	72.1	South net
10/17/2023	<i>Caretta caretta</i>		FFT477/FFT478	61.0	61.7	65.7	64.9	51.6	48.6	34.3	North net
10/17/2023	<i>Caretta caretta</i>		FFT479/FFT480	58.4	59.9	62.1	60.6	48.7	47.5	33.3	South net
10/17/2023	<i>Caretta caretta</i>		FFT481/FFT482	65.6	66.9	70.6	72.6	56.3	51.4	40.5	South net
10/18/2023	<i>Chelonia mydas</i>	12	/	69.4	69.5	74.6	65.1	53.0	56.1	45.6	South net
10/18/2023	<i>Chelonia mydas</i>	13	FFE635/FFE636	45.2	45.6	47.6	40.9	35.3	37.8	12.0	Dip net
10/18/2023	<i>Chelonia mydas</i>	14	FFM082/FFM083	51.5	52.2	54.7	51.3	41.1	43.0	19.5	South net
10/18/2023	<i>Chelonia mydas</i>	15	FFS145/	32.6	32.8	34.5	28.2	24.5	26.6	4.3	Dip net
10/18/2023	<i>Chelonia mydas</i>		FFT483/FFT484	30.5	30.7	31.8	25.9	24.6	25.8	3.4	Dip net
10/18/2023	<i>Caretta caretta</i>		FFT485/FFT486	72.2	73.8	79.5	74.0	57.9	57.1	64.7	South net
10/19/2023	<i>Caretta caretta</i>	16	FFT288/FFT289	77.7	79.3	85.2	72.3	59.2	61.1	62.1	South net
10/19/2023	<i>Caretta caretta</i>	17	FFT487/FFT488	83.4	86.2	92.1	80.7	64.1	65.5	88.3	South net
10/19/2023	<i>Caretta caretta</i>		FFT489/FFT490	65.2	67.0	71.1	65.2	51.4	52.4	41.1	South net
10/20/2023	<i>Caretta caretta</i>		FFT491/FFT492	71.3	71.6	77.5	71.1	56.6	56.6	47.2	South net
10/21/2023	<i>Chelonia mydas</i>		IRG0251/IRG0252	28.9	29.6	30.6	25.1	22.8	23.8	2.8	Dip net
10/21/2023	<i>Caretta caretta</i>		FFT493/FFT494	67.6	68.7	72.5	70.5	56.5	53.1	40.6	South net
10/23/2023	<i>Caretta caretta</i>	18	/	73.5	74.9	80.3	73.6	61.2	55.5	52.0	North net
10/23/2023	<i>Chelonia mydas</i>	19	FFE530/FFT495	69.9	70.3	75.8	68.6	54.6	54.7	45.1	North net
10/25/2023	<i>Caretta caretta</i>		FFT496/FFT497	65.7	66.4	71.1	68.1	54.3	52.7	43.0	South net
10/26/2023	<i>Chelonia mydas</i>	20	FFT440/FFT441	50.9	51.7	55.0	47.1	38.0	42.2	15.9	South net
10/26/2023	<i>Caretta caretta</i>		FFT498/FFT499	68.7	70.6	74.6	71.2	56.8	54.2	49.1	South net
10/28/2023	<i>Chelonia mydas</i>	21	/FFM431	54.1	54.1	57.6	52.7	41.9	44.5	20.8	South net
10/29/2023	<i>Caretta caretta</i>	22	/	82.4	83.2	89.0	79.1	63.7	64.3	86.2	South net

10/29/2023	<i>Caretta caretta</i>	23	FFE439/FFE440	67.9	69.8	72.6	67.4	54.9	51.9	42.2	South net
10/30/2023	<i>Chelonia mydas</i>		FFT500/FFT501	30.9	31.1	32.0	26.1	24.2	25.9	3.7	South net