

GROSS NECROPSY REPORT

Updated 11/11/2010

SPECIES *Tursiops truncatus* **FIELD NUMBER** 79IMMS091910 **DATE** 9/20/2010

LOCATION Dauphin Island, Mobile, Al **LAT** 30.25078/**LONG** -88.20687

GENDER Male **TL** 218.5 **COND Code** 3, **Thin** 3-4/7 **WEIGHT** 147 kgs

HISTORY: Found floating. Construction workers tied rope to peduncle to tow dolphin to shore. Then used rope to lift dolphin out of water and place in IMMS truck.

NECROPSY

EXTERNAL EXAM:

Dorsal right fluke- multiple healed conspecific rake marks and scarring. White discoloration of cranial edge. Right ventral fluke- multiple healed conspecific rake marks. Base of peduncle- circumferential dark grey lesion with excoriations on lateral and dorsal aspects peduncle which is a rope mark. Left ventral fluke- light discolored area approx. 12 cm wide. Fresh multiple conspecific rake marks. Left dorsal fluke- fresh conspecific rake marks close to peduncle. Right dorsal and left lateral peduncle- healed conspecific rake marks with a 1 cm bleeding opening. Lateral scar with bleeding. Right dorsal cranial and mid peduncle- healed conspecific rake marks. Right dorsal peduncle and base of dorsal fin- scrape marks. Right lateral dorsal fin- multiple dark red circular discolorations on caudal edge. Linear broken dark gray mark on right ventral dorsal fin which appears to be a rope mark. Right caudal to blowhole- linear healed conspecific rake marks. Right eye normal. Teeth- right upper jaw- 21, right lower jaw- 21 teeth, left upper jaw- 23, left lower jaw- 20. Right upper jaw multiple black punctuate lesions suspect avian scavenger. Right caudal mandible³ superficial bleeding linear lesions. Gingiva- dark red discoloration. Tongue- dark purple red. Small amount of blood on tongue surface. Circular debriding lesion on lower mandible with skin held by 2 mm peduncle. 14.5 cm linear lesion on right lateral neck. Right flipper, dorsal aspect- multiple conspecific rake marks. Midventral abdomen- 2 linear broken discoloration extending to caudal right flipper. Appear to be rope marks. Ventral abdomen- dark red multiple short linear and circular lesions. Dark red discoloration of ventral abdomen. Ventral left flipper- few white conspecific rake marks. Ventral abdomen- 6 cm triangular white/grey scar left of umbilicus. Dark semicircular discoloration with slight indentation dorsal to left eye. Dorsal body- multiple conspecific rake marks, two fresh. Left lateral right thorax- fresh conspecific rake marks. Left lateral ventral to dorsal- multiple indentations and scrapes. Indentation possibly from body bag. Cranial to dorsal fin- healed conspecific rake marks. Left lateral dorsal fin, cranial aspect- multiple fresh rake marks. Left lateral ventral to dorsal fin- white, dark gray circular indentations- old scrape marks. Dorsal fluke, cranial aspect- fresh rake mark. Slight indentation of blubber over ribs- ribs visible and palpable.

INTERNAL EXAM:

BLUBBER: Dark red, oozing blood around left shoulder and neck and lateral body. Blood vessels were very prominent and dark red in sub-blubber fascia.

MUSCULOSKELETON

Axial Muscle: Hemorrhaging around left neck and shoulder area. Dark muscle, bleeding on left ventral mandible.

Axial Skeleton: No fractures found. Left shoulder joint normal.

Ribs & Sternum: No fractures found.

CIRCULATORY SYSTEM

Heart: Hemorrhaging around the coronary blood vessels. Heart valves normal.

RESPIRATORY SYSTEM

Thoracic cavity: Small amount of serosanguineous fluid.

Trachea: Dark red mucosa and 2 mm thick hemorrhagic submucosa. Some froth.

Blowholes: No parasites found.

Lungs: Few linear 1 cm thin worms in both lungs. Left generalized mild 0.5 granulomas. Left lung ventral aspect had multiple lobes and there were fibrinous adhesions to pleura. Suspect previous lung trauma. Right lung 1 cm granuloma. Few small granulomas.

DIGESTIVE SYSTEM

Tongue: Caudal tongue- several linear dark green discolorations. Fish skeleton (catfish head) in oropharynx. No injuries found resulting from fish skeleton.

Esophagus: Caudal thoracic- Full of partially digested fish.

Fore Stomach: Full of partially digested fish and shrimp. No parasites found.

Main Stomach: Small amount of grayish. No parasites found.

Pyloric Stomach and duodenum: Large amount of thick gritty grayish material with black specks and shrimp exoskeleton and fish scales.

Intestine: No parasites found. Pyloric sphincter had dark greenish black ecchymotic hemorrhage. Large intestine had clay like feces.

Describe food-stuffs found in GI Tract: Partially digested fish and shrimp.

Describe parasites found in GI Tract: None found.

Liver: Dark red. White varicose superficial lesions on capsule mucosa.

Pancreas: Large, pale pink.

URINARY SYSTEM

Kidneys: No stones found.

Adrenals: Normal.

Urinary Bladder: Empty. Two dark greenish black ecchymotic circular lesions on mucosa

ENDOCRINE & HEMOLYMPHATIC SYSTEMS

Thymus: Present

Thyroid: Dark red

Pituitary: Small. Dark red.

Spleen: Mucosa had multiple ecchymotic dark red spots.

Lymph Nodes: WNL

REPRODUCTIVE TRACT: No lesions found.

CENTRAL NERVOUS SYSTEM

Brain: Subdural hemorrhage on cerebrum along central sulcus. Calcified circular encapsulated 0.6 cm mass in right cerebrum adjacent to central sulcus. Cerebral blood vessels very large and dark red. Pituitary appeared small, dark red.

Spinal Cord: Blood in canal.

HEAD

SENSORY ORGANS

Eyes: WNL

Ears: WNL

CONCLUSIONS: Acute death. Hemorrhage in dura mater. Possible trauma to left side, neck and head.

Carcass Disposition: Frozen in BP Deepwater Horizon oil spill evidence truck

CAUSE OF DEATH FROM FIELD DETERMINATION: Hemorrhagic syndrome, possible trauma unknown etiology

This report was generated by: Dr. Connie Chevis

TISSUES COLLECTED

Frozen: IMMS X2

Blubber
Muscle
Liver
Teeth

Histo (10% Buffered Formalin): DROT x2, IMMS X2

Lung
Trachea
Heart- R, L Atrium, R,L Ventricle.
Aorta
Pulmonary artery
Thymus
Salivary gland
Thyroid
Tonsil
tongue
Esophagus
Stomach- fore, glandular, pyloric
Duodenum
Jejunum
Ileum
Colon
Pancreas
Spleen
Liver
Kidney-L
Urinary bladder
Ureter
Blubber
Bone marrow
Adrenal
Skin
Muscle
Gonad
Lymph nodes- mesenteric, colonic, gastric, subscapular, pulmonary
Lung granulomas from left and right lung
Skin lesion from right peduncle- 1 cm bleeding lesion associated with healed conspecific rake
Mark
Granuloma from cerebrum

Hydrocarbon: X2

Bile- amber jar (some blood mixed in)
Blood- heart
Abdominal cavity fluid
Thoracic fluid

Liver
Kidney
Muscle
Lung
Intestine
Blubber
Stomach sample from forestomach
Stomach sample from pyloric stomach

Viral: Dr. Romero

Lung
BH swab
Spleen
Liver
Kidney-L
Fecal-LI
Brain
Cerebellum
Cerebrum
Spinal cord
Duodenum
Dura mater
Culturette- Abdominal fluid, Brain

70% ETOH:
skin

Cultures for bacterial culture/sensitivity and fungal culture. MHG:

Cerebral spinal fluid- **Results:** Scant *Vibrio parahaemolyticus*, scant *Plesiomonas shigelloides*.
No fungus isolated at 4 weeks.
Brain swab- **Results:** No fungus isolated at 4 weeks. 4+ *Plesiomonas Shigelloides*.
Stomach fluid- **Results:** No fungus isolated at 4 weeks. No growth after 48 hours.

Other: Lung parasites to Dr. Overstreet in formalin

PHOTOS/VIDEO: Yes/No

ASSOCIATED DATA SHEETS: Level A Data Form, Delphinid Specimen record, NOAA Photo Log, NOAA Chain of custody record, Protocol for Examining Marine Mammals for Signs of Human Interaction