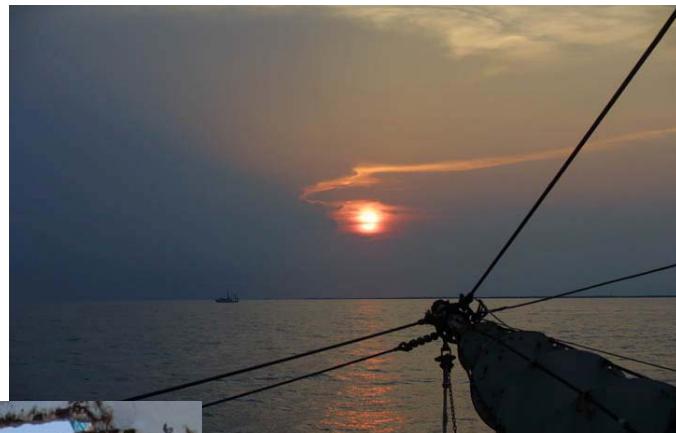


**Marine Endangered Species Monitoring Program
Trawling Project Summary
Navarre Beach, Florida
Beach Replenishment
SAJ-2003-10496-IP-EPS**

**US Army Corps of Engineers - Jacksonville District
Weeks Marine, Inc. / Coastal Tech / ECO, Inc.
23Mar06 – 25July06 and 28Sept06-12Nov06**



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ABSTRACT

A twenty-four-hour-per-day relocation project was conducted onboard the trawling vessels F/V Miss Adrienne, F/V Jana Lin, F/V Bad Habit, and F/V Elvira working for East Coast Observers, Inc. for endangered and threatened sea turtles during the beach replenishment of Navarre Beach, Florida, Santa Rosa County. Species targeted included Loggerhead (*Caretta caretta*), Kemp's Ridley (*Lepidochelys kempii*), Green (*Chelonia mydas*), Hawksbill (*Eretmochelys imbricata*), and Leatherback (*Dermochelys coriacea*) sea turtles. Coverage was provided at 100% by a minimum of one (1) relocation trawler per working dredge and, at times, two (2) relocation trawlers for a single working dredge. This summary focuses on statistics and scope of work conducted onboard the F/V Miss Adrienne, F/V Jana Lin, F/V Bad Habit, and F/V Elvira.

INTRODUCTION

On 23Mar2006 at 2021 hours, relocation trawling was initiated by the Weeks Marine Inc, and conducted by East Coast Observers, Inc. (ECO) in accordance with the requirements of the Department of the Army (DA) permit authorizing the hopper dredging. A period of 6 hours was used for pre-dredge trawling, after which the hopper dredge B.E. Lindholm began dredging in the borrow site. Trawling was continued 24 hours a day during all dredging activities barring cessation of operations regarding any mechanical failures (dredge or trawling vessel(s)), routine maintenance, taking on fuel, potable water, supplies, or heightened sea states due to foul weather. The hopper dredge R.N. Weeks served as relief for the B.E. Lindholm during this projects duration. The trawling vessel F/V Jana Lin relieved the F/V Bad Habit on 20May2006 at 0727 hours and served as the secondary trawling vessel for the remainder of this part of the project. Dredging suspended on 24July2006, and trawling suspended on 25July2006. During this leg of the project there were other intermittent suspensions of activity due to circumstances detailed in the scope of work.

On 28Sep2006 at 2018hrs pre-dredge trawling was initiated for the completion of the Navarre Beach Restoration Project. Dredging with the R.N. Weeks began on 29Sep2006 at 1700hrs. Trawling was continued 24 hours a day during all dredging activities with F/V Jana Lin and F/V Elvira. Project completion occurred on 12Nov2006 at 0920hrs.

SCOPE OF WORK

This relocation-trawling project in Navarre Beach, Florida was contracted by Week Marine Inc. ECO, Inc provided relocation-trawling services providing two (2) trawlers. Onboard said trawlers ECO, Inc was responsible for providing and maintaining two working nets, equipment, trained personnel, and a trawl supervisor approved through The National Marine Fisheries Service (NMFS).

Equipment and operational standards were maintained in excellent order, and open communication was maintained at all times between all parties involved to achieve the best results possible. All parties agreed on trawling speed, length of tow, number of drags in segment and length of dredging / trawling during the segment. The trawlers were required to drag approved nets ahead of the Dredges B.E. Lindholm and R.N. Weeks at all times.

Trawling was conducted with repetitive 40 minute tows, and pertinent data was recorded by the trawling supervisor for each tow on standardized log sheets. Data included beginning and ending tow times, depth of water, average trawl speed, latitude and longitude at start and end of tow (obtained by GPS equipment aboard trawler), water temperature, air temperature and various sea conditions (wave height, wind speed, weather conditions), biological species by-catch, number of turtles captured (if applicable) on each tow and in which net (port or stbd.), and any relevant comments or subsequent incidents. A daily trawl summary was electronically submitted by the primary trawl supervisor to USACE, Weeks Marine, Coastal Tech and any other required personnel which included any turtles relocated, by-catch, weather conditions and any other pertinent information for the day. All original tow sheets were received by USACE personnel and Weeks Marine project superintendents on a regular basis.

All turtles captured for relocation would be identified, measured, tagged, and released starting 2 miles outside the project area as per contract specifications (Appendix 1).

All applicable permits for handling endangered and threatened species were obtained from the appropriate federal and state agencies, and all licensing is current. Observers and trawl supervisors are unconditionally approved through NMFS.

During both portions of the beach replenishment (23 March to 25 July and 28 September to 12 November), several periods of dredging suspension occurred. Circumstances included three (3) incidental takes on the hopper dredge B.E. Lindholm and (2) incidental takes on the F/V Jana Lin. Other delays included mechanical failure and several instances of high sea conditions and foul weather. Due to the incidental takes, the contract and permits were modified in order to complete the necessary areas of beach outlined in this part of the replenishment. Two extensions were granted (10Jul06 and 20Jul06) to allow completion of said areas of work. The authorization for the restart of the project was granted on 18Aug06.

RESULTS

Table 1: Cumulative project totals.

Project Date: 23Mar06 - 25Jul06 and 28Sep06-12Nov06			
Project Length: 171 days			
Total Number of Dredge Takes: 3 dredge takes (1 L. kempii, 2 C. caretta)			
Number of Tows:	23Mar-25Jul	28Sep-12Nov	
F/V Miss Adrienne -	2316	F/V Jana Lin-	455
F/V Jana Lin -	1235	F/V Elvira-	406
F/V Bad Habit -	82		
Cumulative Tow #: 4494			
Number of Turtles Collected and Released: 67			
Species: 60 C. caretta, 6 L. kempii, 1 D. coriacea			
Capture Rate: (# turtles / # tows) = 0.01491% (cumulative percentage)			
Number of Recaptures: 7 (6 this effort, 1 previously tagged in Mexico)			
Number of Trawling Incidental Takes: 2 (C. caretta)			
Water Temperature: 69° - 88° Fahrenheit			

DISCUSSION

All operations and methods employed by ECO, Inc. proved to be an overall success through out project duration. Open communication was maintained at all times between mates operating dredge and captains operating trawling vessels. There were numerous occasions where trawlers and subsequently dredges suspended operations due to unsafe sea conditions and mechanical difficulties. Depth of water in the borrow site averaged between 65 and 74 feet.

A total of five (5) incidental sea turtle takes occurred; three (3) on the dredge B.E. Lindholm and two (2) on the F/V Jana Lin, throughout the duration of the project. Necropsies were performed on both sea turtles recovered by the trawlers.

The first take occurred on 05Jun06 at 2155 hours onboard F/V Jana Lin. Upon retrieval of nets after a standard 40 minute tow, a loggerhead turtle was observed in the starboard net. It was brought aboard as normal, but upon further observation, it seemed non-responsive to normal activity and very listless. All resuscitation techniques were employed, and the primary trawling supervisor was consulted. The decision to transfer said turtle was made, and the loggerhead was

moved to the F/V Miss Adrienne for further observation. Every effort to resuscitate and save this turtle was made, however at 0200hrs on 06Jun06 it was determined the animal had expired. The carcass was placed in the freezer onboard the F/V Miss Adrienne until transport for necropsy could be arranged. On 09Jun06 at 1430hrs the turtle was transported to the NMFS Panama City, FL laboratory until it could be transferred to Dr. Allen Foley for a formal necropsy at the end of the month. Final necropsy results proved inconclusive as to exact cause of death.

The second take occurred on 14Jul06 at 2255 hours onboard F/V Jana Lin. Upon retrieval of nets after a standard 40 minute tow, a loggerhead turtle was observed in the starboard net of the vessel, and immediately brought onboard as per normal procedure. Once aboard a large quantity of water was expelled from the turtle and the turtle was struggling for breath. Resuscitation procedures were followed; however, the turtle did not respond and was declared dead at 0200hrs. On 15Jul06 at 1023hrs the turtle was transported to the Emerald Coast Stranding Center to await transport to Dr. Allen Foley for necropsy. Final necropsy results determined the cause of death to be consistent with drowning.

Table 2: By-catch list for all trawlers for duration of project

Fishes	Rays/ Skates
<i>Atlantic Croaker</i>	<i>Atlantic Stingrays</i>
<i>Bigeye Sea Robin</i>	<i>Clearnose Skate</i>
<i>Bighead Sea Robin</i>	<i>Cow Nosed Ray</i>
<i>Cutlass fish</i>	<i>Southern Ray</i>
<i>Gafftopsail Catfish</i>	<i>Smooth Butterfly Ray</i>
<i>Gulf Flounder</i>	
<i>Hardhead Catfish</i>	Crabs / Crustaceans
<i>Lookdown</i>	<i>Blue Crab</i>
<i>Moonfish</i>	<i>Box Crab</i>
<i>Orange Filefish</i>	<i>Brewster Crab</i>
<i>Pancake Batfish</i>	<i>Horseshoe Crab</i>
<i>Plane head Filefish</i>	<i>Mantis Shrimp</i>
<i>Red Drum</i>	<i>Lady Crab</i>
<i>Red Snapper</i>	
<i>Remora</i>	Shells / Bi-valves / Mollusks
<i>Scrawled Cowfish</i>	
<i>Scrawled Filefish</i>	<i>Lightning Whelk</i>
<i>Southern Flounder</i>	<i>Apple Murex</i>
<i>Southern Puffer</i>	<i>Great Atlantic Cockle</i>
<i>Spade fish</i>	<i>Unidentified Squid</i>
<i>Spanish Mackerel</i>	<i>Unidentified Octopi</i>
<i>Spiny Box Fish (Burr)</i>	
<i>Striped Burr Fish</i>	Jellies
<i>Unicorn Filefish</i>	<i>Cannonball Jelly</i>
<i>Unidentified Sole</i>	<i>Moon Jelly</i>
	<i>Lion's Mane Jelly</i>
Sharks	
<i>Black Tip</i>	Misc.
<i>Bonnethead</i>	<i>Sea Whip</i>
<i>Smooth Hammerhead</i>	<i>Slender sea star</i>
<i>Sandbar</i>	
<i>Nurse</i>	
<i>Tiger</i>	

Appendix 1. Sea Turtle Relocation Data

Turtle ID	0602-BH01	0602-BH02	0602-BH03	0602-jl01	0602-jl02	0602-jl03	0602-jl04	0602-jl05	0602-jl06	0602-jl07	0602-jl08
Project	Navarre	Navarre	Navarre	Navarre	Navarre						
Common Names	Cc	Cc	Cc	Lk	Cc	Cc	Cc	Cc	Cc	Cc	Cc
Date Captured	4/21/2006	4/26/2006	5/7/2006	5/25/2006	5/26/2006	5/29/2006	6/3/2006	6/5/2006	6/6/2006	6/15/2006	6/15/2006
Date Released	4/21/2006	4/26/2006	5/7/2006	5/25/2006	5/26/2006	5/29/2006	6/3/2006	6/5/2006	6/6/2006	6/15/2006	6/15/2006
Tag Number-LF	ttp 201	ttp 203	ttp 205	ttp 207	TTP 209	ttp 211	ttp 213		ttp 215	ttp 217	ttp 186
Tag Number-RF	ttp 202	ttp 204	ttp 206	ttp 208	TTP 210	ttp 212	ttp 214		ttp 216	ttp 218	ttp 187
Pit Tag .							443a253453		44524f5f1e		
Any tags present	No	No	No	No	Yes						
Recap same proj	No	No	No	No	Yes						
Recap diff proj	No	No	No	No	No						
Capture Location lat	3018681	3018293	3018066	3018507	3018489	3018617	3018293	3018028	3018119	3018172	3018313
Capture Location long	8650537	8651427	8651147	8650902	8650998	8650413	8650671	8651123	8650892	8650852	8650534
Release Location lat	3014983	3017402	3014282	3014134	3014263	3013632	3015047		3013521	3011839	3012714
Release Location long	8650355	8653431	3049816	8646866	8646959	8647899	8646158		8644700	8646870	8645366
SCLmin	84.1	97.3	86.2	63.6	71.7	73.7	82.3	72.8	78.2	82	69.1
SCI n-t	84.9	98.1	87.1	64.4	72.4	74	84.1	0	79.5	82.2	71.1
SCL t-t	85.2	99.5	87.7	65.6	74	76	85	0	81	84.1	72.2
SCW	64.8	72.1	66.2	65	61.2	63	67.5	58.9	63.9	61.1	57
CH	34.9	38.4	33.1	20	24.8	24.5	34.2	0	32.3	24.8	23.5
CCL min	90.2	99.3	94.3	67	75.5	80.5	86.2	79.6	83.9	87	75.8
CCL n-t	91.3	100.1	94.7	67.3	76.5	81	88.5	0	84.5	87.6	77
CCL t-t	94.8	104.6	96.2	68	77.2	83.2	90.2	0	86.7	88.3	78.6
CCW	90.2	91.8	84.3	68.2	75	74	86.2	75.8	79.2	79.9	70
Weight	91.3								~100		~90
Plastron L	94.8	69.2	67	47.1	56.8	56.1	66.5	59.8	62.4	60.2	48
Plastron W	85.4	64.5	61.3	48.9	52	53.6	87.5	52.2	62.3	53.5	49.9
Tail Length	24.8	47.3	18.4	15.2	18.9	15	20	0	14.5	22.2	15.5
Head Width	0	20.7	19.2	12.3	14.6	16	17.2	13.8	15.4	15.4	15

Turtle ID	0602-jl09	0602-jl10	0602-jl11	0602-jl14	0602-jl15	0602-MA01	0602-ma02	0602-ma03	0602-ma04	0602-ma05	0602-ma06
Project	Navarre	Navarre	Navarre	Navarre	Navarre	Navarre	Navarre	Navarre	Navarre	Navarre	Navarre
Common Names	Cc	Cc	Cc	Cc	Cc	Cc	Cc	Lk	Cc	Cc	Lk
Date Captured	6/29/2006	6/30/2006	7/3/2006	7/14/2006	7/15/2006	3/25/2006	3/25/2006	3/26/2006	3/28/2006	3/29/2006	3/30/2006
Date Released	6/30/2006	6/30/2006	7/3/2006		7/15/2006	3/25/2006	3/25/2006	3/26/2006	3/26/2006	3/29/2006	3/30/2006
Tag Number-LF	TTP 219	ttp 056	ttp 058		ttp 223	TTP-126	TTP-128	TTP-130	TTP-132	TTP-134	TTP-136
Tag Number-RF	TTP 220	ttp 057	ttp 059		ttp 224	TTP-127	TTP-129	TTP-131	TTP-133	TTP-135	TTP-137
Pit Tag .											
Any tags present	No	No	No	No	No	No	No	No	No	No	No
Recap same project	No	No	No	No	No	No	No	No	No	No	No
Recap diff project	No	No	No	No	No	No	No	No	No	No	No
Capture Location lat	3018356	3018567	3018138	3018101	3018497	30 18.045N	30 18.282N	30 18.412N	30 18.414N	30 18.347N	30 18.221N
Capture Location long	8651169	8650608	8651224	8651503	8650711	86 51.414W	86 50.838W	86 50.366W	86 50.461W	86 51.249W	86 50.569W
Release Location lat	3013355	3013217	3013795		3012796	30 17.081N	30 16.966N	30 17.012N	30 16.853N	30 15.766N	30 15.719N
Release Location long	8644544	8644259	8644622		8646428	86 47.580W	86 47.724W	86 47.602W	86 47.769W	86 50.210W	86 50.520W
SCLmin	93.6	73.6	71	89.2	87	86.7	54.7	52.6	93.9	80.2	54.5
SCL n-t	95.7	74.7	73.3	89.8	88.2	87.7	57.1	54.5	96	81.3	55.2
SCL t-t	98	77	74.2	91.6	90.3	88.9	58.3	54.7	97.2	81.9	56.1
SCW	74	62.3	59	71.3	69.2	67.5	65.1	55.5	72.3	61.9	56
CH	33.1	27.8	26	26.1	36.8	33.5	23.5	18.4	30.9	28.2	17.9
CCL min	97	79.2	76.2	92.1	92	93	57.5	56.4	98.2	86.3	58.4
CCL n-t	99	80.5	77.9	92.5	92.4	93.5	60.8	56.6	100.3	87.4	58.8
CCL t-t	103	83.1	79.8	94.9	95.1	94.4	61.6	58.4	102.9	88.1	60.7
CCW	90	77.6	75	89.1	87.6	87.1	85.5	63.4	90.4	77.5	64.6
Weight						0	0	0	0	0	0
Plastron L	69.5	59	58.6	65.5	68.5	63.5	59.9	42.3	70.9	58.3	43
Plastron W	71.5	55	50.5	61.5	65.1	60.4	57.4	47	67.2	57.8	47.4
Tail Length	26	13	14.7	43.5	23	42.2	16.9	11.5	50.1	20.4	13
Head Width	20	14.8	13.6	18.3	19.6	17.7	16.1	11.1	20.1	16.3	12.1

Turtle ID	0602-ma07	0602-ma08	0602-ma09	0602-ma10	0602-ma11	0602-ma12	0602-ma13	0602-ma14	0602-ma15	0602-ma16
Project	Navarre	Navarre	Navarre	Navarre						
Common Names	Cc	Cc	Lk	Cc	Cc	Cc	Cc	Cc	Cc	Lk
Date Captured	4/1/2006	4/1/2006	4/5/2006	4/5/2006	4/9/2006	4/14/2006	4/22/2006	4/23/2006	4/26/2006	4/27/2006
Date Released	4/1/2006	4/1/2006	4/5/2006	4/5/2006	4/9/2006	4/14/2006	4/22/2006	4/23/2006	4/26/2006	4/27/2006
Tag Number-LF	TTP-138	TTP 140	TTP 143	ttp 145	TTP 147	TTP 149	RRD 778	RRD 780	RRD 782	rrd 784
Tag Number-RF	TTP-139	TTP 141	TTP 144	ttp 146	TTP 148	TTP 150	RRD 779	RRD 781	RRD 783	rrd 785
Pit Tag .							47087D5335	470D2A140B	47044A4E66	470278257a
Any tags present	No	No	No	No						
Recap same project	No	No	No	No						
Recap diff project	No	No	No	No						
Capture Location lat	3018050	3018527	3018328	3018225	30 1832	3018445	3018050	3018654	3018618	3018563
Capture Location long	8651261	5651097	8651115	8650753	8651314	8651207	8651708	8650813	8650570	8650757
Release Location lat	3016040	3016736	3015420	3016000	3015648	3015482	3016628	3017444	3017433	3017410
Release Location long	8650839	8648290	8651188	8650397	8650835	8649999	8647869	8647502	8648077	8647426
SCLmin	72	78.9	59.2	71.5	64.2	94.6	63.3	85.2	67.4	55.7
SCI n-t	73.5	80.3	59.9	73.5	64.9	96.1	64.6	87.2	69	56.8
SCL t-t	74.9	80.5	60.4	0	66.3	97.8	66.7	88.7	70.3	56.9
SCW	58.1	64	58.9	58.6	52.9	72.9	52.2	67.1	55.6	57.7
CH		30.2	20	0	20	30.4	26.9	30.3	25.2	20.1
CCL min	77.9	86.9	64.3	78.3	70.5	100.4	69	91.3	73	60
CCL n-t	78.5	88.4	65.5	78.7	71.1	101.1	70.1	93	74.5	60.5
CCL t-t	78.9	88.6	66.4	0	722	103.4	72.2	94.3	76.8	60.7
CCW	75.4	83.2	68.4	73.6	67.2	91.9	67	85.4	70	64.6
Weight	0	0	0		0		32	~80 -90 lbs	65-70	30-35
Plastron L		65.3	46.9	0	46.9	72.1	53	64.1	54.5	45
Plastron W		57.5	51	0	51	68.4	56.6	62.5	51.5	47.1
Tail Length		16.9	14.2	0	14.2	43.2	11.7	41.6	16	11.9
Head Width	16.1	15.5	12.2	0	13.3	18.8	12.4	17.8	13.8	11.5

Turtle ID	0602-ma17	0602-ma18	0602-ma19	0602-ma20	0602-ma21	0602-ma22	0602-ma23	0602-ma24	0602-ma25
Project	Navarre								
Common Names	Cc								
Date Captured	5/2/2006	5/3/2006	5/4/2006	5/4/2006	5/6/2006	5/6/2006	5/7/2006	5/7/2006	5/7/2006
Date Released	5/2/2006	5/3/2006	5/4/2006	5/5/2006	5/6/2006	5/6/2006	5/7/2006	5/7/2006	5/7/2006
Tag Number-LF	rrd 786	rrd 788	rrd 790	rrd 792	rrd 794	rrd 796	rrd 798	ttp 176	ttp178
Tag Number-RF	rrd 787	rrd 789	rrd 791	rrd 793	rrd 795	rrd 797	rrd 799	ttp 177	ttp179
Pit Tag .	470d354448	47031c6a56	470526787c	47050b4859	470423487d	471a335339	47030c4168	4704194836	470d217358
Any tags present	No								
Recap same project	No								
Recap diff project	No								
Capture Location lat	3018635	3018072	3018128	3018040	3018497	3018607	3018285	3018323	3018360
Capture Location long	8650589	8651189		8651202	8650444	8650718	8651412	8651050	8651332
Release Location lat	3017213	3016923		3016835	3016893	3016801	3016924	3016924	3016889
Release Location long	8649103	8648557		8648078	8648065	8648079	8647959	8647959	8648058
SCLmin	86	70.9	91.8	90.6	72.5	82.1	70.8	72.9	74.4
SCI n-t	87.1	71.7	93	93.3	72.9	83.5	71.4	73.7	75.7
SCL t-t	88.6	72.8	96.6	93.8	74.3	84.7	73.1	75.3	77.5
SCW	66.6	57.7	67.8	68.9	60.6	63.4	57.3	56.5	57.5
CH	33.5	27.6	34.8	36.3	26.6	34.3	26.7	29.5	29.6
CCL min	94	78	97.6	99.3	79.2	90.1	79.2	80.2	82
CCL n-t	94.3	78.7	98.3	101.5	79.6	91.3	80.1	81.5	83.5
CCL t-t	95.6	80.5	102.2	103.6	82.5	93.9	81.3	82.7	85
CCW	83.8	75.3	83.7	90.8	74.3	83.2	74.1	75.5	80
Weight	90-110	70-85	~150	150-170	75-85	90-100	70-80	80-100	85-90
Plastron L	69	57.5	68	72.3	60.6	63.8	58	59	60
Plastron W	63.6	53.7	65.1	66.5	56	60.6	53.2	53	52
Tail Length	20.3	16.2	44	22	14	18.3	15.1	16.4	22.7
Head Width	18.2	14.7	19.2	18.5	14.3	17.2	13.7	14.9	15.6

Turtle ID	0602-ma26	0602-ma27	0602-ma28	0602-ma29	0602-ma30	0602-ma31	0602-ma32	0602-ma33	0602-ma34
Project	Navarre	Navarre	Navarre	Navarre	Navarre	Navarre	Navarre	Navarre	Navarre
Common Names	Cc	Cc	Lk	Cc	Cc	Cc	Cc	Cc	Cc
Date Captured	5/8/2006	5/14/2006	5/17/2006	5/17/2006	5/18/2006	5/19/2006	5/19/2006	5/20/2006	5/20/2006
Date Released	5/8/2006	5/14/2006	5/17/2006	5/17/2006	5/18/2006	5/19/2006	5/19/2006	5/20/2006	5/20/2006
Tag Number-LF	ttp180	ttp 182	HL 592	ttp 184	ttp 186	ttp188	ttp101	TPP 103	ttp 101
Tag Number-RF	ttp181	ttp 183		ttp 185	ttp 187	ttp189	ttp102	TPP 104	ttp 102
Pit Tag .	470d1b6460	4703237d76	470d38330e	47040a752b	470d277941	470d786839			
Any tags present	No	No	Yes	No	No	No	No	No	Yes
Recap same project	No	No	No	No	No	No	No	No	Yes
Recap diff project	No	No	Yes	No	No	No	No	No	No
Capture Location lat	3018472	3018067	3018340	3018356	3018130	3018391	3018489	3018624	3018138
Capture Location long	8651096	8651168	8651206	8650400	8651364	8651271	8651102	8650665	8650957
Release Location lat	3016624	3015645	3015697	3015734	3015584	3015195	3015312	3018146	3016235
Release Location long	8647475	8649871	8649817	8649723	8649356	8649741	8649747	8648822	8646155
SCLmin	87.7	75.2	60.1	69.3	66.8	64.4	76.1	85.8	76.1
SCI n-t	89.4	76.7	60.8	69.8	69.5	65.2	76.8	87.9	76.8
SCL t-t	92	78.9	62	71.2	71.3	67.1	79	89.8	79
SCW	68.1	61	62	56.1	54.9	53	61.4	65.4	61.4
CH	36.6	30.8	21.2	27.4	26	22.2	29	0	29
CCL min	97.5	82.4	65.6	77.9	76	68.7	82.9	95.5	82.9
CCL n-t	98.8	83.4	66	78.4	77.2	70.9	84.8	97.3	84.8
CCL t-t	101.4	85	67.4	80.8	78.7	73.8	87	100.1	87
CCW	85.5	78.7	70.7	75.4	70.5	66.4	77.7	86.8	77.7
Weight	130-150	~90	45-50	70-80	~50	50-60			
Plastron L	70	62	48.5	56.2	52.7	51.5	61.9	0	61.9
Plastron W	66.3	56.7	53.5	51.9	49.6	49	57.4	0	57.4
Tail Length	22.3	19	15.2	16.3	13.2	14.2	25.5	0	25.5
Head Width	17.5	16.6	12.3	14.5	14.1	12.3	16.3	10.9	16.3

Turtle ID	0602-ma35	0602-ma36	0602-ma37	0602-ma38	0602-ma39	0602-ma40	0602-ma41	0602-ma42	0602-ma43
Project	Navarre	Navarre	Navarre	Navarre	Navarre	Navarre	Navarre	Navarre	Navarre
Common Names	Cc	Cc	Cc	Cc	Cc	Cc	Cc	Cc	Cc
Date Captured	5/23/2006	5/27/2006	6/3/2006	6/5/2006	6/16/2006	6/20/2006	6/28/2006	7/14/2006	7/14/2006
Date Released	5/23/2006	5/27/2006	6/3/2006	6/5/2006	6/16/2006	6/20/2006	6/28/2006	7/14/2006	7/14/2006
Tag Number-LF	ttp 105	ttp 108	ttp 110	ttp 106	ttp 114	ttp 116	ttp 101	ttp 114	ttp 118
Tag Number-RF	ttp 106	ttp 109	ttp 111	ttp 107	ttp 115	ttp 117	ttp 102	ttp 115	ttp 119
Pit Tag .				470d277941	44521e3870	4452766133		44521e3870	
Any tags present	No	No	No	Yes	No	No	Yes	Yes	No
Recap same project	No	No	No	Yes	No	No	Yes	Yes	No
Recap diff project	No	No	No	No	No	No	No	No	No
Capture Location lat	3018255	3018334	3018240	3018389	3018239	3018516	3018200	3018632	3018574
Capture Location long	8650931	8650864	8650969	8650728	8651122	8651021	8651418	8650635	8651188
Release Location lat	3013456	3015278	3014515	3012803	3010813	3011341	3011514	3012094	3018094
Release Location long	8648829	8646131	8647455	8646200	8651418	8649774	8648903	8646500	8646500
SCLmin	85	77.9	65.9	68.4	72.5	71.4	76.2	72.4	91.9
SCI n-t	86.4	79.1	66.8	68.7	74	72.5	77.6	73.9	94.6
SCL t-t	88.6	80.9	68	70.1	75.2	73.3	79.3	75.2	96
SCW	62.9	60.1	55.3	54.9	59.5	59	60.6	59.2	71.4
CH	29.3	24.2	26.1	26.1	27.3	24.3	30.5	29.9	30.4
CCL min	90.4	85	72.7	75.1	77.7	79.2	81.3	74.5	97
CCL n-t	92.5	85.2	73.5	76.1	79.2	80.2	82.6	79.8	94.9
CCL t-t	95.9	86.7	74.4	77.5	80.9	80	83.6	80.8	101.6
CCW	85.4	78.2	71.8	69.4	73.3	71.9	77.4	72.8	90.7
Weight	250-275	~150	~125	~80	~70				
Plastron L	0	58.8	54.2	52.1	56.4	53.7	59	54.8	67.9
Plastron W	0	55.1	51.1	49.5	56.2	53.5	57.5	52.5	62.6
Tail Length	4.1	21.6	12.6	14.8	17.3	14.7	25.9	4.5	60.5
Head Width	16.8	16.5	13.1	14.4	15.1	13.8	16.3	15.5	19.9

Turtle ID	jl-01	jl-02	jl-03	e-01	e-02	e-03	e-04	e-05
Project	Navarre							
Common Names	Cc	Cc	Cc	Cc	Cc	Dc	Cc	Cc
Date Captured	9/29/2006	10/10/2006	11/1/2006	10/9/2006	10/13/2006	10/24/2006	10/30/2006	11/10/2006
Date Released	9/29/2006	10/10/2006	11/1/2006	10/9/2006	10/13/2006	10/24/2006	10/30/2006	11/10/2006
Tag Number-LF	ttr 110	ttp 147	ttp 118	TTR376	TTR378	ttr 124	ttp 194	TTZ176
Tag Number-RF	ttr 111	ttp 148	ttp 119	TTR377	TTR379	ttr 125	ttp 195	TTZ177
Pit Tag .	47050C1D18	47051A0A6C	47041F4A69	4705403c02	471A3C1546	470D443058	4703130913	N/A
Any tags present	No	Yes	Yes	no	no	No	No	no
Recap same project	No	Yes	Yes	no	no	No	No	no
Recap diff project	No							
Capture Location lat	3018161	3018529	3018143	3018090	3018112	3018426	3018438	3018429
Capture Location long	8651998	8650740	8651108	8551070	8650943	8651058	8651032	8651003
Release Location lat	3015773	3013225	3015755	3016076	3015629	3017069	3015890	3016334
Release Location long	8649066	8648285	8649245	8648721	8648759	8647283	8649208	8648324
SCLmin	72.5	64.6	92	34.4	86.8	n/a	73.4	87.3
SCL n-t	73.9	65.5	94.1	35.9	88.1	n/a	75	88.7
SCL t-t	74.6	66.4	96	36.2	90.3	177	75.9	89.4
SCW	59.7	53.4	69.5	27.5	68	75	56.4	69.1
CH						n/a		
CCL min	79	71	96.6	37.5	92.8	n/a	80.1	92.4
CCL n-t	83.3	71.3	97.8	38.4	94.1	n/a	81	95.1
CCL t-t	80.5	72.1	100.2	38.8	95.6	n/a	84.4	96
CCW	75.8	67.4	89.7	34.9	82.6	n/a	73.2	88.3