NECROPSY REPORT-Gross Necropsy Findings 25 May 2010 Histology Report: PENDING

BP Deepwater Horizon Oil Spill Incident

Animal Log No: BP2010LA28 Field ID: MCTC2010-524-LA001

Accession Number:xxx Species: Tursiops truncatus Date of Observation: 5/24/2010

Date of Intake: 5/24/2010 (LMMSTRP)

Date of Necropsy: 5/25/2010 Time of Necropsy 1430-1730 Sex, Age Class: F, Immature

TL: 165.1 cm* (incomplete due to predation)

WT: 50.0 kg (estimate)

Condition at Investigation: Dead Condition of Carcass: Late Code 4

GROSS REPORT

REPORTING INSTITUTION: NOAA OPR MMHSRP

Necropsy is begun at 1430hrs and completed at 1730 hours on 25 May 2010. Presented for necropsy is an approximately 50.0 kg, 165.1 cm, late Code 4, heavily predated immature female Tursiops truncatus. All organs or systems not described are considered within normal limits. In addition, diagnoses generate from the gross necropsy may be amended or lead to additional diagnoses after microscopic evaluation of tissues. Sample disposition is indicated in an attached table.

External Examination. The description that follows is that of post-mortem changes associated with decomposition and shark predation. The cetacean is necropsied in left lateral recumbency. The head is separated from the body. There is patchy flaking and sloughing of the epithelium without associated dermal discoloration or loss of dermal structure (e.g. laceration).

Head. There is a 62 X 25.5 X 2.5 cm complete absence of blubber and muscle that begins mid-melon and extends caudally (e.g. foramen magnum, occipital condyles) and ventrally to the mandible and ends approximately 7.5cm from the mandibular symphysis. The right eye is absent and the left eye is collapsed with protrusion of the cornea due to gas within the anterior chamber of the eye. The teeth are uniform with no evident wear or fractures.

Body. Approximately 4.0 cm of the apical portion of the left and right lung lobes is exposed at the site of post-mortem separation of the head and neck region. There are several (n=6) sites of shark predation resulting in extensive loss of blubber, epithelium, and bone. All of the bites exhibit either a reverse C or oval shape and in all of these defects, there is no evidence of discoloration of the exposed dermis and muscle; skin margins are regular. The right front pectoral fin has a 15.0 cm reverse-C shaped defect that involves the caudal surface. On the left front pectoral fin, there is an absence of approximately 1/3 of the distal portion with bone exposed. The dorsal fin has a 14.0 cm reverse-C shaped defect affected the caudal dorsal fin. Approximately 25.0 from the cranial insertion of the dorsal fin, there is a 27 X 20 X 7 cm oval defect involving the dorsal mid-line. Approximately 50.0 cm from the caudal insertion of the right pectoral fin, there are 3, irregular reverse-C to oval defects involving the ventral area from the anogenital region to the tail stock. These defects range from 9 X 2 X 3 cm to 15 X 12 X 4 cm. Flukes are absent.

Blubber Depth.

	455	45000
Site of Measurement: Axillary	Measurement (cm)	THE STATE OF THE S
Location of Measurement		
Dorsal	1.5	
Lateral	0.9	
Ventral	1.8	

Cardiovascular System. No visible lesions (NVL). Approximately 1.5 ml of heart blood is removed from the chamber of the right ventricle for toxicological analysis.

Parameter	Measurement
Left Ventricle Thickness	1.8
Interventricular Septum	1.4 cm
Thickness	
Right Ventricle Thickness	0.5

Respiratory System and Thoracic Cavity. The apical portion of the left and right lung lobes is exposed and is dark red. The remaining lung lobes are spongy, brick red and float in formalin. Minimal red-tinged forth is present in distal airways. The trachea and primary bronchi are not present (predation).

Digestive System. Approximately 5.0 ml of yellow-orange fluid is present in the 2nd chamber of the stomach. There are no gastric or intestinal contents. The mucosa of the stomach and intestines is uniformly pink-red and there is no evidence of ulcerations. Dental counts are as follows:

Location	Tooth Couth
Upper Left	19
Lower Left	21
Upper Right	22
Lower Right	22

Animal Log No: BP2010LA28 - 3 - Pathology Accession No.: Urogenital System. Bilaterally, the ovaries are smooth and elongate and measure 3 X 2 X 0.5 cm (right) and 3 X 1.5 X 0.5 cm (left). The uterine horns are bilaterally symmetrical.

Hematopoietic/Lymphoreticular System. NSF.

Endocrine System. The right and left adrenal glands were not found (autolysis); the thyroid gland was absent (predation-associated).

Nervous System. The meninges were present, but the brain was absent.

Hepatobiliary System. The liver was diffusely mahogany and was palpably firm. Sections did not float in formalin.

Musculoskeletal System. There are 12 ribs on the right and 13 ribs on the left.

Auditory System. Mandibular acoustic fats are uniformly brown. The right ear is fractured (post-mortem).

PRELIMINARY GROSS DIAGNOSES

Integumentary System:

Post-mortem predation (scavenging) and decomposition, advanced.

Digestive System:

Empty digestive tract.

External Oil: No Internal Oil: No

Histological evaluation of tissues is pending. Samples were collected as per the manual for the BP Deepwater Horizon Oil Spill Incident as well as samples for any potential pathogen detection by molecular or other diagnostic technique.

ANCILLARY FINDINGS

Test	Tissue Tested	Result	Comment

TISSUES/SAMPLES RECEIVED

Samples from necropsy are placed in Cassettes 1-XXXX.

MORPHOLOGIC DIAGNOSES

Microscopic Evaluation: PENDING

Systems with Significant /Incidental Findings

Tissues with no significant findings:.

FINAL DIAGNOSES/INTERPRETATIVE SUMMARY

	Diag	ınosis)	

FIGURES

PENDING TEST	S-PATHOLOGIS		
TEST	PURPOSE	SITE	RESULT

DATE: REPORTING PATHOLOGIST: David S. Rotstein, DVM, MPVM, DACVP