

**From:** Steve Weege <sweege@inwater.org>  
**Sent:** Monday, December 14, 2020 7:46 AM  
**To:** Koperski, Meghan  
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**Subject:** [External\_Sender] November 2020 FPL Marine Turtle Removal Monthly Report  
**Attachments:** November 2020 Marine Turtle Captures.pdf; Monthly Report Notes 2020.pdf; FPL St. Lucie Capture Summary 2020.pdf

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

**Subject: Marine Turtle Removal Monthly Summary November 2020**

Dear Meghan,

Attached, please find the monthly summary of marine turtle removals for November 2020. This month we captured nine *Caretta caretta*, 28 *Chelonia mydas*, one *Lepidochelys kempii*, and one *Dermochelys coriacea* in the intake canal of the St. Lucie power plant on Hutchinson Island. Three turtles were sent to rehabilitation facilities for non-causal injuries and/or illness and there was one non-causal mortality during the month of November. As with all sea turtle strandings at the Saint Lucie Plant, the Florida Fish and Wildlife Conservation Commission (FWC) was consulted and a stranding form was filed with the state through the Sea Turtle Stranding and Salvage Network.

Three turtles were sent to the rehabilitation facility at the Gumbo Limbo Nature Center (GLNC) in Boca Raton for non-causal injuries this month. On November 1<sup>st</sup>, an underweight and lethargic subadult loggerhead was recovered from atop the primary barrier net. The turtle was also missing most of its left front flipper (healed). On November 3<sup>rd</sup>, an adult female loggerhead was hand captured that was also underweight and lethargic. On November 9<sup>th</sup>, another lethargic subadult loggerhead was recovered from the permanent 5-inch barrier net. This turtle was missing 80% of its left front flipper and 80% of its right rear flipper (both healed). It also had a large arc-shaped portion missing from its right posterior carapace from a probable shark attack (healed injury). These strandings were all classified as non-causal since the underlying illnesses and/or injuries were unrelated to power plant activity.

There was one non-causal mortality this month. On November 1<sup>st</sup>, a severely decomposed juvenile green turtle recovered from atop the primary barrier net in the morning. The turtle was bloated and the scutes were sloughing off. Even the sutures in

the skull were separating from decomposition. Based on the advanced state of decomposition this turtle was presumed to have been entrained postmortem.

Following Tropical Storm Eta, the primary 5-inch barrier net encountered moderate-to-severe amounts of algae. In addition, there was a pulse of moon jellyfish and they were categorized as severe for one day. In response, Underwater Engineering Services, Inc. (UESI) inspected the primary barrier net and removed accumulated algae and debris as needed. Furthermore, IRG biologists 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. Moreover, 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 2020. 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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**From:** Steve Weege

**Created By:** sweege@inwater.org

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Files	Size	Date & Time
MESSAGE	3539	12/14/2020 7:45:51 AM

November 2020 Marine Turtle Captures.pdf		265126
Monthly Report Notes 2020.pdf	187601	
FPL St. Lucie Capture Summary 2020.pdf		253273

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# MARINE TURTLE REMOVALS ST. LUCIE PLANT INTAKE CANAL NOVEMBER 2020

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
11/1/2020	<i>Caretta caretta</i>	1	RCW201101-01	69.5	71.4	75.5	70.4	55.1	53.2	43.1	Dip net
11/1/2020	<i>Chelonia mydas</i>	2	RCW201101-02	30.0	30.0	32.5	25.0	24.6	25.0	3.0	Barrier net
11/2/2020	<i>Chelonia mydas</i>	3	KKY035/KKY036	88.2	88.3	92.9	86.0	67.2	71.5	94.0	North net
11/3/2020	<i>Chelonia mydas</i>		IRG0092/IRG0093	28.9	29.4	30.7	25.5	22.8	25.0	3.1	South net
11/3/2020	<i>Chelonia mydas</i>	4	KKY037	65.8	66.3	70.6	62.8	52.9	53.4	37.4	North net
11/3/2020	<i>Caretta caretta</i>		KKY038/KKY039	82.8	83.7	89.7	83.5	65.3	64.9	84.2	Barrier net
11/3/2020	<i>Caretta caretta</i>	5	KKY040/KKY041	85.9	87.8	95.5	85.2	68.3	63.7	87.8	Hand capture
11/7/2020	<i>Chelonia mydas</i>		IRG0094/IRG0095	24.5	24.6	25.9	22.0	19.9	20.4	1.6	Dip net
11/9/2020	<i>Chelonia mydas</i>		IRG0096/IRG0097	29.0	29.4	31.0	27.0	24.3	24.7	4.2	Barrier net
11/9/2020	<i>Caretta caretta</i>	6	KKY038/KKY039	83.4	84.4	90.6	85.0	64.7	64.9	84.3	Barrier net
11/9/2020	<i>Chelonia mydas</i>		KKY042/KKY043	32.0	32.5	34.2	29.6	26.7	26.4	7.6	Barrier net
11/9/2020	<i>Chelonia mydas</i>		KKY044/KKY045	39.1	39.5	41.5	36.5	31.6	33.0	8.1	Dip net
11/9/2020	<i>Chelonia mydas</i>		KKY046/KKY047	38.7	39.0	41.7	35.0	29.9	31.1	7.4	Dip net
11/9/2020	<i>Chelonia mydas</i>	7	KKY048/KKY049	36.1	36.4	38.5	30.0	25.6	28.8	5.4	Dip net
11/11/2020	<i>Chelonia mydas</i>	8	KKT012/KKT013	55.8	56.2	60.5	55.4	45.9	45.4	22.0	South net

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
11/11/2020	<i>Caretta caretta</i>		KKY050/KKY051	63.6	63.6	67.0	67.9	57.5	52.7	47.9	North net
11/12/2020	<i>Lepidochelys kempii</i>		KKY052/KKY053	54.6	55.6	58.4	61.0	56.5	43.2	23.0	North net
11/12/2020	<i>Chelonia mydas</i>		KKY054/KKY055	78.5	79.3	85.3	76.2	63.8	64.2	67.5	South net
11/12/2020	<i>Chelonia mydas</i>		KKY056/KKY057	46.6	47.0	49.7	41.1	35.9	36.4	12.4	South net
11/12/2020	<i>Chelonia mydas</i>		KKY058/KKY059	30.2	30.8	33.0	28.6	25.4	25.4	3.7	South net
11/12/2020	<i>Chelonia mydas</i>		KKY060/KKY061	51.3	51.9	55.4	52.5	41.1	42.0	17.6	North net
11/13/2020	<i>Chelonia mydas</i>		KKY062/KKY063	38.4	38.8	40.9	36.2	32.8	31.4	7.3	South net
11/14/2020	<i>Caretta caretta</i>	9	KKG385	74.5	76.8	81.1	76.1	61.1	58.0	58.7	North net
11/14/2020	<i>Caretta caretta</i>		KKY064/KKY065	60.0	61.0	65.4	60.7	50.3	47.8	31.6	South net
11/16/2020	<i>Chelonia mydas</i>		IRG0098/IRG0099	28.2	28.2	29.8	27.0	24.6	24.4	3.0	Dip net
11/16/2020	<i>Chelonia mydas</i>	10	KKY020	29.3	29.6	31.2	28.3	24.5	24.4	3.3	North net
11/17/2020	<i>Chelonia mydas</i>		KKY066/KKY067	31.6	31.7	32.5	28.6	26.2	26.8	4.5	North net
11/18/2020	<i>Chelonia mydas</i>		KKY069/KKY070	80.7	81.1	87.5	81.9	64.8	68.6	72.0	South net
11/20/2020	<i>Chelonia mydas</i>	11	KKT115	59.5	59.8	63.2	57.9	47.7	50.6	28.0	South net
11/20/2020	<i>Chelonia mydas</i>		KKY071/KKY072	70.5	72.7	77.4	69.5	57.0	59.4	50.6	South net
11/27/2020	<i>Dermochelys coriacea</i>		KKY073/KKY074	113.1	113.1	122.4	86.7	66.6			Hand capture
11/28/2020	<i>Chelonia mydas</i>		KKY068/KKY075	35.0	35.7	37.5	34.4	29.3	29.1	5.5	North net
11/28/2020	<i>Chelonia mydas</i>		KKY076/KKY077	30.2	31.0	32.4	27.7	24.7	25.3	4.0	Dip net
11/28/2020	<i>Chelonia mydas</i>		KKY078/KKY079	33.0	33.3	35.5	33.3	30.3	28.7	5.5	Dip net
11/29/2020	<i>Chelonia mydas</i>	12	KKY080/KKY081	64.4	64.9	68.2	63.9	52.9	51.7	38.3	South net

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCl (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
11/29/2020	<i>Chelonia mydas</i>		KKY082/KKY083	30.3	30.8	33.0	28.5	25.1	26.0	3.7	Dip net
11/29/2020	<i>Caretta caretta</i>		KKY084/KKY085	60.4	61.4	66.5	67.0	52.0	48.0	37.8	North net
11/30/2020	<i>Chelonia mydas</i>	13	4A591B0149	63.2	63.3	68.3	59.5	47.7	50.8	34.0	South net
11/30/2020	<i>Caretta caretta</i>		KKY086/KKY087	55.7	56.4	62.0	59.0	48.0	43.7	25.1	North net

## NOTES

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1. REHAB (NON-CAUSAL). Stranding #RCW201101-01. Power plant recapture from 2/9/14. Underweight and lethargic subadult loggerhead recovered from atop the primary barrier net in the morning. Turtle missing 90% of left front flipper (healed). Taken to Gumbo Limbo Nature Center (GLNC) in Boca Raton.
2. DEAD (NON-CAUSAL MORTALITY). Stranding #RCW201101-02. Severely decomposed juvenile green turtle recovered from atop the barrier net in the morning. The turtle was bloated, the scutes were sloughing off, and the skull was breaking apart. Too decomposed to necropsy.
3. Adult female green turtle. Tail length = 157 mm.
4. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 4/17/16, 9/21/16, 1/7/17, 10/16/17, and 11/3/20. New Inconel tag placed in left front flipper.
5. REHAB (NON-CAUSAL). Stranding# STW201103-01. Underweight and lethargic adult female loggerhead (tail length = 182 mm). Turtle was tagged prior to rehab determination (would not crawl to water on its own). After consultation with FWC, the turtle was held overnight and the following morning Inwater Research Group (IRG) biologists helped transport partway to GLNC.
6. REHAB (NON-CAUSAL). Stranding# RCW201109-01. Power plant recapture from 11/3/20. Lethargic subadult loggerhead recovered from the permanent 5-inch barrier net. Turtle missing 80% of the left front flipper and 80% of right rear flipper (both healed). Large arc-shaped portion missing from right posterior carapace. IRG transported this turtle partway to GLNC for rehab.
7. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 9/20/19 and 11/9/20.
8. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 11/19/19 and 11/11/20.
9. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 8/18/07, 8/21/07, 8/24/07, 9/2/07, 9/10/07, 10/25/07, 12/17/07, 1/25/08, 4/6/08, 4/30/08, 7/13/08, 8/24/08, 9/13/08, 10/6/08, 10/18/08, 4/17/09, 6/17/09, 8/13/09, 10/27/09, 6/11/10, 9/15/10, 9/15/11, 10/21/11, 11/30/11, 7/7/12, 3/20/13, 11/4/15, 2/27/16, 1/6/17, 5/30/17, 9/24/17, 2/9/18, 5/7/18, 4/21/19, and 11/14/20. PAPILOMAS (Balazs Tumor Score = 1 {light}, Total Tumor Score = 1). One small papilloma tumor in corner of jaw.
10. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 10/28/20 and 11/16/20.
11. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 3/19/08, 6/28/13, 5/25/14, 2/12/16, 6/1/17, 9/19/17, 10/16/17, 1/21/18, 4/17/19, 2/17/20, 10/5/20, and 11/20/20.
12. PAPILOMAS (Balazs Tumor Score = 1 {light}, Total Tumor Score = 3).
13. RECAPTURE. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 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, and 11/30/20.

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	
	Nov-20	Year to Date	Nov-20	Year to Date	Nov-20	Year to Date	Nov-20	Year to Date	Nov-20	Year to Date	Nov-20	Year to Date
<b>Captures</b>	<b>9</b>	165	<b>28</b>	138	<b>0</b>	0	<b>1</b>	1	<b>1</b>	7	<b>39</b>	311
<b>Causal Mortalities</b>	<b>0</b>	0	<b>0</b>	1	<b>0</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>	1
<b>Noncausal Mortalities</b>	<b>0</b>	1	<b>1</b>	4	<b>0</b>	0	<b>0</b>	0	<b>0</b>	0	<b>1</b>	5
<b>Causal Injuries</b>	<b>0</b>	0	<b>0</b>	1	<b>0</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>	1
<b>Sent to rehab</b>	<b>3</b>	13	<b>0</b>	3	<b>0</b>	0	<b>0</b>	0	<b>0</b>	3	<b>3</b>	19
<b>Fresh Scrapes</b>	<b>Nov</b>	<b>Year to Date</b>	<b>Nov</b>	<b>Year to Date</b>	<b>Nov</b>	<b>Year to Date</b>	<b>Nov</b>	<b>Year to Date</b>	<b>Nov</b>	<b>Year to Date</b>	<b>Nov</b>	<b>Year to Date</b>
<b>None</b>	<b>3</b>	19	<b>5</b>	20	<b>0</b>	0	<b>0</b>	0	<b>0</b>	3	<b>8</b>	42
<b>Minor</b>	<b>6</b>	139	<b>23</b>	115	<b>0</b>	0	<b>0</b>	0	<b>1</b>	4	<b>30</b>	258
<b>Moderate</b>	<b>0</b>	7	<b>0</b>	2	<b>0</b>	0	<b>1</b>	1	<b>0</b>	0	<b>1</b>	10
<b>Severe</b>	<b>0</b>	0	<b>0</b>	1	<b>0</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>	1
<b>Percent with mod/sev scrapes</b>	<b>0.0%</b>	4.2%	<b>0.0%</b>	2.2%	<b>N/A</b>	N/A	<b>100.0%</b>	100.0%	<b>0.0%</b>	0.0%	<b>2.6%</b>	3.5%