

NRR-DMPSPeM Resource

From: Steve Weege <steveweege@gmail.com>
Sent: Thursday, April 12, 2018 8:40 AM
To: Meghan Koperski
Cc: Ed Hollowell; Jodie Gless; 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; Eaton, Kristin; Jonathan Gorham; William.Nurnberger@fpl.com; Audra Livergood - NOAA Federal; Ryan Chabot
Subject: [External_Sender] March 2018 FPL Marine Turtle Removal Monthly Report
Attachments: March 2018 Marine Turtle Captures.pdf; Monthly Report Notes 2018.pdf; FPL St. Lucie Capture Summary 2018.pdf

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

Subject: Marine Turtle Removal Monthly Summary March 2018

Dear Meghan,

Attached, please find the monthly summary of marine turtle removals for March 2018. This month we captured eight *Caretta caretta* and 40 *Chelonia mydas* in the intake canal of the St. Lucie power plant on Hutchinson Island. One sea turtle was sent for rehabilitation and there was one mortality during the month of March; both of these strandings were classified as non-causal. 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 stranding forms were filed with the state through the Sea Turtle Stranding and Salvage Network.

One adult loggerhead was sent to a rehabilitation facility for non-causal injuries this month. On March 18th, an emaciated and lethargic adult male loggerhead was hand-captured shortly after entering the intake canal. The turtle was missing 65% of its right rear flipper from a mostly healed old injury. Inwater Research Group biologists transported the turtle partway to the Loggerhead Marinelife Center in Juno Beach for rehabilitation.

There was one non-causal mortality this month. On the morning of March 19th, a moderately decomposed juvenile green turtle was found floating on the permanent 5-inch barrier net. It was rigid and bloated with no obvious external injuries (most likely entrained postmortem). After consultation with FWC, this turtle was determined to be non-causal. No necropsy was performed due to the advanced state of decomposition.

The primary 5-inch barrier net encountered light-to-moderate amounts of algae during the month of March. A scheduled short-term power plant outage began mid-month. Consequently, flow rates in the canal system have abated considerably. In addition, baseline water levels in the intake canal have risen due to the reduced flow rates, as some of the circulation pumps were powered down for the outage. Even still, the new 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 2018. 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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MESSAGE	2838	4/12/2018 8:40:24 AM

March 2018 Marine Turtle Captures.pdf		82501
Monthly Report Notes 2018.pdf	59950	
FPL St. Lucie Capture Summary 2018.pdf		76451

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**MARINE TURTLE REMOVALS
ST. LUCIE PLANT INTAKE CANAL
MARCH 2018**

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
3/3/2018	<i>Caretta caretta</i>	1	MML376/MML377	55.7	57.3	61.9	59.0	48.5	43.8	29.7	North net
3/4/2018	<i>Chelonia mydas</i>		MMY059/MMY060	61.8	62.2	66.2	57.0	48.5	51.3	28.9	North net
3/5/2018	<i>Chelonia mydas</i>	2	MMY061/MMY062	50.5	50.8	55.5	49.7	42.0	41.8	18.1	North net
3/5/2018	<i>Chelonia mydas</i>		MMY063/MMY064	46.4	47.5	49.5	41.2	35.8	38.7	11.7	North net
3/6/2018	<i>Caretta caretta</i>		MMY065/MMY066	64.1	65.6	68.8	62.2	53.3	51.5	39.4	South net
3/6/2018	<i>Chelonia mydas</i>		MMY067/MMY068	38.1	38.2	40.5	35.5	31.4	31.0	8.0	South net
3/6/2018	<i>Chelonia mydas</i>		MMY069/MMY070	48.0	48.6	50.9	47.6	39.8	40.5	13.6	North net
3/7/2018	<i>Chelonia mydas</i>	3	MMY071/MMY072	56.7	57.0	59.5	54.4	45.9	49.6	25.8	South net
3/7/2018	<i>Chelonia mydas</i>		MMY073/MMY074	37.9	38.1	40.8	36.2	30.9	30.5	7.0	North net
3/11/2018	<i>Chelonia mydas</i>		MMY075/MMY076	34.6	34.7	36.6	31.2	27.3	27.1	4.6	Hand capture
3/11/2018	<i>Chelonia mydas</i>		MMY077/MMY078	31.3	31.5	33.9	27.9	24.5	26.6	4.0	Barrier net
3/12/2018	<i>Caretta caretta</i>		MMY079/MMY080	57.3	58.3	63.0	61.4	48.5	45.7	28.6	North net
3/12/2018	<i>Chelonia mydas</i>		MMY081/MMY082	41.5	41.6	43.6	39.5	33.5	33.8	9.4	North net
3/12/2018	<i>Chelonia mydas</i>		MMY083/MMY084	45.4	45.6	47.7	40.8	34.0	36.9	11.2	North net
3/12/2018	<i>Chelonia mydas</i>	4	MMY085/MMY086	53.5	53.5	56.3	51.8	44.1	44.3	20.0	North net

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
3/14/2018	<i>Chelonia mydas</i>		982000402166761	26.3	26.5	28.0	23.4	21.1	22.1	2.2	South net
3/14/2018	<i>Chelonia mydas</i>	5	MMX221/MMX222	37.4	37.5	39.8	32.6	27.9	29.5	6.7	South net
3/14/2018	<i>Chelonia mydas</i>		MMY087/MMY088	47.5	47.7	50.4	43.1	35.7	39.9	12.9	South net
3/14/2018	<i>Chelonia mydas</i>		MMY089/MMY090	47.2	47.3	51.2	45.2	36.5	38.6	14.7	South net
3/15/2018	<i>Chelonia mydas</i>		MMY091/MMY092	52.9	53.2	56.8	50.2	41.9	44.5	19.5	South net
3/16/2018	<i>Caretta caretta</i>	6	MMY093/MMY094	87.5	88.4	93.4	84.4	66.1	64.4	83.1	South net
3/16/2018	<i>Chelonia mydas</i>		MMY095/MMY096	42.4	42.7	45.2	41.1	34.1	34.8	10.1	South net
3/16/2018	<i>Caretta caretta</i>		MMY097/MMY098	65.3	66.3	71.8	69.2	56.8	50.2	39.1	South net
3/16/2018	<i>Chelonia mydas</i>		MMY099/MMY100	33.7	34.3	36.6	34.2	30.0	28.2	5.5	Dip net
3/16/2018	<i>Chelonia mydas</i>		MMY101/MMY102	39.5	39.7	43.1	38.4	32.4	32.6	8.7	South net
3/18/2018	<i>Caretta caretta</i>	7	MML376/MML377	56.3	57.2	61.4	59.0	48.2	44.2	29.4	South net
3/18/2018	<i>Caretta caretta</i>	8	STW180318-01	85.6	87.2	94.0	83.5	63.2	62.1	63.2	Hand capture
3/19/2018	<i>Chelonia mydas</i>	9	JRG180319-01	26.8	27.0	28.2	26.5	21.6	22.8	2.2	Barrier net
3/20/2018	<i>Chelonia mydas</i>		982000402162625	27.0	27.2	27.9	24.7	22.1	22.7	2.6	Dip net
3/20/2018	<i>Chelonia mydas</i>		MMY103	28.4	28.6	30.3	27.3	23.3	24.1	3.2	Dip net
3/20/2018	<i>Chelonia mydas</i>		MMY104	27.4	27.8	29.5	25.1	22.4	22.3	3.0	Dip net
3/20/2018	<i>Chelonia mydas</i>		MMY106/MMY107	42.8	42.8	44.6	37.2	32.7	34.4	8.8	Dip net
3/20/2018	<i>Chelonia mydas</i>		MMY108	29.6	30.0	32.0	26.1	22.9	23.9	3.4	Dip net
3/20/2018	<i>Chelonia mydas</i>		MMY109/MMY110	68.9	69.4	73.3	64.9	52.3	56.1	40.0	South net
3/22/2018	<i>Chelonia mydas</i>	10	MMY111	45.2	45.4	49.4	41.6	33.2	36.9	11.6	South net

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCl (cm)	CMCW (cm)	SMCW (cm)	SMP L (cm)	Weight (kg)	Method
3/22/2018	<i>Chelonia mydas</i>		MMY112/MMY113	50.5	50.7	53.4	48.7	41.5	41.0	16.7	Dip net
3/22/2018	<i>Chelonia mydas</i>		MMY114/MMY115	43.0	43.4	45.5	40.5	34.9	36.6	10.0	South net
3/22/2018	<i>Chelonia mydas</i>		MMY116/MMY117	42.0	42.2	44.1	39.7	34.5	35.0	9.7	South net
3/23/2018	<i>Chelonia mydas</i>		MMY118/MMY119	32.3	32.5	34.6	30.5	26.0	25.9	5.0	Dip net
3/23/2018	<i>Chelonia mydas</i>		MMY120/MMY121	31.6	31.7	33.6	29.5	25.8	25.6	4.4	Hand capture
3/23/2018	<i>Chelonia mydas</i>		MMY122/MMY123	35.5	36.1	38.0	32.5	28.3	29.1	5.9	Dip net
3/23/2018	<i>Chelonia mydas</i>		MMY124	28.3	28.6	29.9	25.9	23.1	23.1	2.9	Dip net
3/24/2018	<i>Chelonia mydas</i>	11	MMX448/MMX449	55.9	56.0	58.4	51.5	43.1	46.8	23.1	South net
3/25/2018	<i>Chelonia mydas</i>		MMY125	26.5	26.6	28.3	24.4	21.5	21.6	2.6	South net
3/26/2018	<i>Chelonia mydas</i>		MMY126	31.6	31.7	34.4	27.5	24.0	25.4	3.8	Dip net
3/29/2018	<i>Chelonia mydas</i>		MMY127/MMY128	43.6	43.9	46.0	41.5	34.7	35.5	8.9	South net
3/31/2018	<i>Chelonia mydas</i>	12	MMX322	60.4	60.7	63.2	59.5	48.4	49.0	29.4	South net
3/31/2018	<i>Caretta caretta</i>		MMY130/MMY131	58.6	60.5	63.7	62.1	51.2	45.8	31.3	South net

NOTES

1. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 7/14/17, 8/24/17, and 3/3/18.
2. PAPILOMAS (Balazs Tumor Score = 2 {moderate}, Total Tumor Score = 31).
3. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 6/1/08, 10/13/11, and 3/7/18.
4. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on from 10/13/11, and 3/12/18.
5. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 1/10/18, and 3/14/18.
6. Adult male. Tail length = 464 mm. Soft, concave plastron.
7. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 7/14/17, 8/24/17, 3/3/18, and 3/18/18.
8. REHAB (NON-CAUSAL). Stranding# STW180318-01. Adult male. Tail length = 367 mm. Emaciated and lethargic adult male loggerhead hand-captured shortly after entering the intake canal. Turtle missing 65% of right rear flipper from a mostly healed old injury. Inwater Research Group biologists transported partway to the Loggerhead Marinelifelife Center, Juno Beach for rehab.
9. DEAD (NON-CAUSAL MORTALITY). Stranding# JRG180319-01. Moderately decomposed juvenile green turtle found floating on 5-inch barrier net in the morning. The turtle was rigid and bloated with no obvious external injuries (most likely entrained postmortem). After consultation with FWC, this turtle was determined to be non-causal. No necropsy was performed due to the advanced state of decomposition.
10. PAPILOMAS (Balazs Tumor Score = 2 {moderate}, Total Tumor Score = 1).
11. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 4/24/14, 1/8/16, 1/26/18, and 3/24/18.
12. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 7/10/02, 9/27/03, 6/19/06, 7/8/06, 8/16/06, 10/24/11, 5/24/13, 2/6/14, 1/20/18, and 3/31/18.

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	
	Mar-18	Year to Date	Mar-18	Year to Date	Mar-18	Year to Date	Mar-18	Year to Date	Mar-18	Year to Date	Mar-18	Year to Date
Captures	8	69	40	201	0	0	0	0	0	10	48	280
Causal Mortalities	0	0	0	5	0	0	0	0	0	0	0	5
Non-causal Mortalities	0	0	1	2	0	0	0	0	0	0	1	2
Causal Injuries	0	0	0	0	0	0	0	0	0	0	0	0
Sent to rehab	1	4	0	5	0	0	0	0	0	0	1	9
Fresh Scrapes												
None	0	7	2	127	0	0	0	0	0	0	2	134
Minor	7	61	38	71	0	0	0	0	0	10	45	142
Moderate	1	1	0	3	0	0	0	0	0	0	1	4
Severe	0	0	0	0	0	0	0	0	0	0	0	0
Percent with mod/sev scrapes	12.5%	1.4%	0.0%	1.5%	N/A	N/A	N/A	N/A	N/A	0.0%	2.1%	1.4%