GROSS NECROPSY REPORT

SPECIES Tursiops truncatus FIELD NUMBER 87IMMS041811 DATE 4/20/11

LOCATION West End of Dauphin Island LAT30.23712/LONG-88.29883

GENDER Female TL 103.5 cm COND 2 WEIGHT Approx 23 kgs

HISTORY: Caught in Dauphin Island Sea lab trawl net on 4/18/11. Single animal in stranding. Taken to DISL .Skin samples and swabs were collected by DISL personnel. Then brought to IMMS for necropsy. HI form completed.

NECROPSY

EXTERNAL EXAM: Very slight dark linear markings on base of peduncle and rostrum. Appears to be net markings. Bleeding noted from skin tissue collection site. Both eyes were intact. Fetal folds were prominent. Dorsal fin was slighty floppy and curved to the right. No vibrissae present. Flukes were not floppy with flat width of 28 cm. Rostral hair follicles were present. Teeth were not erupted. Pectoral flippers were not floppy. Dorsal keel was not floppy or folded. Papillae were present on the tongue. Nuchal "dent" was present. Umbilicus was completely healed.

INTERNAL EXAM: Mid-thoracic blubber thickness (dorsal, lateral, ventral) (cm)- 1.3, 1.1, 1.1. Muscle color was medium (light red). Lungs were puffy and mottled light pink and dark red. Both lungs floated. There was 1 umbilical vein, closed at the umbilicus, open ½ way to liver margin with a flat diameter at the ½ mark of 0.4 cm and a round diameter of 0.3. No meconium was present. Stomach appeared full.

BLUBBER: Blood oozing from sub-blubber tissue.

MUSCULOSKELETON

Axial Muscle: Muscle was light red. No bruising or parasites found. Appeared grossly normal.

Axial Skeleton: No fractures were found. Appeared grossly normal.

Ribs & Sternum: No fractures were found. Appeared grossly normal.

CIRCULATORY SYSTEM

Heart: Approximately 10mls of blood was present in the pericardial sac. Both heart valves appeared normal. Ventricular wall thickness (cm)= Left: ventral = 0.5, lateral= 2.0, dorsal= 1.5. Right= ventral = 0.7, lateral= 1.2, dorsal= 1.2. Ductus arteriosus appeared closed.

RESPIRATORY SYSTEM

Blowhole: Patent. No exudate.

Trachea: Foamy liquid in trachea. Thickening of the tracheal submucosa with hemorrhaging.

Lungs: Both lungs floated in water. Serosal surface was generalized light pink and dark red mottled, puffy to touch. Both lungs had severe generalized parasitemia. Parasites were long, slender white worms. Right lung had submucosal bulla (approx 2 cm x 3 cm). There was air and worms in the bulla. Ventral to the bulla was a similar sized encapsulated cyst filled with large white worms.

DIGESTIVE SYSTEM

Esophagus: No food, ulcers or parasites were observed. Mucosal lining appeared normal.

Fore Stomach: The entire fore stomach and main stomach were tied off and removed in its entirety for later evaluation. Stomach felt firm and full.

Main Stomach: The entire fore stomach and main stomach were tied off and removed in its entirety for later evaluation. Stomach felt firm and full.

Pyloric Stomach: Pyloric stomach was tied off and cut separately unintentionally. The pyloric stomach had white curdled material resembling milk in it. It was placed in the same bag with the other stomachs.

Intestine: The midsection was darker red than the rest of the intestines. The internal contents were slightly hemorrhagic. Intestinal samples were collected for histopath.

Describe food-stuffs found in GI Tract: Not evaluated due to save for later examination.

Describe parasites found in GI Tract: Not evaluated due to save for later examination.

Liver: Dark red, hemorrhaging on cut surface.

Pancreas: light pink, firm. No bile was found. Appeared grossly normal.

URINARY SYSTEM

Kidneys: Pinkish red. Grossly normal appearance.

Adrenals: light pink, hemorrhaged when cut.

Urinary Bladder: Bladder did not contain any urine. No stones or parasites were found. Mucosal lining appeared grossly normal.

ENDOCRINE & HEMOLYMPHATIC SYSTEMS

Thymus: Dark red.

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Thyroid: Dark red, appeared very large.

Pituitary: not evaluated due to skull was frozen intact.

Spleen: Dark blackish red, homogenous medulla. Grossly normal.

Lymph Nodes: Prescapular, mediastinal, mesenteric, pulmonary, colonic lymph nodes were dark red with slight hemorrhaging.

REPRODUCTIVE TRACT: Appeared grossly normal.

CENTRAL NERVOUS SYSTEM

Brain: Not examined. UME protocol requested skull and skeleton being frozen intact. Culture swab was inserted through skull opening and sample collected for bacterial culture and sensitivity.

Spinal Cord: blood present in the spinal canal.

HEAD

SENSORY ORGANS

Eyes: Appeared grossly normal. Aqueous humor was collected from the left eye. The right eye was removed in its entirety and fixed in formalin.

Ears: Appeared grossly normal.

CONCLUSIONS: External evaluation showed an animal in good body condition and acute death. The frothy material in the bronchi and a history of being caught in a trawl net lead to a conclusion of death by drowning but this animal was had significant pulmonary lesions which may have diminished the chance of escaping. Significant gross pathological lesions included severe bilateral pulmonary parasitemia and bleeding or signs of hemorrhaging from multiple tissues could indicate a coagulopathy.

Carcass Disposition: Frozen and stored at IMMS freezer

CAUSE OF DEATH FROM FIELD DETERMINATION:

This report was generated by: Dr. Connie Chevis

Observers: Wendy Hatchett, Suzanne Smith (Audubon), Ashley, Gidget, Rebekah, John Shelley.

PHOTOS/VIDEO: Yes/No

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ASSOCIATED DATA SHEETS: Level A Data Form, Delphinid Specimen record, Northern Gulf UME Sample Collection Check List, NOAA chain of custody record subsample form, Northern Gulf UME Neonatal Characters Data Sheet, notes from necropsy,.