

Balsam, Briana

From: Stephen Weege [steveweege@yahoo.com]
Sent: Saturday, September 04, 2010 3:51 PM
To: RidsNrrDlr Resource
Subject: FPL/ St. Lucie Monthly Reports - August 2009
Attachments: August 2009 Cover Letter.doc; August 2009 Marine Turtle Captures.rtf; Monthly Report Notes 2009.xls; FPL St. Lucie Capture Summary 2009.xls

Dear Dr. Logan,

I am forwarding you the monthly marine turtle removal reports for the FPL St. Lucie Nuclear Power Plant. This report is for August 2009. As requested, I will send the 2010 monthly reports starting with February (in a separate e-mail).

The August 2010 monthly report, as well as all future mailings, will be sent to Ridsnrrdlr.resource@nrc.gov.

Please contact me if you have any further questions or concerns. Thank you.

Sincerely,
Steve Weege
Inwater Research Group
sweege@inwater.org
(772) 216-5096

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

Subject: Marine Turtle Removal Monthly Summary
August 2009

Dear Meghan,

Attached, please find the monthly summary of marine turtle removals for August 2009. In August, we captured twenty six (26) Caretta caretta, and eleven (11) Chelonia mydas at the intake canal of the St. Lucie power plant on South Hutchinson Island. In August, one loggerhead and one green turtle were transported to the Marinelife Center in Juno Beach for treatment after consultation with FFWCC personnel. The loggerhead had fishing line tightly wrapped around both front flippers causing deep constriction wounds. Fishing line was also protruding from the mouth. The green turtle had limited range of motion to its rear flippers possibly creating buoyancy issues. Both events were considered not causal to power plant operation. All other turtles captured in August were released on the same day of capture.

Heavy amounts of drift algae were entrained into the canal during August 22, 23, and 24. Divers were deployed for three days during the month to clean the primary barrier net in order to maintain its integrity. During August, the primary barrier net performed as designed and effectively kept turtles confined east of this net.

Tag numbers and morphometric data for all turtles are attached. Also, attached is a spreadsheet for all captures, mortalities, injuries and causal events delineated by species and month for 2009. This spreadsheet tracks fresh scrapes and will be helpful in determining the success of the intake pipe-cleaning project. If you have any questions or comments about the enclosed data please contact me at your convenience.

As of August 15, 2009 Inwater Research Group Inc. (a nonprofit organization) became responsible for all sea turtle work conducted at the St. Lucie power plant. Our group includes researchers with over 100 years of combined experience in almost every facet of sea turtle biology. We excel at implementing exploratory studies in the coastal waters of Florida and look forward to improving the sea turtle research program at the St. Lucie power plant. For more information about our organization please go to www.inwater.org. I will be responsible for sending out the monthly sea turtle captures report and will be managing the sea turtle work at the St. Lucie power plant. This should be a seamless transition as we have retained the sea turtle biologists at the power

plant and Michael Bresette is still very much involved as the president of Inwater Research Group. I look forward to working with you in the future and if you have any questions please don't hesitate to reach me by email or phone.

Sincerely,

David A. Singewald
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**MARINE TURTLE REMOVALS
ST. LUCIE PLANT INTAKE CANAL
AUGUST 2009**

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPL (cm)	Weight (kg)	Method
8/3/2009	<i>Caretta caretta</i>		YYW355/YYW356	70.3	71.3	77.9	77.4	62.2	56.6	52.8	Hand capture
8/3/2009	<i>Caretta caretta</i>		YYW357/YYW358	74.5	76.4	81.5	75.0	61.6	58.9	60.5	Hand capture
8/3/2009	<i>Caretta caretta</i>		YYW359/YYW360	80.4	81.6	90.2	85.3	66.2	63.7	78.4	Hand capture
8/3/2009	<i>Caretta caretta</i>	1	YYW361/YYW362	90.5	92.5	99.3	91.9	71.9	71.4	111.4	Hand capture
8/4/2009	<i>Chelonia mydas</i>	2		59.8	59.8	66.8	64.7	50.4	51.6	37.0	Dip net
8/4/2009	<i>Caretta caretta</i>	3	YYW363/YYW364	101.7	102.4	108.8	96.0	77.9	76.6	155.5	North net
8/7/2009	<i>Caretta caretta</i>	4	YYW365/YYW366	97.7	97.7	102.9	98.6	73.9	78.3	132.3	South net
8/10/2009	<i>Caretta caretta</i>	5	YYW367/YYW368	86.5	87.2	96.5	86.4	70.2	63.8	92.1	Hand capture
8/10/2009	<i>Caretta caretta</i>		YYW369/YYW370	66.4	68.1	72.0	66.0	54.2	53.0	38.9	Hand capture
8/10/2009	<i>Caretta caretta</i>		YYW371/YYW372	69.8	70.7	77.4	72.8	58.9	56.4	51.4	Hand capture
8/10/2009	<i>Caretta caretta</i>		YYW373/YYW374	62.3	63.1	68.5	65.7	53.2	48.9	37.9	South net
8/13/2009	<i>Caretta caretta</i>	6	YYB108/YYB109	63.7	64.4	68.2	66.9	53.5	49.9	38.1	Hand capture
8/13/2009	<i>Caretta caretta</i>	7	YYW375/YYW376	93.1	93.9	102.2	89.8	74.9	69.7	114.5	Hand capture
8/13/2009	<i>Caretta caretta</i>		YYW377/YYW378	65.8	66.5	72.9	69.0	56.2	52.5	39.4	Hand capture
8/15/2009	<i>Caretta caretta</i>	8	YYW379/YYW380	94.8	95.8	100.8	93.4	73.3	73.9	127.9	South net
8/16/2009	<i>Chelonia mydas</i>		YYW381/YYW382	42.7	42.8	45.7	37.5	31.7	33.9	9.7	North net
8/18/2009	<i>Chelonia mydas</i>	9		32.2	32.5	33.5	26.9	24.9	27.8	4.3	Hand capture

Date	Species	Note	Tag #'s	SMCL (cm)	SSCL (cm)	CSCL (cm)	CMCW (cm)	SMCW (cm)	SMPLE (cm)	Weight (kg)	Method
8/18/2009	<i>Chelonia mydas</i>	10		39.9	41.7	44.1	39.2	33.5	35.9	9.9	Hand capture
8/18/2009	<i>Caretta caretta</i>	11	YYR383/YYR384	68.4	69.7	74.5	70.1	59.6	52.0	40.8	Hand capture
8/18/2009	<i>Caretta caretta</i>		YYW383/YYW384	53.0	54.0	57.0	54.5	44.5	41.8	20.9	North net
8/18/2009	<i>Caretta caretta</i>		YYW385/YYW386	77.7	78.4	84.7	77.9	62.1	60.6	72.2	Hand capture
8/19/2009	<i>Caretta caretta</i>	12		75.2	75.3	77.6	73.9	59.3	55.0	64.8	Hand capture
8/19/2009	<i>Chelonia mydas</i>			33.0	33.1	35.4	29.3	25.5	26.3	4.5	Dip net
8/20/2009	<i>Chelonia mydas</i>			25.2	25.4	26.5	23.1	20.7	21.8	2.2	Dip net
8/20/2009	<i>Caretta caretta</i>	13	YYW387/YYW388	90.4	93.0	98.8	86.7	70.6	72.2	105.8	Hand capture
8/20/2009	<i>Caretta caretta</i>		YYW389/YYW390	70.9	72.6	77.7	70.2	56.8	54.1	49.9	Hand capture
8/20/2009	<i>Chelonia mydas</i>		YYW391	50.5	50.9	54.1	47.6	42.4	41.6	16.5	Hand capture
8/20/2009	<i>Chelonia mydas</i>		YYW392/YYW393	42.2	42.3	44.8	38.2	31.9	34.3	10.2	Hand capture
8/21/2009	<i>Caretta caretta</i>	14	YYW394/YYW395	87.2	88.3	93.7	83.0	66.9	68.7	92.5	North net
8/24/2009	<i>Chelonia mydas</i>			26.1	26.7	27.2	24.4	22.7	22.3	2.1	Dip net
8/25/2009	<i>Caretta caretta</i>	15	YYW396/YYW397	89.8	90.1	98.3	89.0	68.4	68.4	96.3	Hand capture
8/25/2009	<i>Caretta caretta</i>		YYW398/YYW399	67.6	69.3	75.5	73.2	58.0	53.5	49.5	Hand capture
8/27/2009	<i>Caretta caretta</i>	16		59.9	60.8	68.0	64.8	52.7	47.5	34.2	Hand capture
8/27/2009	<i>Chelonia mydas</i>	17	YYW400	46.8	47.3	50.3	43.7	37.3	39.2	13.9	South net
8/29/2009	<i>Caretta caretta</i>	18	UUB601/UUB602	85.5	86.0	90.0	87.4	69.9	68.0	100.0	South net
8/29/2009	<i>Caretta caretta</i>		UUB603/UUB604	57.1	57.9	62.6	61.0	51.2	46.0	32.0	South net
8/30/2009	<i>Chelonia mydas</i>	19	YYR468	55.4	55.7	59.1	54.3	45.5	46.0	23.4	South net

NOTES

1. Adult female. Tail length = 278 mm.
2. Recapture. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 1/7/03, 3/10/06, 8/23/06 and 4/23/08. Turtle has buoyancy issues and rear flippers appear to have limited range of motion. Transported to Marinelife Center by Center personnel. Not causal to power plant operation.
3. Adult female. Tail length = 275 mm.
4. Adult female. Tail length = 246 mm.
5. Adult female. Tail length = 188 mm.
6. 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 and 6/17/09.
7. Adult female. Tail length = 243 mm.
8. Adult female. Tail length = 225 mm.
9. Recapture. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 12/4/08.
10. Recapture. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 1/25/06 and 9/28/06.
11. Recapture. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 10/4/08 and 12/19/08.
12. Recapture. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 5/30/89, 9/6/90, 10/11/90, 10/15/90, 2/23/91, 8/10/92, 8/27/92, 9/21/92, 1/6/93, 6/8/93, 12/29/93, 3/22/94, 10/31/94, 3/17/95, 4/20/95, 2/7/96, 4/7/96, 7/11/96, 7/23/96, 7/29/96, 9/22/96, 10/9/96, 6/13/97, 5/15/98, 4/15/00, 6/13/00, 9/8/00, 11/19/00, 11/15/01, 9/16/02, 4/30/03, 11/24/03, 3/31/04, 9/15/04, 10/25/04, 8/10/05, 8/16/06, 4/30/08 and 9/26/08. Adult male. Tail length = 380 mm.
13. Adult female. Tail length = 227 mm.
14. Adult female. Tail length = 214 mm.
15. Adult female. Tail length = 250 mm.
16. Turtle found with fishing line tightly wrapped around both front flippers causing constriction wounds. Line was removed. Fishing line also present protruding from mouth and going down into throat. Transported to Marinelife Center by FWCC personnel. Not causal to power plant operation.
17. Recapture. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 11/5/05, 9/23/06, 10/10/06, 10/24/06, 12/28/06, 12/9/07, 4/8/08, 10/16/08 and 11/28/08.
18. Adult female. Tail length = 216 mm.
19. Recapture. Turtle was removed from the intake canal, tagged and released at Hutchinson Island on 2/24/06, 10/6/07, 12/5/08 and 4/3/09.

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	
	Aug-09	Year to Date	Aug-09	Year to Date	Aug-09	Year to Date	Aug-09	Year to Date	Aug-09	Year to Date	Aug-09	Year to Date
Captures	26	185	11	111	0	2	0	1	0	0	37	299
Causal Mortalities	0	0	0	0	0	0	0	0	0	0	0	0
Non-causal Mortalities	0	1	0	0	0	0	0	0	0	0	0	1
Causal Injuries	0	1	0	0	0	0	0	0	0	0	0	1
Sent to rehab	1	11	1	3	0	0	0	0	0	0	2	14
Fresh Scrapes	Aug-09	Year to Date	Aug-09	Year to Date	Aug-09	Year to Date	Aug-09	Year to Date	Aug-09	Year to Date	Aug-09	Year to Date
None	1	19	1	6	0	0	0	0	0	0	2	25
Minor	20	114	8	71	0	1	0	0	0	0	28	186
Moderate	5	49	2	32	0	1	0	1	0	0	7	83
Severe	0	3	0	2	0	0	0	0	0	0	0	5
Percent with mod/sev scrapes	19.2%	28.1%	18.2%	30.6%	#DIV/0!	50.0%	#DIV/0!	100.0%	#DIV/0!	#DIV/0!	18.9%	29.4%