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Env'l. Affairs

April 2, 1987

Mr. J. Alan Huff
Florida Department of
Natural Resources
Bureau of Marine Research
100 Eighth Avenue, S.E.
St. Petersburg, FL 33701-5095

Dear Alan:

Forty-five loggerhead turtles and eight green turtles were removed from the St. Lucie Plant intake canal during the January - March quarter of 1987. Four loggerheads were dead when recovered.

Measurements for all animals are attached. All but one of the live turtles were released into the ocean off Hutchinson Island. The one exception was a lethargic and emaciated loggerhead which was captured on 11 FEB and transferred to a tank at the House of Refuge Museum. This turtle is still being held at that facility. No turtles were reported from other plants.

Please feel free to contact me if you have any questions concerning the enclosed data.

Sincerely,

R. Erik Martin
Senior Scientist

Attachment

- cc: J.R. Wilcox (FPL)
- C.A. Oravetz (NMFS)
- B.A. Schroeder (NMFS)
- R.G. Ernest (ABI)

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MARINE TURTLE REMOVALS

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JANUARY 1987

<u>DATE CAPTURED</u>	<u>SPECIES</u>	<u>TAG NUMBER</u>	<u>CARAPACE LENGTH (mid-line) (cm)</u>	<u>CARAPACE LENGTH (curved) (cm)</u>	<u>CARAPACE WIDTH (cm)</u>	<u>PLASTRON LENGTH (cm)</u>	<u>TOTAL TAIL LENGTH (mm)</u>	<u>WEIGHT (lbs)</u>
ST. LUCIE PLANT INTAKE CANAL								
Live Removals								
1/2	<u>C. caretta</u>	AAJ-368 PPD-693	74.4	81.5	78.0	59.4	145	132
1/6	<u>C. caretta</u>	AAJ-369 PPD-694	54.0	60.0	58.0	42.3	132	60
1/6	<u>C. caretta</u> ¹	PPD-695	82.2	92.0	89.5	67.0	163	186
1/8	<u>C. caretta</u>	AAJ-370 PPD-696	44.7	51.0	47.5	38.9	80	36
1/8	<u>C. mydas</u>	PPD-697 NNC-609	28.7	31.0	26.5	24.1	40	5
1/12	<u>C. caretta</u>	AAJ-371 PPD-698	61.4	70.5	66.0	50.6	138	NM
1/12	<u>C. mydas</u>	PPD-699 PPD-700	30.4	32.6	29.0	25.5	61	8
1/12	<u>C. caretta</u>	AAJ-372 AAJ-373	56.2	62.0	59.0	44.9	125	55
1/13	<u>C. caretta</u>	AAJ-374 AAJ-375	67.2	74.0	76.0	54.6	152	115
1/13	<u>C. caretta</u>	NNC-610 NNC-611	53.6	59.5	57.5	42.9	112	55
1/13	<u>C. caretta</u>	AAJ-376 PPD-701	48.5	54.0	52.5	38.0	95	40
1/14	<u>C. caretta</u>	AAJ-377 PPD-703	59.7	67.0	63.5	48.3	120	76
1/14	<u>C. caretta</u>	AAJ-378 PPD-704	48.0	53.0	50.0	40.5	101	42
1/14	<u>C. caretta</u>	AAJ-379 PPD-706	70.9	78.0	74.5	56.3	135	123
1/15	<u>C. caretta</u>	AAJ-381 PPD-708	51.5	57.5	55.0	40.0	111	45

MARINE TURTLE REMOVALS

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JANUARY 1987

DATE CAPTURED	SPECIES	TAG NUMBER	CARAPACE LENGTH		CARAPACE WIDTH (cm)	PLASTRON LENGTH (cm)	TOTAL TAIL LENGTH (mm)	WEIGHT (lbs)
			(mid-line) (cm)	(curved) (cm)				
ST. LUCIE PLANT INTAKE CANAL								
Live Removals								
1/15	<u>C. mydas</u>	PPD-710 NNC-626	29.5	31.5	27.0	24.2	59	7
1/16	<u>C. caretta</u>	AAJ-382 PPD-712	54.4	60.0	56.0	42.7	115	60
1/16	<u>C. caretta</u> ²	PPF-663 PPF-664	47.4	54.0	50.0	39.0	97	36
1/16	<u>C. caretta</u>	AAJ-384 PPD-713	63.8	70.5	64.0	49.5	142	84
1/19	<u>C. caretta</u>	AAJ-385 PPD-714	64.0	71.5	66.0	48.9	145	92
1/19	<u>C. mydas</u>	PPD-715 NNC-627	40.1	44.0	36.5	33.6	52	20
1/20	<u>C. caretta</u>	AAJ-386 PPD-716	60.8	66.0	63.0	48.0	120	78
1/20	<u>C. caretta</u>	AAJ-387 PPD-717	53.3	59.0	58.0	42.4	95	56
1/23	<u>C. caretta</u>	AAJ-383 PPD-718	60.1	66.0	63.0	45.4	140	71
1/23	<u>C. caretta</u>	AAJ-388 PPD-720	51.5	59.0	54.0	42.1	110	53
1/30	<u>C. caretta</u> ³	AAJ-331 PPD-633 PPD-721	85.0	92.0	82.0	63.2	160	181
1/30	<u>C. caretta</u>	AAJ-389 PPD-722	56.2	63.5	62.5	44.4	100	65
Dead Removals								
1/18	<u>C. caretta</u> ⁴	SI-3989	88.0	96.0	89.5	NM	NM	250(E)
1/18	<u>C. caretta</u>	not tagged	55(E)	NM	NM	41(E)	NM	40(E)



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MARINE TURTLE REMOVALS

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JANUARY 1987

<u>DATE CAPTURED</u>	<u>SPECIES</u>	<u>TAG NUMBER</u>	<u>CARAPACE LENGTH (mid-line)</u> <u>(cm)</u>	<u>CARAPACE LENGTH (curved)</u> <u>(cm)</u>	<u>CARAPACE WIDTH</u> <u>(cm)</u>	<u>PLASTRON LENGTH</u> <u>(cm)</u>	<u>TOTAL TAIL LENGTH</u> <u>(mm)</u>	<u>WEIGHT</u> <u>(lbs)</u>
ST. LUCIE PLANT INTAKE CANAL Dead Removals								
1/18	<u>C. caretta</u> ⁵	not tagged	89.0	NM	NM	NM	NM	180(E)

¹Female. Due to injury to right front flipper, tag applied to left front flipper only.

²NMFS Miami tags.

³Female. ABI-tag return. This turtle was removed from the intake canal, tagged (AAJ331/PPD633) and released 3.0 miles south of the intake on 14AUG86. Upon recapture on 30JAN87, PPD633 which was covered with barnacles was removed and replaced with PPD721.

⁴Female. Caretta Research tag.

⁵Female.

NM = not measured E = estimated

NOTE: PPD-702, PPD-705, PPD-709, PPD-711 and PPD-719 malfunctioned and were not applied to turtles.

MARINE TURTLE REMOVALS

FEBRUARY 1987

DATE CAPTURED	SPECIES	TAG NUMBER	CARAPACE LENGTH		CARAPACE WIDTH (cm)	PLASTRON LENGTH (cm)	TOTAL TAIL LENGTH (mm)	WEIGHT (lbs)
			(mid-line) (cm)	(curved) (cm)				
ST. LUCIE PLANT INTAKE CANAL								
Live Removals								
2/2	<u>C. caretta</u>	AAJ-390 PPD-723	64.5	70.0	69.0	52.5	137	89
2/5	<u>C. caretta</u>	AAJ-391 PPD-725	57.9	65.0	63.0	46.2	105	67
2/10	<u>C. caretta</u> ¹	AAJ-392 PPD-726	86.1	95.1	83.5	65.0	308	187
2/10	<u>C. caretta</u>	AAJ-393 PPD-727	48.2	53.8	50.2	36.8	98	33
2/10	<u>C. caretta</u>	AAJ-394 PPD-728	74.1	78.9	75.1	57.8	153	133
2/11	<u>C. caretta</u> ²	not tagged	78.7	88.0	85.7	60.7	140	130
2/12	<u>C. caretta</u>	AAJ-395 PPD-729	73.0	80.4	78.9	57.6	150	123
2/12	<u>C. caretta</u>	AAJ-396 PPD-730	50.9	57.0	54.4	40.2	113	39
2/16	<u>C. mydas</u>	NNC-612 PPD-731	31.6	33.8	30.3	26.4	55	8
2/16	<u>C. caretta</u> ³	PPD-732	58.4	66.0	69.9	50.1	169	83
2/22	<u>C. caretta</u>	AAJ-397 PPD-733	65.7	72.2	66.5	51.6	160	102
2/27	<u>C. caretta</u>	AAJ-398 PPD-734	51.0	56.6	54.2	40.6	114	49

¹Male.²This emaciated and lethargic turtle was transferred to a tank at the House of Refuge Museum on 11FEB87.³Posterior portion of carapace missing (old wound). Trailing edge of left front flipper missing (old wound), therefore, tag applied to right front flipper only.

NOTE: PPD-724 malfunctioned and was not applied to a turtle.

MARINE TURTLE REMOVALS

MARCH 1987

<u>DATE CAPTURED</u>	<u>SPECIES</u>	<u>TAG NUMBER</u>	<u>CARAPACE LENGTH (mid-line) (cm)</u>	<u>CARAPACE LENGTH (curved) (cm)</u>	<u>CARAPACE WIDTH (cm)</u>	<u>PLASTRON LENGTH (cm)</u>	<u>TOTAL TAIL LENGTH (mm)</u>	<u>WEIGHT (lbs)</u>
ST. LUCIE PLANT INTAKE CANAL								
Live Removals								
3/3	<u>C. caretta</u> ¹	PPF-693 PPF-694	47.3	53.9	49.9	38.8	78	41
3/3	<u>C. caretta</u>	AAJ-399 PPD-735	55.0	61.6	57.3	42.9	105	58
3/3	<u>C. caretta</u> ²	AAJ-400 PPD-736	80.8	88.8	83.8	63.2	181	152
3/4	<u>C. caretta</u>	AAJ-425 PPD-737	60.5	66.9	63.4	45.8	153	70
3/5	<u>C. caretta</u>	AAJ-401 PPD-738	52.4	57.6	54.2	41.4	124	48
3/6	<u>C. caretta</u>	AAJ-402 PPD-739	74.3	80.8	81.7	59.9	149	147
3/9	<u>C. mydas</u>	PPD-740 PPD-741	24.3	25.5	20.7	19.9	46	3.2
3/20	<u>C. mydas</u>	PPD-742 PPD-743	34.4	36.8	31.4	28.4	50	14
3/27	<u>C. mydas</u>	PPD-745 PPD-746	31.1	33.2	29.8	25.6	50	6.8
3/27	<u>C. caretta</u>	AAJ-403 PPD-744	67.9	74.5	68.2	53.0	190	107

Dead Removals

3/23	<u>C. caretta</u> ²	not tagged	NM	93	86	66	NM	160(E)
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¹NMFS Miami tags.²Female.

NM=not measured

E=estimated