GROSS NECROPSY REPORT

SPECIES _*Tursiops Truncatus* **FIELD NUMBER** 65IMMS062510 **DATE** 06/25/2010

LOCATION Mobile Bay, AL LAT 30.409 /LONG-88.017167

GENDER Female TL 228.4 cm COND 3 WEIGHT Est. 450#

HISTORY: Found floating, towed in. Fluke was cut at base when found and damaged more by towing. Dorsal fin was cut when found and almost pulled off by towing.

NECROPSY

EXTERNAL EXAM: Right fluke-laceration starting on dorsal peduncle 4 cm cranial to base of fluke extending ventrally through both right and left flukes. Laceration almost completely through fluke with only skin attaching to body. Right ventral fluke had multiple conspecific rake marks on cranial edge. Right ventral fluke had 2 triangular shaped wedges (2.5 cm deep x 2.3 cm wide, 0.9 cm deep x 0.9 cm wide) missing from caudal aspect. Left fluke had 2 triangular shaped wedges (1.9 cm deep x 2.7 cm wide, 0.5 cm deep x 0.7 cm wide) missing from caudal aspect. Left fluke had multiple healed conspecific rake marks. Peduncle dorsal aspect had multiple healed conspecific rake marks. Left lateral peduncle had multiple healed conspecific rake marks. Left peduncle had a broken semicircular scar (possible shark bite). Dorsal fin 3 triangular shaped wedges (2 cm deep x 0.8 cm wide, 1.5 cm deep x 0.1 cm wide, 1.2 cm deep x 0.9 cm wide) missing on caudal aspect. Base of dorsal fin had large 6.5 cm wide by 12 cm deep laceration. Multiple healed conspecific rake marks on both sides of dorsal fin. Left lateral body 3 conspecific rake mark scars. Left flipper on dorsal surface multiple conspecific rake mark scars on cranial edge. Dorsal left lateral body had linear discoloration 15 cm caudal to blowhole. Dorsal aspect of line had mottled grayish white discoloration. Ventral aspect was darker gray. Teeth in good condition. Tongue was green. Right flipper had multiple conspecific rake marks on ventral aspect. Multiple conspecific rake marks on genital slit area. Genital slit was swollen. Right side of body had sloughing of skin about right eye (5 cm x 2.5 cm) with reddish discoloration to blubber area. Right side above flipper sloughing of skin 42 cm dorsal/ventral by 12.5 cm lateral with reddish discoloration to blubber. Left side of dorsal fin-laceration extending ventral caudal 26 cm. Right lateral dorsal fin sloughing skin (7 cm x 10 cm) with white blubber. Caudal dorsal fin 2 areas of sloughing skin 8 cm x 3.2 cm and 4 cm x 2.8 cm. Puncture wound into thoracic cavity on right mid lateral thorax. Mid peduncle sloughed skin 7.6 cm x 4.5 cm with reddish colored blubber. Left peduncle laceration starting on dorsal aspect of peduncle extending to right fluke through peduncle to left fluke. Right fluke dorsal aspect on distal tip- multiple healed conspecific rake marks. Left dorsal fluke- healed wound 9.5 cm long starting on cranial aspect of tip and extending medially. Right peduncle lateral aspect skin scraped over lateral vertebral processes with reddish blubber.

INTERNAL EXAM: Multiple fractured ribs on both sides of body. Large amount of clotted blood in right side of thorax. Large blood clot in dorsal venous rete area.

BLUBBER:

Mid-thoracic blubber thickness (mm): 16(Dorsal), 13 (lateral), 16 (ventral) Anterior dorsal fin (mm): 21 (dorsal), 10 (lateral), 14 (ventral) Peduncle (mm): 29 (dorsal), 12 (lateral), 18 (ventral)

MUSCULOSKELETON

Axial Muscle: Bruising at base of skull on right side.

Axial Skeleton: Possible fractured thoracic vertebrae. Multiple fractured ribs on left and right side. Distal aspect of ribs 1-6 on left side were fractured. Right side on dorsal surface close to vertebrae ribs 1-8 fractured.

Ribs & Sternum:

Left shoulder joint: No arthritic lesions, joint fluid present, reddish colored.

CIRCULATORY SYSTEM

Heart: Unclotted serosanguineous fluid in pericardial sac. Bruising on heart muscle on medial aspect. Fat around the heart vessels.

RESPIRATORY SYSTEM

Hyoid bone: Left side fractured. **Blowhole:** Blood in blowhole.

Lungs: Right lung almost completely ruptured into two pieces dorsal ventral on proximal third of lung. Right lung dark red color generalized. Large amount of clotted blood in right thoracic cavity. Large blood clot in dorsal venous rete where ribs were fractured. Left lung- large blood clot on ventral aspect. Pink with some areas of dark red discoloration. Clotted blood in bronchi. Tracheal mucosa was hemorrhagic. Parasites long white thin in left lung- few. Few parasites in right lung.

DIGESTIVE SYSTEM

Caudal oropharynx: Black, sticky material. Possibly oil?

Esophagus: partially digested fish in thoracic esophagus

Fore Stomach: Full of partially digested fish. No ulcers on mucosa.

Main Stomach: One parasite (Braunina) seen. (Collected)

Pyloric Stomach: Small amount of fluid.

Intestine: WNL. Liquid feces.

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

Describe parasites found in GI Tract: 0.8 cm circular attached to mucosa of main

stomach

Abdominal cavity: Large amount of gas and serosanguionous fluid.

Liver: Greenish black, firm. No parasites observed.

Pancreas: Gas in serosa lining. Firm.

URINARY SYSTEM

Kidneys: Gas in capsule. Very little inter-renicular fat.

Adrenals: R WNL, L not found

Urinary Bladder: Full of urine

ENDOCRINE & HEMOLYMPHATIC SYSTEMS

Thymus: Not found

Thyroid: WNL

Pituitary: WNL

Spleen: Whitish green with black spots. Inside was bright red.

Lymph Nodes: Mesenteric ln had some hemorrhage in center. Suprascapular ln had dark

discoloration in center.

REPRODUCTIVE TRACT: No follicles seen. No fetus.

CENRTRAL NERVOUS SYSTEM

Brain: Swollen blood vessels

Spinal Cord: Clotted blood in spinal canal

HEAD- Bruising on muscle at atlantoaxial joint

SENSORY ORGANS

Eyes: WNL

Ears: WNL

OTHER:

CONCLUSIONS: Suspect trauma by blunt object, possible boat strike with propellers causing lacerations of dorsal fin and peduncle/flukes.

Carcass Disposition: Frozen in evidence truck

CAUSE OF DEATH FROM FIELD DETERMINATION:

This report was generated by: _Dr. Connie Chevis

TISSUES COLLECTED

Teeth

Oil swabs: Blowhole, 2 tongue depressor samples of material in oropharynx

Histo (10% Buffered Formalin): 2 jars DROT; x1 IMMS

Left lung Right lung Trachea

Heart: r atrium, l atrium, r ventricle, l ventricle

Aorta

Pulmonary artery

Tonsil

Salivary gland

Thyroid Tongue

Esophagus

Stomach- forestomach, glandular, pyloric

Duodenum Jejunum Ileum

Colon

Pancreas

Spleen

Liver

Brain

Kidney

Urinary bladder

Urethra

Blubber

Spinal cord

Mammary gland

Adrenal

Skin

Fat-base of dorsal fin

Ovary Pituitary Muscle Uterus

Vagina

Colonic In
Hepatic In
Mediastinal In
Tracheobronchial In
Pulmonary In
Suprascapular In

Cervix

Histo Jar- DROT: L eye

Histo Jar- DROT: Hyoid bone (fractured)

Histo Jar- IMMS: R Eye

Cryovials for Dr. Overstreet: Lung parasites x 3 (70% Ethanol, 10% Formalin, broins soln),

Braunina sp x 1

Bacterial and Fungal Culturettes: Abdominal fluid, right lung fluid, urine for MHG

Hydrocarbon analysis: Urine x1 glass amber vial Bile x 1 glass amber vial Blood x 1 glass amber vial

Liver x2

L Kidney x 2

Muscle x 2

Lung x 2

Intestine x 2

Blubber x 2

Colon x 2

Duodenum x 2

Viral Samples frozen:

Spleen

Kidney

Spinal cord

Colon

Liver

Skin sample- grayish white discoloration

Feces

Culturette-colon

PHOTOS/VIDEO: Yes/NO

ASSOCIATED DATA SHEETS: Level A, Delphinid Specimen Record, Marine Mammal Oil Necropsy report, Chain of Custody, NOAA Photograph log, IMMS necropsy report, Protocol for Examining marine Mammals for signs of human interaction form.

Results: Culture:

Urine: No growth

Rt lung: 1+ Edwardsiella tarde, 1+ Aeromonas species

Abdominal fluid: 2+ Plesiomonas shigelloides, 2+ Vibrio damsel (Now called

Photobacterium damsela)

Fungal: Urine, Rt lung, Abdominal fluid- No fungus isolated at 4 weeks