

NRR-PMDAPem Resource

From: Steve Weege <steveweege@gmail.com>
Sent: Tuesday, October 11, 2016 9:41 AM
To: Meghan Koperski
Cc: Ed Hollowell; Jodie Gless; John Jones; Ken Frehafer; Marine Turtle Permit; Michael Brette; EndangeredSpecies Resource; SCO@dep.state.fl.us; Vince Munne; Cody Mott; Jeff Guertin; Ryan Welsh; debbie.spring@noaa.gov; Kristin.Eaton@fpl.com; Jonathan Gorham; Terri.Taylor@fpl.com
Subject: [External_Sender] September 2016 FPL Marine Turtle Removal Monthly Report
Attachments: September 2016 Marine Turtle Captures.pdf; Monthly Report Notes 2016.pdf; FPL St Lucie Capture Summary 2016.pdf; Power Plant Causal Turtles.pdf

Mrs. Meghan Koperski

Tequesta Field Laboratory

19100 SE Federal Highway

Tequesta, FL 33469

Subject: Marine Turtle Removal Monthly Summary September 2016

Dear Meghan,

Attached, please find the monthly summary of marine turtle removals for September 2016. This month, we captured twenty-seven (27) *Caretta caretta* and nine (9) *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 in September.

Throughout the month, the permanent 5-inch barrier net experienced light-to-moderate loads of broad-blade algae and only light amounts of comb jellies. Overall, the barrier net has performed as designed and no turtles have been observed beyond the 5-inch net this month.

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 2016. In addition, this spreadsheet tracks fresh scrapes incurred on captured turtles for the current month, as well as the entire year. An additional Excel spreadsheet tracks all causal injuries and mortalities incurred by sea turtles at the St. Lucie Plant since 2003.

Please feel free to contact me with any questions.

Sincerely,

Steve

Steve Weege

Sr. Environmental Specialist

Inwater Research Group, Inc.

4160 NE Hyline Dr.

Jensen Beach, FL 34957

sweege@inwater.org

[\(772\) 349-7252](tel:(772)349-7252)

Hearing Identifier: NRR_PMDA
Email Number: 3093

Mail Envelope Properties (CAJrYmh8DPsmJRUmW11JQ6QQgiCtF0tF0mX40OPg3QE9bsiXTAw)

Subject: [External_Sender] September 2016 FPL Marine Turtle Removal Monthly Report
Sent Date: 10/11/2016 9:40:40 AM
Received Date: 10/11/2016 9:40:49 AM
From: Steve Weege

Created By: steveweege@gmail.com

Recipients:

"Ed Hollowell" <Ed.Hollowell@fpl.com>
Tracking Status: None
"Jodie Gless" <Jodie_Gless@fpl.com>
Tracking Status: None
"John Jones" <John.Jones@fpl.com>
Tracking Status: None
"Ken Frehafer" <Ken_Frehafer@fpl.com>
Tracking Status: None
"Marine Turtle Permit" <MTP@myfwc.com>
Tracking Status: None
"Michael Bresette" <mbresette@inwater.org>
Tracking Status: None
"EndangeredSpecies Resource" <EndangeredSpecies.Resource@nrc.gov>
Tracking Status: None
"SCO@dep.state.fl.us" <SCO@dep.state.fl.us>
Tracking Status: None
"Vince Munne" <Vince.Munne@fpl.com>
Tracking Status: None
"Cody Mott" <cmott@inwater.org>
Tracking Status: None
"Jeff Guertin" <jguertin@gmail.com>
Tracking Status: None
"Ryan Welsh" <rwelsh@inwater.org>
Tracking Status: None
"debbie.spring@noaa.gov" <debbie.spring@noaa.gov>
Tracking Status: None
"Kristin.Eaton@fpl.com" <Kristin.Eaton@fpl.com>
Tracking Status: None
"Jonathan Gorham" <jgorham@inwater.org>
Tracking Status: None
"Terri.Taylor@fpl.com" <Terri.Taylor@fpl.com>
Tracking Status: None
"Meghan Koperski" <Meghan.Koperski@myfwc.com>
Tracking Status: None

Post Office: mail.gmail.com

Files	Size	Date & Time
MESSAGE	1598	10/11/2016 9:40:49 AM
September 2016 Marine Turtle Captures.pdf		76430
Monthly Report Notes 2016.pdf	55360	

FPL St Lucie Capture Summary 2016.pdf
Power Plant Causal Turtles.pdf

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**MARINE TURTLE REMOVALS
ST. LUCIE PLANT INTAKE CANAL
SEPTEMBER 2016**

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
9/1/2016	<i>Caretta caretta</i>		MMA559/MMA560	66.4	67.5	73.0	71.2	55.6	52.6	42.8	South net
9/1/2016	<i>Caretta caretta</i>		MMA561/MMA562	64.2	65.5	70.1	67.0	56.3	51.8	41.7	South net
9/3/2016	<i>Caretta caretta</i>		MMA563/MMA564	59.8	61.8	66.7	64.8	54.0	48.8	36.9	North net
9/3/2016	<i>Caretta caretta</i>		MMA565/MMA566	74.6	75.3	81.5	78.5	61.3	56.1	57.2	North net
9/6/2016	<i>Caretta caretta</i>	1	BBX036/BBX038 MMA569/MMA570	73.5	74.2	78.9	78.6	61.6	54.9	56.3	North net
9/6/2016	<i>Caretta caretta</i>		MMA567/MMA568	57.8	59.4	63.9	63.5	51.7	45.8	33.2	North net
9/8/2016	<i>Caretta caretta</i>		MMA571/MMA572	76.5	78.5	81.7	71.9	55.6	58.2	56.5	North net
9/8/2016	<i>Caretta caretta</i>		MMA573/MMA574	60.8	62.5	65.4	64.6	52.8	46.4	32.5	North net
9/9/2016	<i>Caretta caretta</i>		MMA575/MMA576	63.9	65.0	71.5	69.0	53.9	49.4	35.9	South net
9/10/2016	<i>Chelonia mydas</i>		MMA577/MMA578	30.0	30.7	32.1	26.3	23.9	25.4	3.5	Dip net
9/12/2016	<i>Caretta caretta</i>		MMA579/MMA580	71.3	72.2	76.1	72.2	59.6	56.7	52.3	North net
9/14/2016	<i>Caretta caretta</i>	2	LLA257/MMA583	59.4	60.6	64.0	63.0	50.7	44.8	34.2	South net
9/14/2016	<i>Caretta caretta</i>		MMA581/MMA582	56.6	57.9	61.2	63.0	51.4	46.1	28.8	North net
9/15/2016	<i>Caretta caretta</i>		MMA584/MMA585	60.3	61.7	67.7	67.2	52.7	46.6	32.2	South net
9/15/2016	<i>Caretta caretta</i>		MMA586/MMA587	62.1	62.8	67.2	66.0	51.5	49.2	36.2	North net

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
9/15/2016	<i>Caretta caretta</i>		MMA588/MMA589	66.8	68.6	74.6	71.1	57.4	51.6	46.7	North net
9/16/2016	<i>Chelonia mydas</i>		MMA590/MMA591	49.5	50.4	53.0	47.0	41.2	42.1	16.3	North net
9/17/2016	<i>Caretta caretta</i>	3	LLH974/LLH975	61.2	63.7	70.5	66.0	54.9	50.0	39.3	North net
9/17/2016	<i>Chelonia mydas</i>	4	MMA517/MMA594	46.3	46.9	49.0	41.0	36.2	36.6	11.6	South net
9/17/2016	<i>Caretta caretta</i>		MMA592/MMA593	65.0	66.4	71.0	68.5	54.3	51.9	43.4	South net
9/18/2016	<i>Chelonia mydas</i>		MMA595/MMA596	46.3	46.7	48.5	43.0	36.9	38.1	12.6	South net
9/19/2016	<i>Caretta caretta</i>		MMA597/MMA598	69.7	70.9	74.7	69.5	68.3	56.1	47.9	South net
9/19/2016	<i>Caretta caretta</i>		MMA599/MMA600	64.4	66.5	69.0	74.6	57.7	57.3	52.9	North net
9/20/2016	<i>Caretta caretta</i>		MMA601/MMA602	56.0	57.7	61.0	60.6	49.4	45.7	28.9	South net
9/20/2016	<i>Caretta caretta</i>		MMA603/MMA604	64.2	65.1	68.6	69.1	55.5	49.1	42.3	North net
9/20/2016	<i>Chelonia mydas</i>		MMA605/MMA606	60.1	60.7	64.4	60.3	49.2	50.9	30.8	North net
9/21/2016	<i>Chelonia mydas</i>	5	LLS436	52.9	53.5	55.9	49.3	41.6	42.2	18.2	South net
9/22/2016	<i>Chelonia mydas</i>		982000167824089	22.7	23.3	24.9	22.3	19.4	20.2	2.1	Dip net
9/23/2016	<i>Caretta caretta</i>		MMA608/MMA609	60.0	61.7	66.8	64.0	53.5	47.4	34.6	South net
9/24/2016	<i>Caretta caretta</i>		MMA610/MMA611	67.2	68.6	72.4	69.2	58.0	53.1	46.5	South net
9/25/2016	<i>Chelonia mydas</i>		MMA612/MMA613	78.0	78.6	83.0	75.0	61.2	64.9	63.9	South net
9/25/2016	<i>Chelonia mydas</i>	6	MMA614/MMA615	95.4	97.1	102.8	89.5	71.3	79.1	111.6	Hand capture
9/25/2016	<i>Caretta caretta</i>		MMA617/MMA618	64.8	66.4	70.1	67.5	53.9	49.5	41.2	Hand capture
9/25/2016	<i>Caretta caretta</i>		MMA619/MMA620	55.3	56.3	61.7	59.3	47.6	42.5	25.8	North net
9/27/2016	<i>Caretta caretta</i>		MMA620/MMA621	69.7	71.7	77.3	72.9	60.2	55.6	52.0	North net

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSSL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
9/30/2016	<i>Caretta caretta</i>	7	MMA565/MMA566	74.3	75.7	81.0	78.9	62.9	56.4	57.1	South net

NOTES

1. STRANGE TAG (Inconel Tags #BBX036 & BBX038 in rear flippers, no PIT tag). Originally tagged as part of the NOAA observer program. Shark bite wound in right front flipper, likely broken but wounds healing well. New Inconel tags MMA569 and MMA570 applied to front flippers and PIT tag inserted.
2. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 12/30/14 and 9/14/16. New Inconel tag #MMA583 inserted today.
3. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 8/16/15 and 9/17/16.
4. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 7/30/16 and 9/17/16.
5. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 4/17/16 and 9/21/16. Inconel tag #MMA607 malfunctioned.
6. Adult female. Tail length = 231 mm.
7. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 9/3/16 and 9/30/16. Turtle had lesions on carapace from shark bite (arc-shaped bite patterns on both sides of carapace). Extensive flipper damage (mostly healed) and old healed crack in center of plastron.

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	
	Sep-16	Year to Date	Sep-16	Year to Date	Sep-16	Year to Date	Sep-16	Year to Date	Sep-16	Year to Date	Sep-16	Year to Date
Captures	27	283	9	130	0	3	0	1	0	6	36	423
Causal Mortalities	0	0	0	0	0	0	0	0	0	0	0	0
Non-Causal Mortalities	0	0	0	8	0	0	0	0	0	0	0	8
Causal Injuries	0	0	0	0	0	0	0	0	0	0	0	0
Sent to Rehab	0	11	0	6	0	1	0	0	0	2	0	20
Fresh Scrapes	Sep-16	Year to Date	Sep-16	Year to Date	Sep-16	Year to Date	Sep-16	Year to Date	Sep-16	Year to Date	Sep-16	Year to Date
None	5	38	1	23	0	0	0	0	0	0	6	61
Minor	21	221	6	90	0	3	0	0	0	6	27	320
Moderate	1	24	2	17	0	0	0	1	0	0	3	42
Severe	0	0	0	0	0	0	0	0	0	0	0	0
Percent with Mod/Sev Scrapes	3.7%	8.5%	22.2%	13.1%	N/A	0.0%	N/A	100.0%	N/A	0.0%	8.3%	9.9%

St Lucie Power Plant Causal Turtles		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	**2016	Injury / Mortality Totals by Species
Loggerhead	Total Captures	538	623	484	419	227	420	260	295	302	232	302	275	274	283	4,934
	Injuries	0	0	1	*3	0	1	1	0	0	1	1	0	0	0	5
	Mortalities	0	1	0	*21	0	0	0	1	0	0	0	0	0	0	2
Green	Total Captures	394	286	428	267	101	299	161	444	217	127	197	134	181	130	3,366
	Injuries	1	0	3	7	0	2	2	1	0	0	0	0	0	0	16
	Mortalities	1	1	1	1	1	2	0	3	1	2	2	0	4	0	19
Leatherback	Total Captures	4	2	0	1	1	0	1	2	0	2	2	0	2	1	18
	Injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mortalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kemp's Ridley	Total Captures	2	1	3	3	0	2	0	7	0	0	0	2	7	6	33
	Injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mortalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawksbill	Total Captures	6	2	2	2	1	4	2	3	2	1	2	3	1	3	34
	Injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mortalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Injury & Mortality Yearly Totals		2	2	5	32	1	5	3	5	1	3	3	0	4	0	66
Total Captures per Year		944	914	917	692	330	725	424	751	521	362	503	414	465	423	8,385

* The loggerhead causal injuries and mortalities in 2006 were all hatchlings.

** 2016 is a partial year.