

GROSS NECROPSY REPORT

Updated 11/11/2010

SPECIES *Tursiops truncatus* **FIELD NUMBER** 71IMMS071110 **DATE** 7/12/2010

LOCATION In front of Beau Rivage, Gulfport, MS **LAT** 30.20.77 **LONG**-88.55.67

GENDER Female **TL** 240 cm **COND** Code 2 **WEIGHT** Approx 181 kgs

HISTORY: Found floating approx 3 miles south of Beau Rivage, Gulfport, MS. Surrounded by conspecifics. Towed in to Gulfport Harbor.

NECROPSY

EXTERNAL EXAM: Left dorsal fluke- multiple conspecific rake marks on distal tip, superficial. Left ventral fluke- multiple superficial conspecific rake marks. Right dorsal fluke- multiple superficial conspecific rake marks. Right ventral fluke- Multiple conspecific rake mark scars, one fresh rake mark. Base of fluke- circumferential rope mark. Note- animal was towed in. Mid dorsal peduncle multiple healed conspecific rake marks. Genital area- Multiple conspecific fresh rake marks. Ventral abdomen- multiple fresh conspecific rake marks. Left lateral umbilical area- 2 linear gray scars. Caudal axilla to midline- multiple fresh conspecific rake marks. Left axilla to right shoulder across ventral midline- purple-red discoloration, linear, possible rope mark. Dorsal left fluke- Multiple conspecific rake marks, healing. Left ventral fluke- multiple fresh conspecific rake marks. Ventral right flipper- middle, fresh scrapes. Proximal ventral right flipper- one conspecific rake mark. Left ventral midlateral neck- 5 conspecific rake marks, healed. Dorsal and left lateral thorax- multiple healed conspecific rake marks. Left side dorsal fin- multiple healed rake marks. Left lateral neck extending to other side, two linear rope marks. Left side ventral to dorsal fin and extending caudally- several circular dark indentations. Right fluke axilla-one large scrape mark, fresh. Right dorsal thorax- multiple conspecific rake marks. Distal peduncle- multiple healed conspecific rake marks. Teeth: Upper left- 24 teeth. #13 (from back) broken to root, #1-10 worn diagonally on cranial aspect. #19-24 worn horizontally to gum line. Left lower jaw- 21 teeth present. #3 broken diagonally. #16-21 worn horizontally to gumline. Lower right jaw- 21 teeth. #1-7 worn diagonally on cranial surface. #11-18 worn down to gumline. Upper right 22 teeth. #1-14 worn diagonally on cranial surface. #15 missing. #16-22 worn to gumline.

INTERNAL EXAM: Blood in thoracic cavity. "Y" shaped laceration on left lateral lung extending medially approximately 1/2 of lung depth. Bruising to left thoracic rib cage. No broken ribs. Lymph nodes in thorax and subscapular were edematous, hemorrhagic with black generalized circular lesions. Neck muscle behind mandible was hemorrhagic. Abdominal fluid was clear yellow. Negative pressure in lung cavity.

BLUBBER: Several calcified cystic lesions in blubber around genitalia.

MUSCULOSKELETON

Axial Muscle: Hemorrhagic on left neck. Sub-blubber tissue was adherent, dry (possible dehydration?).

Axial Skeleton: Left shoulder joint- No arthritic lesions, Minimal joint fluid.

Ribs & Sternum: Bruising and hemorrhaging in left thoracic wall.

CIRCULATORY SYSTEM

Heart: Heart external muscle was pale. Right and left heart valves had cauliflower like edematous lesions.

RESPIRATORY SYSTEM

Blowholes: Serosanguineous discharge from blowhole.

Lungs: Mild parasitemia. Few firm, yellowish white circular nodules in both lungs. Fibrotic area in right lung was 2 cm x 1.5 cm. Two other lesions were 1.5 cm. Left lung had "Y" shaped laceration on lateral surface extending medially approximately ½ depth of lung. Large blood clot in left bronchi extending into bronchioles. "chicken fat" clot in pulmonary artery. Tracheal mucosa hemorrhagic.

DIGESTIVE SYSTEM

Esophagus: No ulcers seen

Fore Stomach: Brownish red fluid present. No ulcers seen. One otolith found. No parasites.

Main Stomach: Multiple Braunini sp.

Pyloric Stomach: Greenish black liquid present.

Intestine: No parasites found.

Describe food-stuffs found in GI Tract: None. One otolith.

Describe parasites found in GI Tract: Circular cysts with white center- Braunini sp.

Liver: Wrinkled surface with convoluted white lines. Some fibrotic areas in parenchyma.

Pancreas: Large, pink, firm. Some bile in bile duct.

URINARY SYSTEM

Kidneys: No stones found.

Adrenals: Dark red, firm.

Urinary Bladder: Small amount of thick yellow material in bladder. No stones found.

ENDOCRINE & HEMOLYMPHATIC SYSTEMS

Thymus: In front of left lung there was a large fibrotic red mass. This was either a large blood clot or the thymus. Sample was collected.

Thyroid: Hemorrhagic.

Pituitary: Dark red, firm.

Spleen: Generalized circular black lesions on serosa. Parenchyma dark red.

Lymph Nodes: Lymph nodes in thorax and neck were edematous and hemorrhagic with black generalized circular lesions (hemosiderosis?). Suprascapular Ln appeared enlarged. Mediastinal Ln was dark red. Hepatic Ln dark green in center.

REPRODUCTIVE TRACT: Gravid with one fetus (16.8 cm long, 126 grams wt, female) in left uterine horn. Left horn was 31 cm long x 15 cm wide x 8.8 cm high. Right ovary- 4 cm x 2 cm x 0.5 cm.

CENTRAL NERVOUS SYSTEM

Brain: Some hemorrhaging in a few sulci.

Spinal Cord: Clotted blood surrounding spinal cord.

HEAD

SENSORY ORGANS

Eyes: WNL.

Ears: WNL.

OTHER:

CONCLUSIONS: Pregnant, possible hemorrhagic syndrome. Liver fibrotic. Trauma to left thorax.

Carcass Disposition: Frozen in IMMS evidence truck.

CAUSE OF DEATH FROM FIELD DETERMINATION:

This report was generated by: Dr. Connie Chevis

TISSUES COLLECTED

Frozen Hydrocarbon analysis: X2

Bile in amber jar (1)

Blood

Liver

Kidney (L)

Muscle

Lung

Intestine

Blubber/fat

Frozen (-10°C): IMMS

Blubber

Muscle

Liver

Left kidney

Histo (10% Buffered Formalin): DROT X2, IMMS X 2

Muscle

Liver

Left kidney

Left lung- normal and fibrotic lung

Heart- right, left atrium and ventricle

Lymph nodes- supracapular, mediastinal, mesenteric, left lung

Thymus or blood clot

Ureter

Cervix

Bladder

Urethra

Thyroid

Pancreas

Trachea

Spleen

Tongue

Ileum

Cerebrum

Cerebellum

Duodenum jejunum

Bone marrow

Esophagus

Adrenal

Eyes- 1- DROT, 1- IMMS

70% ETOH: IMMS

Skin

Skeletal: IMMS

teeth

Virology: Dr. Romero

Swabs:

Pharyngeal swab

Amniotic fluid

Thoracic fluid

Frozen:

Lung

Feces

Cerebellum

Cerebrum

Spinal cord

Spleen

Liver

Kidney

Suprascapular Ln

Skin lesion

Cultures for Bacterial C/S, Fungal: MHG

Blowhole: 4+ *Aeromonas hydrophila*, 4+ Gram negative rod, photobacterium damsela, 4+

Aeromonas hydrophila "diff. colony morphology". **Results:** No fungus isolated at 4 weeks.

Amniotic fluid: **Results:** No growth after 72 hours. No fungus isolated at 4 weeks.

Abdominal fluid: **Results:** No growth after 72 hours. No fungus isolated at 4 weeks.

Bladder content: **Results:** Scant Gram negative rod, Photobacterium damsela, Scant *Aeromonas hydrophila*. No fungus isolated at 4 weeks.

Parasites for Dr. Overstreet:

Braunina sp.

Lung

PHOTOS/VIDEO: Yes/Yes

ASSOCIATED DATA SHEETS: Level A Data, Delphinid Specimen Record, Chain of Custody, NOAA Photograph log, IMMS Specimen Collection Record, Dr Romero Specimen submission sheet.

RESULTS:

Culture:

Amniotic fluid: No growth after 72 hours

Abdominal fluid: No growth after 72 hours

Blowhole: 4+ *Aeromonas hydrophila*, 4+ Photobacterium damsela, 4+ *Aeromonas hydrophila* "different colony morphology"

Bladder content: Scant Photobacterium damsela, Scant *Aeromonas hydrophila*