SEA TURTLE STRANDING AND SALVAGE NETWORK – STRANDING REPORT

OBSERVER'S NAME / ADDRESS / PHONE:
First Mark M.I. G Last Dodd
Affiliation Georgia Department of Natural Resources
Address One Conservation Way
Brunswick, Georgia 31520
Area code/Phone number 912-264-7218

STRANDING DATE:
Year 2009 Month 01 Day 09
Turtle number by day 01
Week # _____ GA# _____
State coordinator must be notified within 24 hrs; this was done by ☒ ***phone*** ***(912)280-6892***
☐ ***email*** ☐ ***fax*** ***(912)262-3143***

SPECIES: (check one)
- ☐ CC = Loggerhead
- ☒ CM = Green
- ☐ DC = Leatherback
- ☐ EI = Hawksbill
- ☐ LK = Kemp's Ridley
- ☐ LO = Olive Ridley
- ☐ UN = Unidentified

Check Unidentified if not positive. Do Not Guess.

STRANDING LOCATION: ☒ Offshore (Atlantic or Gulf beach) ☐ Inshore (bay, river, sound, inlet, etc)
State ~~Georgia~~ Florida County Nassau
Descriptive location (be specific) St. Mary's Ship Channel near buoy # 8
Latitude 30.7118 Longitude -81.3639

Carcass necropsied? ☒ Yes ☐ No
Photos taken? ☒ Yes ☐ No
Species verified by state coordinator? ☒ Yes ☐ No

CONDITION: (check one)
- ☐ 0 = Alive
- ☐ 1 = Fresh dead
- ☒ 2 = Moderately decomposed
- ☐ 3 = Severely decomposed
- ☐ 4 = Dried carcass
- ☐ 5 = Skeleton, bones only

FINAL DISPOSITION: (check)
- ☐ 1 = Left on beach where found; painted? ☐ Yes* ☐ No(5)
- ☐ 2 = Buried: ☐ on beach / ☐ off beach; carcass painted before buried? ☐ Yes* ☐ No
- ☒ 3 = Salvaged: ☐ all / ☒ part(s), what/why? right eye and flipper - NMFS Aging Lab
- ☐ 4 = Pulled up on beach/dune; painted? ☐ Yes* ☐ No
- ☐ 6 = Alive, released
- ☐ 7 = Alive, taken to rehab. facility, where? _____
- ☐ 8 = Left floating, not recovered; painted? ☐ Yes* ☐ No
- ☐ 9 = Disposition unknown, explain _____

If painted, what color? _____

SEX:
- ☐ Undetermined
- ☒ Female ☐ Male

Does tail extend beyond carapace?
☐ Yes; how far? _____ cm / in
☒ No
How was sex determined?
☒ Necropsy
☐ Tail length (adult only)

TAGS: ***Contact state coordinator before disposing of any tagged animal!!***
Checked for flipper tags? ☒ Yes ☐ No
Check all 4 flippers. If found, record tag number(s) / tag location / return address
None found

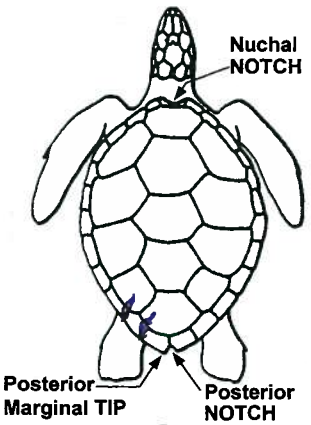
PIT tag scan? ☒ Yes ☐ No
If found, record number / tag location
None found

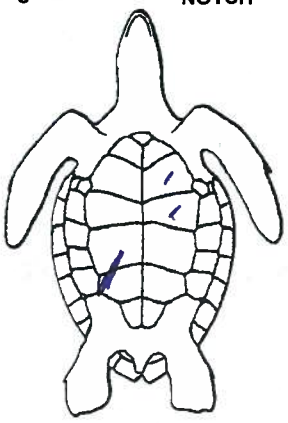
Coded wire tag scan? ☐ Yes ☒ No
If positive response, record location (flipper)

Checked for living tag? ☒ Yes ☐ No
If found, record location (scute number & side)
None found

CARAPACE MEASUREMENTS: (*see drawing*)

Using calipers		Circle unit
Straight length (NOTCH-TIP)	33.2	cm / in
Minimum length (NOTCH-NOTCH)	–	cm / in
Straight width (Widest Point)	25.8	cm / in
Using non-metal measuring tape		Circle unit
Curved length (NOTCH–TIP)	35.7	cm / in
Minimum length (NOTCH-NOTCH)	–	cm / in
Curved width (Widest Point)	31.0	cm / in
		Circle unit
Weight ☒ actual / ☐ est.	5.11	kg / lb





Mark wounds / abnormalities on diagrams at left and describe below (note tar or oil, gear or debris entanglement, propeller damage, epibiota, papillomas, emaciation, etc.). **Please note if no wounds / abnormalities are found.**

Found in inflow box of dredge Liberty Island. Missing scutes and abrasions on carapace, head and plastron. Shell fractures on carapace (nuarginals) and plastron. Necropsy indicated abundant muscle and moderate fat levels. Unidentified vegetative material in large intestine. White granulomas on stomach and small intestine. No other abnormalities noted.

SEA TURTLE STRANDING AND SALVAGE NETWORK – GROSS NECROPSY REPORT

IDENTIFICATION found in inflow box of hopper dredge Liberty Island 1/9/10

1. STSSN #: MGD20100109-10 **2. Other state identifier/#:** _____ **3. Rehab:** ☐Yes ☒No

4. Found dead: ☒Yes ☐No **5. If No, date of death** __/__/__

6. Euthanized: ☐Yes ☒No **7. Frozen/Thawed:** ☐Yes ☒No **8. Condition at necropsy:** ☐1 ☒2 ☐3 ☐4 ☐5

9. Date necropsied: 1/10/10 **10. Examiner:** Mark Dodd **11. Affiliation:** Georgia DNR

12. Necropsy description: ☒External & internal examination ☐External examination only ☐Incomplete carcass

13. Disposition of carcass: ☐Buried on beach ☒Buried off site ☐Rendered ☐Incinerated ☐Other

14. Species: ☐CC ☒CM ☐DC ☐LK ☐EI ☐LO ☐UNK **15. Sex:** ☐Male ☒Female ☐Undetermined

EXTERNAL EXAMINATION

16a. Body weight: 5.11 ☑kg ☐lb **16b.** ☐actual ☐ est. **17. Eyes sunken:** ☑Yes ☐No **18. Skeletal features prominent:** ☐Yes ☒No

19. Heavily encrusted w/ epibiota: ☒Yes ☒No **20. Leeches:** ☐Yes ☒No **21. Gooseneck barnacles:** ☐Yes ☒No

22. Epibiota coverage: **22a. Head/appendages:** 0 % **22b. Carapace:** 1 % **22c. Plastron:** 1 %

23. External Trauma/evidence of Human Interaction (T/HI): ☒Yes ☐No **(If yes, complete 25)** **Use STSSN scale in photos**

24. Other anomalies: ☒Yes ☐No **(If yes, complete 26)** ☐ PHOTOGRAPHS TAKEN

ANATOMIC LOCATION CODES: Head (H) Neck(N) Eyes(E) Mouth(M) Carapace(C) Plastron(P) Tail(T) Vent(V)
Use for 25a & 26a Front flipper - Right (R) Left(L) Rear flipper - Right(F) Left(G) All appendages (Y)

25a. T/HI-Type: (check all that apply)
Enter anatomic codes in blanks: (Example: ⊗ Parallel slicing wounds(1)_C_)

☐Parallel slicing wounds(1)_____ ☐Single linear wound(2)_____
☐Partial/complete amputation(3)_____ ☐Blunt/crushing(4)_____
☐Fractures/Broken bones(5)_PC_ ☐Dislocations(6) _____
☐Probable bite wound(7)_____ ☐Bottom paint(8)_____
☐Ligature/entanglement-type(9)_____ ☐Puncture(10)_____
☐Entangling material attached(11)_____[a] ☐Tar in mouth(12)
☐Hook and/or line present (13)_____[a] [a] **If yes, complete 25e**
☐Other(14) _____,describe:_____

25b. ☐T/HI – multiple events

25c. T/HI- Description: (check all that apply)
Enter 25a. + anatomic codes: (Example: ⊗ Exudate/fibrin _1C_)

☐Exudate/fibrin_____ ☐Fibrous tissue formation_____
☐Bone formation/remodeling_____ ☐Hemorrhage_____
☐Encapsulated sand/debris_____ ☐Blood clots_____
☐Completely healed_____ ☐Other_____ **describe under 25d**

Parallel slicing wounds (cm): Chord length: ___,___,___,___
Cut span: ___,___,___,___ width: ___,___,___,___
length: ___,___,___,___ depth: ___,___,___,___

Other wounds (cm): **Diagram wounds/measurements on pg 3**
Wound length: _____ width: _____ depth: _____

25d. T/HI-Comments (cont. pg 3): 2 fractures of carapace on the left posterior marginals. Several small fractures on plastron

25e. T/HI-Fisheries/Entanglement data: (Fisheries gear, other entangling material)

Gear type:
☐Netting ☐Line & pot ☐Line & buoy ☐Unknown gear/line
☐Hook ☐Monofilament ☐Braided line ☐Other

Number of wraps around body part: _____, **location:** _____[1] **(use anatomic codes)**
Additional areas:___,___[2]; ___,___[3]; ___,___[4]; ___,___[5] (Example: _4_,_R_)

☐Material removed prior to necropsy

Associated injury: (additional comment under 25d)
☐Ligature – skin incised/ulcerated
☐Ligature – full thickness (deep tissue/bone exposed)
☐Ligature – partially/completely healed

Gear description (color, shape, size): _____ **T/HI-Material collected*:** ☐Yes ☐No
Gear identification information: _____ **Disposition of material:** _____

26a. Anomalies-Type: (check all that apply)
Enter anatomic codes in blanks: (Example: ⊗ Ulcers(16)_Y_)

☐Fibropapillomas/Papillomas(15)_____ ☐Ulcers(16)_____
☐Crust/exudate(17)_____ ☐Masses (non-FP or uncertain)(18)_____
☐Other(19)_____

26b. ☐Anomalies: multiple types ☐ PHOTOGRAPHS TAKEN

26c. Other anomalies-Description: (check all that apply)
Extent of observation: *(Refer to Pap Map for FP turtles)*
Enter 26a. + anatomic codes: (Example: ⊗ 10-25% affected_16Y_)

☐<5% surface affected_____ ☐10-25% affected_____
☐>25-50% affected_____ ☐>50% affected_____
☐Visual field involved_____ ☐Both eyes_____
☐Mouth obstructed_____

26d. Anomalies-Comments (cont. pg 3): ~~plastron and carapace fractures presumed to be associated with entanglement during hopper dredging operations~~

INTERNAL EXAMINATION (comments extended to page 3 – optional)

NUTRITIONAL CONDITION - INTERNAL

27. Muscle status: ☒Well-muscled/No atrophy ☐Mild to moderate atrophy ☐Severe atrophy

28. Fat status: ~~☒Abundant/No atrophy~~ ☒Mild to moderate atrophy ☐Severe atrophy

29a. CARDIOVASCULAR SYSTEM (heart/major vessels) – Examined: ☒Yes ☐No **29b. Blood in Heart chambers:** ☒Yes ☐No very small amount

29c. CV-Findings/Comments: No abnormalities

30a. HEPATOBILIARY SYSTEM (liver and gall bladder) – Examined: ☒Yes ☐No

30b. Liver Findings: ☒No significant findings ☐Severe atrophy (shrunken, black) ☐Trauma ☐Masses(describe under comments) ☐Other

30c. HB-Findings/Comments: Gall bladder contained no bile - empty

ANATOMIC LOCATION CODES: Mouth(M) Esophagus(G) Stomach(S) Proximal intestine(P) Distal intestine(D) Cloaca(L)

31a. ALIMENTARY SYSTEM (includes spleen and pancreas) – Examined: ☒Yes ☐No No significant findings

31b. GI-Findings: (check all that apply) **Enter anatomic codes in blanks:** (Example: ⊗ Ulcers(20) D)

☐Ulcers(20)_____ ☐Perforation (21)_____ ☐Masses(22)_____ ☐Impaction(23)_____ ☐Obstruction(24)_____
☐Intussusception(25)_____ ☐Perforation(26)_____ ☐Plication(27) ☒Other(28) S P small granulomas

31c. GI-percentage of affected area: **Enter 31b. + anatomic codes:** (Example: ⊗ >25-50 affected 20D)

☒<5%_____ ☐10-25%_____ ☐>25-50%_____ ☐>50%_____ ☐N/A

31d. GI-Foreign material: ☐Yes ☐No **(if yes, complete 32)**

31e. Injury/lesion associated with foreign material: ☐Yes ☐No **If yes, give entry for 31b:** _____(Example: 21,G)

GI-Contents(include & note any biotic impacted material):

31f. Esophagus: ☐ Empty ☒ Contents, describe: mud and debris

31g. Stomach: ☒Empty ☐ Contents, describe: mucus

31h. Proximal intestine: ☐ Empty ☒Contents, describe: mucus and some dark material, appears to be mud

31i. Distal intestine: ☐ Empty ☒ Contents, describe: ~~broken down~~ green vegetative material, small amt. of shell

31j. GI-Findings/Comments: _____

32a. GI-Foreign material - type: ☐Hook(29) ☐Line(30) ☐Hard plastic(31) ☐Plastic bag(32) ☐Balloon(33) ☐Tar(34) ☐Other(35)

32b. Material/lesion location(s): _____ **(use anatomic codes)** ☐ PHOTOGRAPHS TAKEN

32c. Material collected*: ☐Yes ☐No **Disposition of material:** _____

32d. Foreign material-Description of material & comments: _____

33a. UROGENITAL SYSTEM (kidneys, reproductive, urinary bladder) – Examined: ☒Yes ☐No

33b. Gonads identified as: ☐Testes(complete 31c-e) ☒Ovaries(complete 31f-h) ☐Unknown **(Indicate sex in Page 1, Field 15)**

33c. Testes–characterization: ☐Cylindrical ☐Ellipsoidal ☐Flat **33d. Testes-size:** ___length x ___width (cm)

33e. Epididymis–characterization: ☐Not expanded from wall ☐Distinct ridge ☐Pendulous ☐Obvious white coils

33f. Ovaries–characterization: ☐All follicles <4mm ☐Developing follicles (4-24mm) ☐Corpus luteum (>7mm) ☐Corpus albicans

33g. Ovary length: _____ (cm)

33h. Oviduct–characterization: ☐White, straight (<3mm diam) ☐Partially convoluted (3-15mm diam)
☐Very convoluted (>15mm diameter) ☐Contains eggs (>24mm)

33i. UG-Findings/Comments: No abnormalities noted

34a. RESPIRATORY SYSTEM – Examined: ☒Yes ☐No

34b. Foam/froth in trachea: ☐Yes ☒No **34c. If froth present:** ☐Above bifurcation ☐Below bifurcation

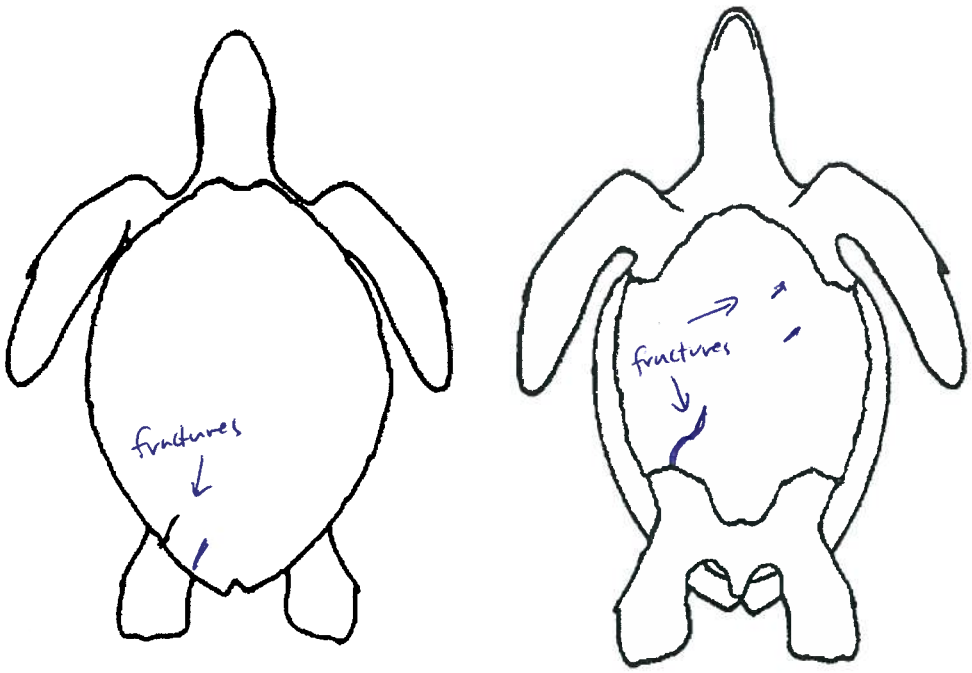
34d. Sand/sediment in trachea: ☐Yes ☒No **34e. Lungs-hyperinflated:** ☐Yes ☒No ☐Don't know

34f. Lungs–other anomalies: ☒No significant findings ☐Exudate in airways ☐Masses ☐Aspirated debris ☐Other

34g. RESP-Findings/Comments: no abnormalities noted

35. Other Comments (including nervous system or other observations): _____

External wounds consistent with turtles captured during hopper dredging operations. No abnormalities noted during internal examination. Food material in large intestine indicated the animal was foraging recently. Moderate state of decomposition indicates turtle was already deceased when taken by dredge. Cause of death undetermined.



Specimen (label w/ ID#)	Fixed	Frozen-bagged	Frozen-Foil	Other (specify)
Tissue biopsy - genetics	alcohol			
Right eye and flipper		✓		

DISCLAIMER

*All fisheries gear should be submitted to Pascagoula (SE) or North Kingston (NE) NOAA laboratories for ID

Dredge Liberty Island 1/10/10
King's Bay, GA

Dredge Liberty Island 1/10/10
King's Bay, GA

Dredge Liberty Island 1/10/10
King's Bay, GA

ENDANGERED SPECIES OBSERVER PROGRAM

SEA TURTLE INCIDENTAL TAKE DATA FORM

Project Name: Kings Bay + Fernandina Harbor **USACE District:** Jacksonville

Dredge Name: M/V Liberty Island **Dredge Firm:** GLDD

DATE: 01/09/10 **Time turtle take recovered (24hr):** 2130 **Turtle take # for project:** 6

LOAD #: 57 **Times (24hrs): Start** 1258 **End** 1939 **Load start date** 01/09/10

SPECIES OF TURTLE TAKE: Unknown Loggerhead (Green) Kemp's Ridley Hawksbill Leatherback

Channel location of take: Latitude 30° 42.707 N **Longitude** 081° 21.836 W

Other location / Channel description (e.g. buoy markers, landmarks): 230+00 - 350+00

30.71178 -81.36393

Location take recovered on dredge: Mid inflow box

Number of dragheads in use at time of incident: 2 **Draghead deflectors? YES** X **NO** ___

Condition of deflectors: Good **Condition of screening:** Good

Beaufort Sea State: 0 1 2 3 (4) 5 6 7 8 9 10 11 12

AIR TEMP: 2 (°C) °F (°F = 9/5 (°C) + 32; °C = 5/9 (°F - 32))

WATER TEMP: Surface 10.0-11.0 (°C) °F **Column (mid-depth)** N/A °C/°F **Bottom** N/A °C/°F

Condition of specimen: 2 Moderately decomposed. Body intact. Carcass bloated. Skin color purple, green. Scutes missing from post dorsal plates. Skin peeling off on damaged areas.

0 = Alive; 1 = Fresh dead; (2 = Moderately decomposed) 3 = Severely decomposed; 4 = skeleton/old bone; 5 = undetermined

Sex: M F (UN) How determined? ___ **Age class: Juv** ___ **Sub-Adult** X **Adult** ___ **UN** ___

***Measurements:* Circle units**

Plastron Length: straight	26	(cm)/in	**Head Width:**	7.5	(cm)/in
Carapace Straight Length:	33	(cm)/in	**Plastron Width:**	29	(cm)/in
Carapace Curved Length:	36	(cm)/in	**Carapace Straight Width:**	27	(cm)/in
			Carapace Curved Width:	31	cm/in

Measurement/description of part: ___

Genetic samples taken: YES ___ **NO** X **Photos taken: YES** X **NO** ___

Turtle tagged?: YES ___ **NO** X **Tag type:** ___ **Tag #:** ___ **Tag date:** ___

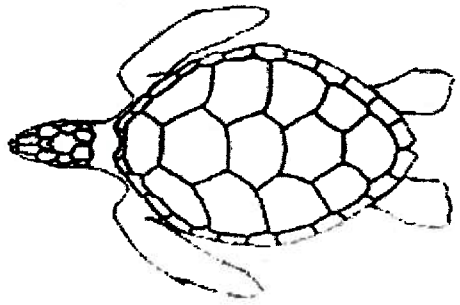
Final disposition of specimen: Secured on deck, awaiting transport to GA DNR

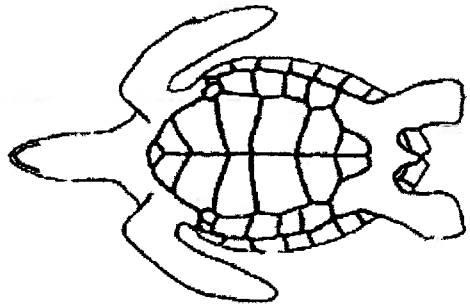
Comments: ___

Load data form attached: YES X **NO** ___ **Dredge load log attached: YES** ___ **NO** X

Observer's name Mike Daley Kate Pagan **Observer Firm:** Coastwise Consulting

Use diagrams below to illustrate specimen/part recovered:

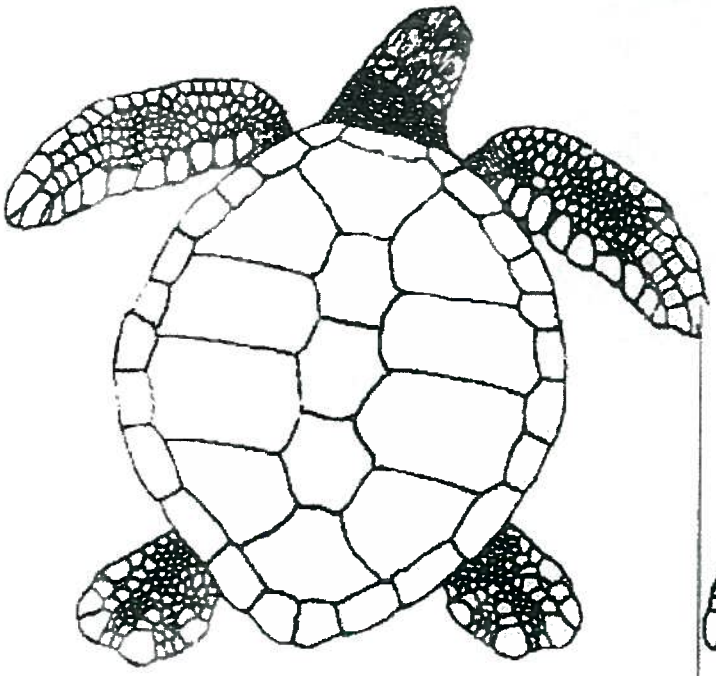


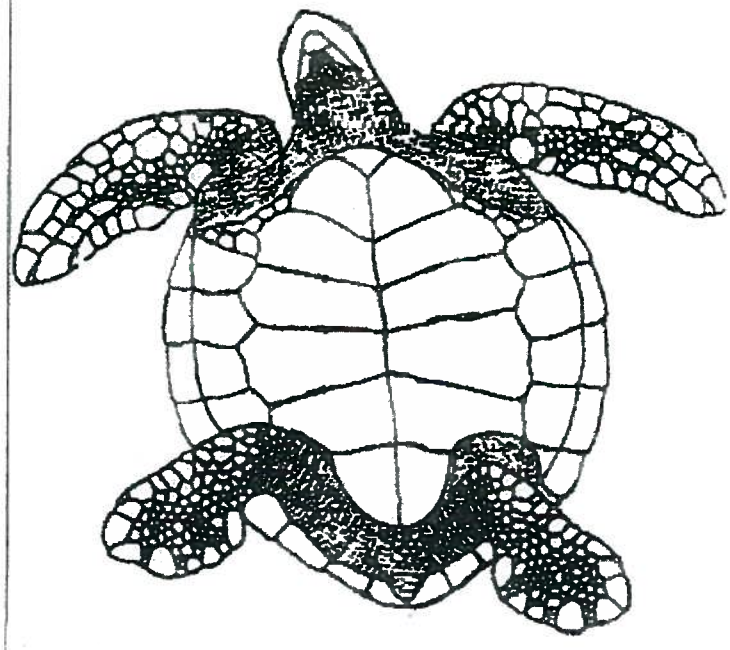


Green turtle (*Chelonia mydas)*

Shade areas of turtle that are missing; sketch cracks and lacerations

Comments: King Bay & Fernandina Harbor Take #6
01/09/10 Load 57 Liberty Island
2 = moderately decomposed. Body intact.
Carcass bloated. Skin color purple,
green. Scutes missing from post central
plates. Skin peeling off of damaged
parts of flippers.
Carapace straight length = 33 cm
Carapace straight width = 27 cm
Secured on deck awaiting transport
to GA DNR.





Original Drawings by Tom McFarland

Drawings Modified by Andrew Jackson

ENDANGERED SPECIES OBSERVER PROGRAM

DAILY REPORT

DATE: 01 / 09 / 10

Project Name: Kings Bay + Fernandina Harbor **USACE District:** Jacksonville

Dredge Name: M/V Liberty Island **Dredge Firm:** GLDD

Contract # W912EP-09-C-0052 **Maintenance** X / **New Work** ____

Load #s: 55 - 57 **Areas worked (stations, etc):** 230+00 - 350+00

Location, Lat/Long: N 30 ° 42 . 700 x W 081 ° 21 . 830

Beaufort Sea State: 0 1 2 3 (4) 5 6 7 8 9 10 11 12

AIR TEMP: -1 - 2 (C) °F **Wind Direction and Speed** NNW 10-15 kts

WATER TEMP: **Surface** 10-11.1 (C) °F **Column (mid-depth)** N/A °C/°F **Bottom** N/A °C/°F

Condition of deflector: Good **Condition of screening:** Good

Were there incidents involving endangered or protected species? **YES** X **NO** ____

Which species? (complete incident form(s)) Chelonia mydas (Green turtle)

SCREEN TYPE						
Y	**Inflow screening:**	**None**	**25%**	**50%**	**75%**	**100%**
X	**Overflow screening:**	**None**	**25%**	**50%**	**75%**	**100%**
	Other screening:	**None**	**25%**	**50%**	**75%**	**100%**

Comments (type of material, biological specimens, unusual circumstances, etc):

- Material dredged was silt, clay
- No right whale aerial survey. No speed restrictions overnight.
- Biota: C. mydas *, horseshoe crab (30), sea pork, sea whip, sea star, egg casing, bivalves and gastropods, rays, sponge.
- Abiota - trash, monofilament line, rope, net, metal, plastic, rock, wood

* C. mydas (Green turtle) taken during load 57, recovered in mid inflow box. Moderately decomposed, slight odor, blood pooling, carcass bloated. Skin color purple - green. Straight carapace length = 33 cm. Awaiting transport to GA DNR.

BRIDGE WATCH SUMMARY

Time	Species	#Sightings/#Animals	Location/Comments
0800	T. truncatus	5 / 4	feeding around buoy 11
1410	T. truncatus	2 / 5	in + around channel
		/	
		/	
		/	
		/	

Observers Names Kate Pagan Mike Daley

Observer Firm Coastwise Consulting

Endangered Species Observer Program
LOAD DATA FORM

Project Name: Kings Bay & Fernandina Harbor **USACE District:** Jacksonville

Dredge Name: Liberty Island **Dredge Firm:** GLDD

Date 01 / 09 / 10 **LOAD #:** 57

Times (24hrs): Start 1258 **End** 1939 **Dump** 2002

Location, Lat/Long: N 30 ° 42 . 707 **W** 081 ° 21 . 836

Condition of screening: MID INFLOW BOX Good **OVERFLOW** Good

Number of dragheads in use: 2 **Type of dragheads used:** Wild Dragon **Size of dragheads:** 8'
Draghead deflector? YES X **NO** ___ **Condition of deflectors:** Good

Type of material dredged: Silt, clay
Weather conditions: overcast, clearing.

TIDAL STAGE (circle one): Slack (Rising) High Falling Low Unknown

BEAUFORT SEA STATE (Enter BSS 1-8) 4 **WAVE HEIGHT:** 2-4 **ft**

WIND (speed & direction): NNW 10 kts **AIR TEMP:** 2 **(°C)/F** (°F = 9/5 (°C) + 32; °C = 5/9 (°F - 32))

WATER TEMP: Surface 10.0-11.1 **(°C)/°F Column (mid-depth)** N/A **°C/°F Bottom** N/A **°C/°F**

SCREEN TYPE

X	**Inflow screening:**	None	25%	50%	75%	(100%)
X	**Overflow screening:**	None	25%	50%	(75%)	100%
	Other screening:	None	25%	50%	75%	100%

MID SCREEN CONTENTS: C. mydas (Green turtle), horseshoe crab, clay, wood net, wire, plastic, seaweed, gastropods + bivalves

OVERFLOW SCREEN CONTENTS: wood, trash

Estimate number entrained on this load for the following:

Sturgeon (any species) 0
Shark (any species) 0
Horseshoe crab 6
Blue crab 0

TURTLE OR TURTLE PARTS PRESENT THIS LOAD: YES X **NO** ___
SPECIES OF TURTLE TAKE: Unknown Loggerhead (Green) Kemp's Ridley Hawksbill Leatherback

Comments: C. mydas recovered in inflow box. Moderately decomposed. Minimal damage. Scute nearly intact. Carcass bloated. Blood pooling. Skin color purple-green.
Carapace straight length: 33 cm
Carapace straight width: 27 cm

Number observers used/24hrs: 2 **% Monitoring/24 hrs: None 25% 50% 75% (100%)**

Observer's Name: Mike Daley **Observer firm** Coastwise