

From: agarstin@inwater.org
Sent: Saturday, December 16, 2023 12:30 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] November 2023 FPL Marine Turtle Removal Monthly
Report
Attachments: monthly report notes 2023.pdf; november marine turtle captures.pdf;
fpl st lucie capture summary 2023.pdf

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

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

Dear Meghan,

Attached, please find the monthly summary of marine turtle removals for November 2023. This month we captured seven *Caretta caretta*, 59 *Chelonia mydas*, and one *Eretmochelys imbricata* in the intake canal of the St. Lucie power plant on Hutchinson Island. Three sea turtles were 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.

Three sea turtles were sent to rehab for non-causal injuries this month. On November 7th, an adult female loggerhead was found with healing shark bite wounds to both front flippers (with bone exposed) and to its right rear flipper. On November 9th, a juvenile green was found with a fresh shark bite wound that encompassed its left front flipper, proximal carapace, and plastron. On November 22nd, a juvenile green was found with a shark bite wound to its left rear quadrant. All three turtles were taken to the Loggerhead Marinelife Center in Juno Beach for rehab. Because these injuries/illnesses were unrelated to the power plant, they were classified as non-causal strandings.

The primary 5-inch barrier net encountered negligible 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. 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,

Aaron Garstin
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Subject: [External_Sender] November 2023 FPL Marine Turtle Removal Monthly Report
Sent Date: 12/16/2023 12:30:16 PM
Received Date: 12/16/2023 12:31:00 PM
From: agarstin@inwater.org

Created By: agarstin@inwater.org

Recipients:

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

Tracking Status: None

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Tracking Status: None

Post Office: inwater.org

Files	Size	Date & Time
MESSAGE	2567	12/16/2023 12:31:00 PM
image001.png	376	
monthly report notes 2023.pdf		191195
november marine turtle captures.pdf		389875
fpl st lucie capture summary 2023.pdf		251392

Options

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

NOTES

1. RECAPTURE, from 9/12/23.
2. RECAPTURE, from 10/9/11, 9/25/17, 3/21/19, 9/22/19, 2/10/23. Turtle missing 90% RRF. Adult female loggerhead. TL= 210 mm. RECAPTURE, from 11/19/17. 30 cm and 15 cm healed wounds to posterior
3. carapace (possible boat strike). New tag inserted into RFF.

Adult female loggerhead. TL= 225 mm. REHAB (NON-CAUSAL): STSSN#HWB20231107-001. "Ranger". Turtle transported to LMC for healing shark bite wounds to both FF and RRF bone exposed. 90% LFF, 25% RFF missing, and lacerations to RRF. CMCL: 99.3 cm. No tags inserted due to transport to rehab.
4. RECAPTURE, from 10/6/23. Missing, healed 100% RRF.
5. REHAB (NON-CAUSAL): STSSN# HWB20231109-001. "Spot". Turtle transported to LMC for fresh shark bite woundsto LFF and surrounding area (neck, plastron and carapace). Large bite wound to proximal LFF goes 80% through flipper. Trailing edge of RFF missing, healed. Missing 5% of LRF, healed. No tags inserted due to the turtle being transported to rehab.
6. RECAPTURE, from: 9/9/23. Missing 5% RFF, healed.
7. RECAPTURE, from 12/13/20, 12/2/22, 2/7/23, 10/18/23. Turtle missing 5% LFF, healed.
8. RECAPTURE, from 9/26/19, 11/16/21, 2/15/22, 1/4/23, 8/3/23. No new LFF inconel tag added due to multiple tag scars present. Extra vertebral scute (6 total), 5 costal scutes on both sides. Healing wound on leading edge LFF, missing 5% RRF, healed.
9. RECAPTURE, from 12/6/18, 3/20/19, 12/2/19, 10/11/20, 5/23/22, 5/21/23. PAPILOMAS (Balazs Tumor Score = 1 {minor}, Total Tumor Score = 1). Missing 5% RFF, healed. New inconel tags added to both FFs.
10. Adult male loggerhead. TL= 490 mm. Healed notch on LFF. Healed carapace damage from boat impact wound across vertebral scutes.
11. Adult female loggerhead. TL= 195 mm. Concave area on mid/posterior plastron.
12. RECAPTURE, from: 10/2/23, 10/5/23, 10/26/23. Missing 5% LRF, healed.
13. RECAPTURE, from: 1/19/18, 8/22/23. No tag scars. New inconel tag (FFT528) applied to RFF.

RECAPTURE, from: 12/29/22. PAPILOMAS (Balazs Tumor Score = 1 {minor}, Total Tumor Score = 2). Small healed notch on distal RFF.
14. RECAPTURE, from 4/27/18, 4/19/19, 6/3/19, 9/14/19, 10/8/19, 12/2/19, 1/3/20, 8/16/20, 1/23/21, 1/6/22, 2/8/23, 2/19/23, 4/14/23, 6/2/23, 6/11/23, 9/24/23. Healed wound on proximal RFF. No new RFF inconel tag applied due to wound.
15. PAPILOMAS (Balazs Tumor Score = 2 {moderate}, Total Tumor Score = 42). LFF inconel tag not inserted due to paps in area. Fat and healthy other than FP load.
16. REHAB (NON-CAUSAL): STSSN#HWB231122-001. Turtle transported to LMC for 20.5 cm shark bite wound to left rear quadrant. CMCL: 32.4 cm. No tags inserted due to transport to rehab.
17. RECAPTURE, from 2/1/19, 4/5/19, 12/13/22. Moderate FS by right eye.
18. RECAPTURE, from 9/22/19.
19. RECAPTURE, from: 11/11/18, 9/26/19, 12/1/19, 12/10/20, 2/15/22, 4/30/22, 1/26/23, 4/19/23, 5/3/23, 5/7/23, 5/22/23, 9/3/23. Healed indentations on right posterior carapace.
20. Adult male green. TL= 455 mm. STRANGE TAG, cold stun turtle from early 2010, stunned near Dummet Cove near Haulover canal in the IRL, SCL 69.8, wt 48.1kg, taken to LMC and released on Juno Beach 1/14/10. New inconel tags inserted today. 10% missing, healed LFF.
21. RECAPTURE, from 4/19/11, 10/3/21, 2/25/23. Small healing wound on ventral LFF.
22. RECAPTURE, from: 1/31/20, 12/15/21, 2/7/23, 5/31/23, 8/26/23. New inconel tags applied.
23. RECAPTURE, from 2/7/23, 4/5/23, 5/3/23, 5/18/23, 6/18/23, 9/20/23.
24. RECAPTURE, from 9/20/2019. New inconel tags applied.
25. PAPILOMAS (Balazs Tumor Score = 2 {moderate}, Total Tumor Score = 12).

28. RECAPTURE, from 9/26/19, 11/16/21, 2/15/22, 1/4/23, 8/3/23, 11/12/23. No new LFF inconel tag added due to multiple tag scars present. Extra vertebral scute (6 total), 5 costal scutes on both sides. Small healed notch 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
11/3/2023	<i>Chelonia mydas</i>	1	FFT376/FFT377	39.7	40.1	42.7	37.1	31.5	32.0	7.6	Dip net
11/3/2023	<i>Eretmochelys imbricata</i>		FFT502/FFT503	64.5	68.5	73.5	62.6	49.8	52.7	36.7	South net
11/5/2023	<i>Chelonia mydas</i>	2	FFM396/FFM397	64.5	64.6	68.8	60.8	51.3	54.4	37.8	South net
11/6/2023	<i>Caretta caretta</i>	3	MMX103/FFT504	87.1	88.8	95.3	88.5	61.6	66.9	99.4	South net
11/7/2023	<i>Caretta caretta</i>	4	/	92.0	93.5	101.0	89.7	66.9	69.3	133.8	Hand capture
11/7/2023	<i>Chelonia mydas</i>	5	FFT454/FFT455	40.6	40.7	43.2	40.0	34.5	33.7	8.6	Dip net
11/7/2023	<i>Chelonia mydas</i>		FFT505/FFT506	31.4	31.8	33.5	30.0	25.9	26.5	4.4	Dip net
11/7/2023	<i>Chelonia mydas</i>		IRG0253/IRG0254	28.4	28.9	30.0	26.2	22.9	24.2	3.1	Dip net
11/8/2023	<i>Chelonia mydas</i>		FFT507/FFT508	74.1	75.6	79.5	70.4	57.2	61.0	52.7	South net
11/8/2023	<i>Chelonia mydas</i>		IRG0255/IRG0256	25.3	25.8	26.9	22.5	20.1	21.5	2.1	Dip net
11/9/2023	<i>Chelonia mydas</i>	6	/	48.3	48.6	50.8	44.7	38.8	38.8	14.2	North net
11/9/2023	<i>Chelonia mydas</i>	7	IRG0228/IRG0229	26.2	26.6	27.6	23.4	21.1	22.1	1.6	Dip net
11/11/2023	<i>Chelonia mydas</i>	8	FFM082/FFM083	51.5	52.0	55.6	50.6	41.0	42.3	18.3	North net
11/11/2023	<i>Chelonia mydas</i>		IRG0257/IRG0258	29.0	29.3	30.7	26.4	24.1	24.3	2.9	Dip net
11/12/2023	<i>Chelonia mydas</i>	9	/FFM362	48.8	48.9	51.0	44.3	37.4	39.9	14.2	South net
11/12/2023	<i>Caretta caretta</i>		FFT509/FFT510	53.9	55.2	58.3	57.5	47.9	42.6	24.9	North net
11/14/2023	<i>Caretta caretta</i>		FFT511/FFT512	77.5	80.0	85.4	79.7	64.6	60.4	71.6	South net
11/14/2023	<i>Chelonia mydas</i>	10	FFT513/FFT514	60.0	60.5	64.0	56.2	47.1	47.5	27.1	South net
11/14/2023	<i>Caretta caretta</i>		FFT515/FFT516	58.0	59.2	63.5	63.0	49.4	45.4	29.3	North net
11/15/2023	<i>Chelonia mydas</i>		IRG0259/IRG0260	28.7	28.9	30.8	26.3	23.0	23.7	3.0	Dip net
11/15/2023	<i>Chelonia mydas</i>		IRG0261/IRG0262	28.0	28.3	30.9	25.9	23.5	24.0	3.2	Dip net
11/16/2023	<i>Chelonia mydas</i>		FFT515/FFT516	31.5	32.2	34.0	38.0	24.2	26.3	3.5	Dip net
11/16/2023	<i>Chelonia mydas</i>		FFT517/FFT518	30.8	31.0	32.3	26.1	25.4	25.7	3.6	Hand capture
11/16/2023	<i>Caretta caretta</i>	11	FFT519/FFT520	101.6	102.6	112.4	102.3	79.0	76.4	157.3	North net
11/16/2023	<i>Caretta caretta</i>	12	FFT521/FFT522	84.1	85.0	91.6	82.7	60.7	65.4	75.9	North net
11/16/2023	<i>Chelonia mydas</i>		IRG0263/IRG0264	26.7	27.1	28.5	23.3	20.9	22.8	2.5	Dip net

11/17/2023	<i>Chelonia mydas</i>	13	FFT440/FFT441	50.8	51.5	55.7	47.3	38.6	42.4	16.0	North net
11/17/2023	<i>Chelonia mydas</i>		FFT524/FFT525	31.5	32.0	33.5	28.5	25.7	26.0	4.1	Dip net
11/17/2023	<i>Chelonia mydas</i>		FFT526/FFT527	30.9	31.5	32.8	27.5	24.0	25.3	3.4	Dip net
11/17/2023	<i>Chelonia mydas</i>		FFT529/FFT530	30.9	31.2	32.4	26.8	24.3	25.4	3.5	South net
11/17/2023	<i>Chelonia mydas</i>		FFT531/FFT532	31.5	31.7	33.3	28.2	25.9	26.2	4.3	Dip net
11/17/2023	<i>Chelonia mydas</i>		FFT533/FFT534	31.0	31.4	32.6	26.6	24.2	26.2	4.0	Dip net
11/17/2023	<i>Chelonia mydas</i>		FFT535/FFT536	42.1	42.2	44.3	38.5	34.0	34.7	9.7	South net
11/17/2023	<i>Chelonia mydas</i>		IRG0265/IRG0266	29.7	30.0	31.2	26.3	23.5	25.3	3.0	Dip net
11/17/2023	<i>Chelonia mydas</i>		IRG0267/IRG0268	25.6	26.4	27.7	25.0	22.8	22.7	2.8	Dip net
11/17/2023	<i>Chelonia mydas</i>		IRG0269/IRG0270	28.9	29.5	30.5	25.3	23.7	24.9	3.2	Dip net
11/17/2023	<i>Chelonia mydas</i>		IRG0271/IRG0272	27.4	27.7	28.5	26.2	23.0	23.6	2.5	Dip net
11/17/2023	<i>Chelonia mydas</i>		IRG0273/IRG0274	27.8	28.1	29.4	25.3	22.9	22.7	2.3	Dip net
11/17/2023	<i>Chelonia mydas</i>		IRG0275/IRG0276	25.4	25.7	26.5	21.6	19.0	21.5	1.8	Dip net
11/17/2023	<i>Chelonia mydas</i>	14	MMX212/FFT528	43.0	43.5	46.0	43.3	36.7	35.5	11.5	Dip net
11/19/2023	<i>Chelonia mydas</i>	15	FFM344/FFM345	33.4	33.8	35.1	28.2	24.5	26.9	4.0	South net
11/19/2023	<i>Chelonia mydas</i>		FFT537/FFT538	31.2	31.5	32.3	27.0	23.4	24.6	3.5	Dip net
11/20/2023	<i>Chelonia mydas</i>	16	FFS376/	52.3	52.6	55.4	47.3	40.2	40.7	18.2	South net
11/20/2023	<i>Chelonia mydas</i>		IRG0277/IRG0278	28.9	29.4	30.5	25.5	22.4	24.3	3.0	Dip net
11/21/2023	<i>Chelonia mydas</i>	17	/FFT539	36.5	36.7	38.5	32.0	28.2	30.7	5.9	South net
11/21/2023	<i>Chelonia mydas</i>		IRG0279/IRG0280	26.1	26.4	28.0	23.0	20.0	22.0	2.6	Dip net
11/22/2023	<i>Chelonia mydas</i>	18	/	31.4	31.7	32.9	27.6	24.9	26.1	3.6	Dip net
11/22/2023	<i>Chelonia mydas</i>		IRG0281/IRG0282	29.5	29.9	30.8	27.3	24.5	24.7	3.4	Dip net
11/22/2023	<i>Chelonia mydas</i>		IRG0283/IRG0284	29.8	29.9	31.0	27.9	24.2	24.1	3.2	Dip net
11/22/2023	<i>Chelonia mydas</i>		IRG0285/IRG0286	29.5	29.9	31.4	27.7	24.9	24.5	3.3	Dip net
11/25/2023	<i>Chelonia mydas</i>		FFT540/FFT541	33.2	33.7	34.9	28.9	26.5	27.4	4.3	Dip net
11/26/2023	<i>Chelonia mydas</i>	19	FFT542/FFT543	63.3	64.0	67.1	59.8	51.9	52.6	35.4	South net
11/26/2023	<i>Chelonia mydas</i>		FFT544/FFT545	77.4	78.8	82.5	74.7	58.8	62.8	69.0	South net
11/26/2023	<i>Chelonia mydas</i>	20	FFT546/FFT547	43.4	43.9	46.7	39.3	33.8	35.4	10.2	South net
11/26/2023	<i>Chelonia mydas</i>		FFT548/FFT549	44.1	44.1	46.5	41.0	33.5	35.5	11.4	South net

11/26/2023	<i>Chelonia mydas</i>		FFT550/FFT551	29.7	30.5	31.3	27.7	25.7	29.4	3.7	Dip net
11/26/2023	<i>Chelonia mydas</i>		IRG0287/IRG0288	27.2	27.5	29.3	25.5	22.6	22.4	2.9	Dip net
11/27/2023	<i>Chelonia mydas</i>	21	FFM380/FFM381	51.8	52.2	55.6	47.8	38.7	42.7	18.9	South net
11/27/2023	<i>Chelonia mydas</i>	22	FFT552/FFT553	88.3	88.5	92.5	88.5	71.5	73.5	99.2	South net
11/27/2023	<i>Chelonia mydas</i>		FFT554/FFT555	30.6	30.7	31.6	26.0	23.9	25.3	3.5	South net
11/28/2023	<i>Chelonia mydas</i>	23	FFM406/FFM407	65.3	65.7	69.2	62.5	51.9	53.7	40.1	South net
11/28/2023	<i>Chelonia mydas</i>	24	FFT556/FFT557	44.6	44.9	48.0	43.0	35.2	35.8	14.2	South net
11/29/2023	<i>Chelonia mydas</i>	25	FFM392/FFT407	56.4	56.4	60.3	54.6	43.5	47.2	21.8	Dip net
11/29/2023	<i>Chelonia mydas</i>	26	FFT558/FFT559	55.6	55.7	58.4	51.6	42.9	44.6	27.6	South net
11/29/2023	<i>Chelonia mydas</i>	27	FFT560/FFT561	62.2	62.5	65.9	55.2	47.3	49.5	32.1	South net
11/29/2023	<i>Chelonia mydas</i>		FFT562/FFT563	45.3	45.7	48.9	43.7	35.2	36.4	12.2	South net
11/30/2023	<i>Chelonia mydas</i>	28	/FFM362	48.9	49.0	51.3	43.7	37.3	39.8	14.5	South net

	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	
	Nov-23	Year to Date	Nov-23	Year to Date	Nov-23	Year to Date	Nov-23	Year to Date	Nov-23	Year to Date	Nov-23	Year to Date	Nov-23	Year to Date
Captures	7	349	59	464	1	2	0	2	0	4	0	1	67	822
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	1	9	2	9	0	0	0	0	0	0	0	0	3	18
Fresh Scrapes	Nov-23	Year to Date	Nov-23	Year to Date	Nov-23	Year to Date	Nov-23	Year to Date	Nov-23	Year to Date	Nov-23	Year to Date	Nov-23	Year to Date
None	0	17	9	35	0	1	0	0	0	0	0	0	9	53
Minor	7	320	49	407	1	1	0	2	0	4	0	1	57	735
Moderate	0	12	1	22	0	0	0	0	0	0	0	0	1	34
Severe	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent with mod/sev scrapes	0.0%	3.4%	1.7%	4.7%	0.0%	0.0%	NA	0.0%	NA	0.0%	NA	0.0%	1.5%	4.1%