

DOLPHIN GROSS NECROPSY LONG FORM

mc 252

ACCESSION #: <i>Smm-2011-0122-LA001</i>	NECROPSY DATE: <i>3/16/11</i>
TIME: START: <i>08:24</i> END: <i>13:37</i>	PROSECTOR(S): <i>F. Guillard, M. Barbieri, D. Greig, L. Rust, M. Tumin, J. Scallan, M. Becker, T. Norris, M. Brasso</i>

- > Circle one: "N" = normal; "A" = abnormal; "U" = unsure; "NE" = not examined; "NA" = not applicable
- > Complete required fields of "Content"; "Life History"; "Congenital", and "Parasites"
- > Describe "abnormal" or "unsure" findings
- > Describe as if to a blind person, without interpretation. Any interpretation / questions can be placed in parenthesis.
- > Consider: (1) **lesion**, (2) **location** within the body and symmetry, (3) distribution within the organ, (4) **relationship** to other organs/lesions, (5) **approximate percent of organ affected**/ severity, (6) **amount/size/size range**, (7) degree of demarcation, (8) shape/structure, (9) texture/consistency, (10) homogeneity, (11) color & odor

**STRANDING OR SAMPLING HISTORY:**

**BODY CONDITION (EXTERIOR):**

- Emaciated: Visible transverse processes; pronounced nuchal concavity, scapulae visible
- Thin: Concave/sunken epaxial muscles, moderate nuchal concavity
- Average: No bony prominences or nuchal concavity observed
- Robust: Bulging epaxial musculature

**Description & Comments:**

**INTEGUMENT:** N / A / U / NE / NA

**LIFE HISTORY:** Rostral hairs, Rostral hair follicles, Fetal Folds (Circle if present)  
**Finding:** Ectoparasites (mite, lice, barnacle, Xenobalanus (<10, 10-20, 20-50, >50), Discolored, Patchy, Surgical incision, Penetrating wound, Foreign body, Laceration / Rake marks, Abrasion, Erosion / Ulcer, Scar, Vesicle / Pustule, Plaque, Abnormal foci, Mass, Abscess, Cyst (fluid filled / empty), Fluid (edema), Scavenging, Bruising (Hemorrhage, Petechia)

**Description & Comments:** *diffuse dark pink bruising along body from rostrum to anus, a uniform 7cm long area of rake marks 7 separate marks 1cm apart with a connected baseline mark across top of melon 7cm long*

**DISCHARGES:** Absent circle and describe if Present:

**OCULAR, BLOW HOLE, ORAL, PENILE/ VULVAR, ANAL, OTHER:**

Note Color and Consistency:

**UMBILICUS:** Present/ Absent (patent hole)/ Recently Healed/ Scarred N / A / U / NE / NA

**LIFE HISTORY:** Umbilical stump: Patent (partly / completely), Closed, Moist / Dry; Length: \_\_\_\_\_  
 Falciform ligament (umbilical vein)/ Umb arteries: Patent (partly / completely), Closed  
 Urachal ligament (urachus): Patent (partly / completely), Closed

**Finding:** Hernia (of: \_\_\_\_\_), Other: \_\_\_\_\_  
**Description & Comments:** *scavenger damage*

ACCESSION #: \_\_\_\_\_

**BLUBBER: (N) / A / U / NE / NA**

**Finding:** Parasites (<10, 10-20, 20-50, >50), Discolored, Penetrating wound, Foreign body (describe: \_\_\_\_\_), Laceration, Abrasion, Abnormal foci, Mass, Abscess, Cyst (fluid filled./empty), Fluid (edema), Scavenging, Bruising (Hemorrhage, Petechia), Necrotic fat

**Description & Comments:** \_\_\_\_\_

**SKELETAL MUSCLE: (N) / A / U / NE / NA**

**Finding:** Atrophy, Pale / Discolored/ Streaked, Abnormal foci, Edema, Hemorrhage, Mass, Abscess, Parasite (<10, 10-20, 20-50, >50), Other: \_\_\_\_\_  
Extent: Tracking along fascia; \*Communicates with skin / blubber / bone / internal cavity

**Description & Comments:** \_\_\_\_\_

**EYES: Right: (N) / A / U / NE Left: (N) / A / U / NE**

**Finding:** Missing; Phthisis (shrunken); Buphthalmia (enlarged); Proptosis (out of socket); Rupture; Lens luxation; Material in anterior chamber (behind cornea); Foreign body; Corneal Opacity; Penetrating wound; Laceration; Abrasion; Erosion / Ulcer; Scar; Other: \_\_\_\_\_

**Location:** Conjunctiva; Third eyelid; Cornea; Anterior chamber; Lens; Entire globe; Periorbital soft tissue

**Description & Comments:** \_\_\_\_\_

**ORAL CAVITY AND NASOPHARYNX: N / (A) / U / NE / NA**

**TEETH:** Unerupted, Just erupting, Fully erupted

**Finding:** Missing; Broken/ Fractured; Worn (regular / irregular); Gingivitis; Discharge

**Description & Comments:** foreign object (fish) sheep's head in oral cavity  
tail protruding forward, Goosebeak displaced, separated from blowhole by fish

**THORACIC CAVITY: N / (A) / U / NE / NA**

**Pericardial fat:** Abundant, Fair amount, Reduced amount, None; Serous (gelatinous) change

**Effusion:** Slight, Moderate, Copious (approximate amt: \_\_\_\_\_ ml)

Liquid, Serous, Viscous, Clear, Opaque, Purulent, Flecks, Fibrin (stringy); COLOR: \_\_\_\_\_

**Finding:** Pneumothorax (communication with skin / abdomen; negative pressure not observed on puncture of diaphragm), Penetrating wound, Foreign body, Adhesions (to lung, diaphragm, pericardium, other: \_\_\_\_\_), Discolored, Plaque, Abnormal foci, Mass

**Description & Comments:** Sero sanguinous

**CRANIAL LYMPH NODES:**

Prescapular: (N) / A / U / NE / NA

Axillary: N / A / U / NE / NA

Lung-associated: N / (A) / U / NE / NA

Mandibular: (N) / A / U / NE / NA

Tracheobronchial: (N) / A / U / NE / NA

Other (location): \_\_\_\_\_

**Finding:** Swollen (slight, moderate, marked), Discolored, Lymphoid hyperplasia (regular demarcated white foci, Abnormal foci, Mass, Abscess (pus), Granuloma (crumbly), Wet / Fluid (edema), Other: \_\_\_\_\_

**Description & Comments:** Lymph node associated lymph node - mild congestion moderate congestion

**ESOPHAGUS:** N / A / U / NE / NA

**CONTENT (AMOUNT / DESCRIBE):** empty, (fish) digesta, mucous, blood, other: Fish bones

**Finding:** Discolored, Penetrating wound, Foreign body, Erosion / Ulcer, Perforation, Proliferation, Thickened, Plaque, Abnormal foci, Mass, Dilated / Constricted, Obstruction, Parasites (<10, 10-20, 20-50, >50)

**Location:** Cervical (in front of thorax), Thoracic, Lumen, Mucosa, Submucosa, Wall, Serosa (outer surface)

**Description & Comments:** Entire length of Esophagus

**THYROID:** (N) / A / U / NE / NA

**Finding:** Enlarged, Discolored / Pale, Abnormal foci, Mass, Cyst (fluid filled / empty), Other: \_\_\_\_\_

**Description & Comments:** \_\_\_\_\_

**THYMUS:** (N) / A / U / NE / NA

**LIFE HISTORY:** Involuted, Present

**Description & Comments:** \_\_\_\_\_

**TRACHEA / BRONCHI / LUNGS:** N / A / U / NE / NA

**CONTENT (AMOUNT / DESCRIBE):** Foam / Mucous / Blood / Pus / Digesta / Other: No fluid in bronchi

Clear, Opaque; Color: \_\_\_\_\_; Other: \_\_\_\_\_

**PARASITES:** Describe: \_\_\_\_\_ Extent and distribution: \_\_\_\_\_

**Finding:** Discolored / Pale, Abnormal foci, Mass, Consolidated, Congested, Emphysema (air bubbles) / Bulla (air filled cyst), Clear foamy fluid / Edema (small / lg airway / septa; slight, mod, copious), Infarct (pale / red / red margins), Thrombus (part / complete vessel occlusion; w/infarct), Abscess, Obstruction

**Location:** Trachea, Bronchi, Lobe: R / L

Dorsal / Hilar, Ventral / Cranioventral, Mid / All regions, Pleura, Parenchyma, Interlobular (space between lobules)

**Description & Comments:** Sparse multi-focal 0.5cm nodules (12ft)

Right lung more congested

**HEART / PULMONARY ARTERIES / AORTA :** (N) / A / U / NE / NA

**CONGENITAL:** Ductus arteriosus: Open (diameter: \_\_\_\_\_), Membrane covered but probe patent, Closed

Foramen ovale: open (diameter: \_\_\_\_\_), probe patent but covered by membrane, Closed

Persistent left aortic arch: with esophageal dilation, without esophageal dilation

Atrial / Ventricular septal defect (diameter defect: \_\_\_\_\_; diameter outflow tract: \_\_\_\_\_)

Aortic / Pulmonic Constriction (valvular, above valve, below valve) (with post-constriction dilation)

**Pericardium:** **Effusion:** Slight, Moderate, Copious (approximate amt: \_\_\_\_\_ ml); COLOR: \_\_\_\_\_

Liquid, Serous, Viscous, Clear, Opaque, Purulent, Flecks, Fibrin (stringy)

**Finding:** Discolored, Rupture, Proliferation, Thickened, Plaque, Abnormal foci, Mass, Other: \_\_\_\_\_

**Valves:** Smooth thickening (nodular / diffuse), Roughened thickening (flat / proliferative)

**Location:** Left AV valve, Aortic valve, Right AV valve, Pulmonic valve

**Myocardial thickness:** L Ventricle outer wall: \_\_\_\_\_, R Ventricle outer wall: \_\_\_\_\_, Interventricular septum: \_\_\_\_\_

**Finding:** Chamber dilation (ventricle L / R; atrium L / R), Left Side Flaccid, Infarct (pale / red / red margins), Thrombus (part / complete occlusion), Roughened inner surface, Pale / Discolored, Abnormal foci, Mass, Abscess, Other: \_\_\_\_\_

**Description & Comments:** \_\_\_\_\_

ACCESSION #:

**ABDOMINAL CAVITY:** N / ~~A~~ / U / NE / NA

**Abdominal fat (Perirenal, Omental):** Abundant, Fair amount, Reduced amount, None

**Effusion:** Slight, Moderate, Copious (approximate amt: \_\_\_\_\_ ml)

Liquid, Serous, Viscous, Clear, Opaque, Purulent, Flecks, Fibrin (stringy); COLOR: \_\_\_\_\_

**Finding:** Penetrating wound, Foreign body / Ingesta (with or without GI rupture), Adhesions (to wall / organs: \_\_\_\_\_), Discolored, Abnormal foci, Mass, Abscess, Hemorrhage

**Location:** Peritoneum, Mesentery, Omentum

**Description & Comments:** Serous sanguinous

**LIVER:** (N) / A / U / NE / NA

**PARASITES:** Flukes / Others: \_\_\_\_\_ (ND, <10, 10-20, 20-50, >50)

**Finding:** Enlarged (slight, moderate, marked), Small, Capsular fibrosis, Fracture / Laceration, Discolored / Pale, Nutmeg appearance, Abnormal foci, Mass, Abscess, Cyst, Friable, Congested, Other: \_\_\_\_\_

**Location:** Lobe: Caudate / Right lateral / Right medial / Quadrate / Left medial / Left lateral / All lobes  
Capsular, Subcapsular, Parenchyma

**Description & Comments:**

**SPLEEN:** (N) A / U / NE / NA

**Finding:** Engorged (slight, moderate, marked), Contracted, Capsular fibrosis, Lymphoid hyperplasia (regular discrete small white foci), Infarct (red / pale / red margin), Discolored / Mottled, Abnormal foci, Mass, Friable, Other: \_\_\_\_\_

**Location:** Head, Body, Tail, Capsule, Subcapsular, Parenchyma Color: \_\_\_\_\_

**Description & Comments:** -Mildly rounded

**PANCREAS:** N / A / U / (NE) / NA

**Finding:** Swollen, Small, Discolored / Pale, Abnormal foci, Mass, Other: \_\_\_\_\_

**Description & Comments:**

**STOMACH:** N / A / U / (NE) / NA / stomach collected whole

**STOMACH CONTENTS (AMOUNT / DESCRIBE):** Empty, Dilated w/ gas, Mucous, Formula, Fluid, Sand/ Rocks, Fish, Cephalopods, Foreign bodies, Undigested, Partially digested, Digested, Other: Full of whole fish

**PARASITES:** Nematodes: (<10, 10-20, 20-50, >50) with or without volcanic ulcer (mild, moderate, severe)  
Other: \_\_\_\_\_ (<10, 10-20, 20-50, >50)

**Finding:** Discolored/ Pale, Penetrating wound, Foreign body, Rugae swollen / loss / thickened, Erosion / Ulcer / Volcanic ulcer, Perforation, Thickened, Plaque, Abnormal foci, Mass, Dilated / Constricted, Torsion, Obstruction

**Location (chamber):** First, Second, Third

**Description & Comments:** -not tied off at esophageal hole still frozen at time of necropsy, (no sample)

**SMALL INTESTINE:** (N) / A / U / NE / NA (lost)

**CONTENT (AMOUNT / DESCRIBE):** Empty, Digesta, Frank blood (red), Digested blood (black/tarry), Other: \_\_\_\_\_

**PARASITES:** Type: \_\_\_\_\_ (<10, 10-20, 20-50, >50)

**Finding:** Discolored/ Pale, Penetrating wound, Foreign body, Erosion / Ulcer, Perforation, Thickened, Abnormal foci, Mass, Dilated / Constricted, Torsion, Corrugated, Obstructed

**Location:** Duodenum, Jejunum, Ileum

**Description & Comments:**

**LARGE INTESTINE:** N / A / U / NE / NA

**CONTENT (AMOUNT / DESCRIBE):** Empty, Feces: firm, thin/pasty, dry, tarry, meconium (neonate; green-brown pasty material) Other: \_\_\_\_\_

**PARASITES:** Type: \_\_\_\_\_ (<10, 10-20, 20-50, >50)

**Finding:** Discolored/ Pale, Penetrating wound, Foreign body, Erosion / Ulcer, Perforation, Thickened, Plaque, Abnormal foci, Mass, Dilated / Constriction, Obstruction (by \_\_\_\_\_),

**Location:** Lumen, Mucosa, Submucosa, Wall, Serosa (outer surface) -

**Description & Comments:** \_\_\_\_\_

**ABDOMINAL LYMPH NODES:**

**Mesenteric:** N / A / U / NE / NA; Rectal N

**Iliac:** N / A / U / NE / NA;

**Inguinal:** N / A / U / NE / NA;

**Finding:** Swollen (slight, moderate, marked), Discolored/ Pale, Lymphoid hyperplasia (regular demarcated white foci), Abnormal foci, Mass, Abscess, Wet / Fluid (edematous), Other: \_\_\_\_\_

**Location:** Left, Right, Symmetrical, Asymmetrical (R>L, L>R), Cortex, Medulla, Corticomedullary junction

**Description & Comments:** \_\_\_\_\_

**ADRENAL GLAND: Right:** N / A / U / NE / NA

**Left:** N / A / U / NE / NA

**CORTICOMEDULLARY RATIO:** Right: 2 to 1 Left: \_\_\_\_\_

**Finding:** Enlarged/ Shrunken (slight, moderate, marked), Nodular cortical hyperplasia (mild, moderate, severe), Discolored / Pale, Abnormal foci, Mass, Abscess, Hemorrhagic, Striated

**Location:** Cortex, Medulla, Corticomedullary junction; Left, Right; Symmetrical, Asymmetrical (R>L, L>R)

**Description & Comments:** \_\_\_\_\_

**URINARY BLADDER and URETERS:** N / A / U / NE / NA

**BLADDER CONTENT:** Patent, Obstructed (by \_\_\_\_\_) Distended, Partly full, Empty;

Urine: Clear, Opaque, Yellow (dark / light), Red-tinged Other: Gritty, Calculi (SAVE)

**Finding:** Discolored/ Pale, Erosion / Ulcer, Dilated / Constricted, Rupture, Proliferation, Thickened, Plaque, Abnormal foci, Mass, Abscess, Cyst (fluid filled / empty), Hydroureter, Calculi (SAVE)

**Location:** Bladder : Apex (tip), Body, Trigone (outflow site) / Ureter; Lumen, Mucosa, Submucosa, Wall, Serosa

**Description & Comments:** Bladder small mucosal thickness 5-5cm appears thickened

**KIDNEY: Right:** N / A / U / NE / NA

**Left:** N / A / U / NE / NA

**Finding:** Swollen / Shrunken (slight, moderate, marked), Hydronephrosis (distended pelvis), Loss of corticomedullary renicular differentiation (slight, moderate, marked), Discolored / Pale, Infarct (red / pale / red margin), Cyst (fluid filled / empty), Hematoma, Thickened, Plaque, Abnormal foci, Mass, Abscess, Other: \_\_\_\_\_

**Location:** Cortex, Medulla, CM junction, Capsule, Subcapsule, Cranial / Caudal Poles

**Description & Comments:** \_\_\_\_\_

ACCESSION #: \_\_\_\_\_

**URETHRA:** (N) / A / U / NE / NA

**CONTENT:** Patent, Obstructed (by \_\_\_\_\_) Gritty, Calculi (SAVE)

**Finding:** Discolored/ Pale, Erosion / Ulcer, Dilated / Constricted, Thickened, Plaque, Abnormal foci, Mass, Abscess

**Description & Comments:** \_\_\_\_\_

**MALE REPRODUCTIVE TRACT:** NA

**Testes:** (N) / A / U / NE

**Penis:** (N) / A / U / NE

**LIFE HISTORY:** Active (swollen), Resting, Immature

**Finding:** Enlarged, Discolored/ Pale, Cyst (fluid filled / empty), Obstructed (by \_\_\_\_\_), Perforation, Swollen/ Thickened, Fluid-filled, Erosion / Ulcer, Plaque, Abnormal foci, Mass, Torsion, Laceration/ Abrasion, Vesicle/ Pustule, Other: \_\_\_\_\_

**Location:** Testes; Epididymus (head/ tail), Penis

Left, Right, Symmetrical, Asymmetrical (R>L, L>R); Skin, Subcutis, Sac, Mucosa, Submucosa

**Description & Comments:** \_\_\_\_\_

**FEMALE REPRODUCTIVE TRACT: (make new form for Fetus):** NA

**Ovaries:** N / A / U / NE

**Uterus:** N / A / U / NE

**Cervix:** N / A / U / NE

**Vagina:** N / A / U / NE

**Vulva:** N / A / U / NE

**LIFE HISTORY: Left Ovary:** Corpora lutea (No. \_\_\_\_\_), Corpora hemorrhagic (No. \_\_\_\_\_), Follicles (No. \_\_\_\_\_)

**Right Ovary:** Corpora lutea (No. \_\_\_\_\_), Corpora hemorrhagic (No. \_\_\_\_\_), Follicles (No. \_\_\_\_\_)

**Uterus:** Placental scar (L/R uterine horn; No. \_\_\_\_\_)

**Fetus Present:** (L/ R uterine horn; Fetus Acc#: \_\_\_\_\_)

**Placenta:** Attached / unattached to fetus; Complete placenta / Part of: chorioallantois, amnion, umbilical stalk; Umbilical Stalk No. of Twist: \_\_\_\_\_

**MAMMARY GLANDS/NIPPLES:** MAMMAE: Lactation, Swollen without lactation, Non-lactating

**Finding:** Enlarged, Discolored/ Pale, Abnormal foci, Mass, Cyst (fluid filled / empty), Obstructed (by \_\_\_\_\_), Prolapse, Rupture, Perforation, Swollen/ Thickened, Fluid-filled, Erosion / Ulcer, Plaque, Abnormal foci, Mass, Torsion,

**Location:** Ovary, Uterus, Cervix, Vagina, Vulva; Left, Right, Symmetrical, Asymmetrical (R>L, L>R);

Capsule, Subcapsule, Parenchyma, Hilus, Lumen, Mucosa, Submucosa, Wall, Serosa (outer surface);

Fetal attachment site, Non-attachment site, Chorioallantois, Amnionic sac, Umbilical stalk

**Description & Comments:** \_\_\_\_\_

**DURA MATER AND INSIDE SKULL:** N / A / U / (NE) / NA

**Finding:** Discolored/ Pale, Congestion, Penetrating wound, Foreign body, Abnormal foci, Mass, Abscess, Hematoma, Fluid,

**Location:** Subleptomeningeal, Dura mater, Inside skull

Level of cerebrum / cerebellum / brainstem; Dorsal, Lateral, Ventral; L / R; Symmetrical, Asymmetrical (R>L, L>R)

**Description & Comments:** \_\_\_\_\_

SESSION # \_\_\_\_\_

**RAIN:** Cerebrum: N / A / U / NE / NA;  
Brain stem: N / A / U / NE / NA;

Cerebellum: N / A / U / NE / NA  
Meninges: N / A / U / NE / NA

**Finding:** Discolored/ Pale, Asymmetry / Midline shift (towards L / R), Shallow sulci (grooves) / Flattened gyri (bumps), Congested, Edematous, Penetrating wound, Foreign body, Abnormal foci, Mass, Abscess, Hydrocephalus, Hematoma,

**Location:** Lobe: frontal / temporal / parietal / occipital; Dorsal, Lateral, Ventral; L / R; Symmetrical, Asymmetrical (R>L, L>R)

**Description & Comments:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**SPINAL CORD:** N / A / U / NE / NA

**Finding:** Discolored, Disc herniation / Compressive lesion, Tear (partial / complete), Foreign body, Abnormal foci, Mass,

**Location:** Cervical, Thoracic, Lumbar, Sacral; Between bone and meninges/cord, Between meninges and cord, Parenchyma

**Description & Comments:** 1.0 cm Histology taken through spinal canal  
\_\_\_\_\_  
\_\_\_\_\_

**SKELETON AND JOINTS:** N / A / U / NE / NA

**Joint Effusion:** Slight, Moderate, Copious (approximate amt: \_\_\_\_\_ ml); Liquid, Viscous, Clear, Opaque, Flecks, Fibrin (stringy); White, Yellow, Tan, Brown, Red, Red-tinged, Other: \_\_\_\_\_

**Finding:** Bone pliable / brittle, Deformity, Bone loss, Sequestrum (bony / other), Cyst (filled / empty),

Fracture (single / multiple breaks; sharp / rounded edges; open to surface; callus on outside / inside of bony surface),

Luxation / Dislocation, Mass, Abnormal foci, Fluid (edema), Foreign Body, Other: \_\_\_\_\_

Joint surface: discolored / roughened / pitted / erosion / ulcer / proliferative / degenerative disease

**Location:** Bone / Joint \_\_\_\_\_; Joint surface, space, capsule

Proximal, Middle, Distal 1/3<sup>rd</sup> of bone; Physis, Metaphysis, Diaphysis; Vertebral Body, Process

Bone surface (outside / inside), Bone Cortex (one / both), Bone marrow cavity

Associated soft tissue (tendon, ligament, muscle, other: \_\_\_\_\_)

**Description & Comments:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_