

MEXICAN WOLF NECROPSY PROTOCOL Am. Vet. Res. Vol. 42, No. 11, November

INSTITUTION/OWNER Living Desert Zoo + Gardens State Park
ADDRESS P.O. Box 100, Carlsbad, NM. 88220.

CANID SPECIES Canis lupus baileyi ANIMAL ISIS ID # 130
STUD BOOK # 874 SEX M
BIRTH DATE/AGE 4/11/04/10 years WEIGHT 38.1 lbs.

REPRODUCTIVE HISTORY:
SHOWN BEHAVIORAL ESTRUS? _____
EVER BRED? NO
PRODUCED PUPS? NO
EVER HOUSED WITH OPPOSITE SEX? NO

DATE OF DEATH 3/10/15 DATE OF NECROPSY 3/10/15

HISTORY: (Briefly summarize clinical signs, circumstances of death.)

2/26/15 #130 showing signs of lethargy, holding head + tail down and diarrhea.
Fecal negative. Rx Metronidazole + Pred. Also showing weight loss.
3/3/15 Holding head up; stool more firm. Readily eating quail w/ medicines w/in.
3/8/15 Not doing well. Condition worsening. Not eating quail w/ meds. Very thin.
Arched lumbar area. Rear leg ataxia, swaying, knuckling over, stumbling, falling over.
Weak, severe muscle atrophy + weight loss. Temperature 100°F. Pulse + Resp WNL.
Ooiferous, orangish diarrhea. (A) Poor prognosis. Rx 12mg Dexamethasone I.M.
3/10/15 Condition worsening. Animal down, no attempt to rise. Euthanasia indicated and performed.
My. 20

2/26/15 Except for ↓ Cu, T.P., Alb, Glob and ↑ Neuts + Grans other blood values WNL.
Please have your pathologist perform a histopathology on the tissues. Then send the gross examination worksheets and pathologist's report to Dr. Linda Munson, Mexican Wolf SSP® Pathology Advisor; Department VM-PMI, Haring Hall; School of Veterinary Medicine; University of California; Davis, CA 95616; PH: 530-754-7963; Fax: 530-752-

CARDIOVASCULAR SYSTEM: (Heart, pericardium, great vessels)

Appears Normal.

DIGESTIVE SYSTEM: (Mouth, teeth, esophagus, stomach, intestines, liver, pancreas, mesenteric lymph nodes)

NEONATES: Is milk present in stomach? *Mouth, teeth, esoph. appear normal. Stomach - thickened mucosa. Intestinal mucosa thickened throughout. From jejunum to colon mucosa not only thickened by also hemorrhagic.*

URINARY SYSTEM: (Kidneys, ureters, urinary bladder, urethra)

Kidneys perhaps mildly swollen; Rest of urinary system appears to be normal.

REPRODUCTIVE SYSTEM: (Testis/ovary, uterus, vagina, penis, prepuce, prostate, mammary glands, placenta)

WNL.

ENDOCRINE SYSTEM: (Adrenals, thyroid, parathyroids, pituitary)

Appear Normal

NERVOUS SYSTEM: (Brain, spinal cord, peripheral nerves)

Appears normal. Collected cervical, thoracic & lumbar spinal cord since ataxia was noted.

SENSORY ORGANS: (Eyes, ears)

WNL. typical old age changes ie. cataracts.

PRELIMINARY DIAGNOSES:

Gastrointestinal disorder + possible neurological & neuromuscular disorder.

FIXED TISSUE CHECK LIST

Preserve the following tissues in 10% buffered formalin at a ratio of 1 part tissue to 10 parts formalin. Tissues should be no thicker than 1 cm. **INCLUDE SECTIONS OF ALL LESIONS AND SAMPLES OF ALL LISTED TISSUES.** For NEONATES, see the additional tissues on the NEONATAL PROTOCOL. Information on specific TISSUE SECTIONING PROCEDURES are on the following pages.

TISSUES TO SAMPLE (ALL TISSUES CAN BE PUT IN ONE CONTAINER): 3 containers

- ✓ Heart
- ✓ Trachea
- ✓ Thyroid/parathyroid glands
- ✓ Lungs
- Thymus
- ✓ Lymph nodes
- ✓ Spleen
- ✓ Liver
- ✓ Stomach
- ✓ Small intestines
- ✓ Pancreas
- ✓ Large intestines
- ✓ Adrenal
- ✓ Kidneys
- ✓ Urinary bladder
- ✓ Testis/Ovary
- Uterus
- ✓ Brain
- ✓ Skin
- ✓ Skeletal muscle
- ✓ Bone marrow
- Long bone (if bone disease)
- ✓ Spinal cord (if neurological disease)

FROZEN TISSUE: Store in plastic bags at -70 or -20 C for toxicology: Liver, brain, kidney, and (if possible) antemortem serum and plasma frozen. If you suspect an infectious disease, also freeze samples of small intestines, lung, spleen, and lymph nodes.

RECOMMENDED TISSUE SAMPLING PROCEDURES

- ✓ Adrenal glands: Entire gland with transverse incision.
- ✓ Brain: Cut longitudinally along the midline. Submit entire brain and pituitary gland except for frozen sections.
- ✓ Eye: Both eyes intact. Remove extraocular muscles and periorbital tissues.
- ✓ Gastrointestinal tract: Open carefully along the long axis.
 - ✓ Esophagus - 3 cm long section
 - ✓ Stomach - multiple sections from cardia, fundus (body), and atrium of pylorus.
 - ✓ Small intestines - duodenum, jejunum, ileum
 - ✓ Large intestines - cecum, colon
 - ✓ Omentum - 3 cm square
- ✓ Heart: longitudinal section including atrium, ventricle, and valves from (both) right and left heart. (Include large vessels.)
- ✓ Kidney: Cortex and medulla from each kidney.
- ✓ Liver: Sections from 3 lobes with capsule and gall bladder.
- ✓ Lungs: Sections from several lobes including a major bronchus.
- ✓ Lymph nodes: Cervical, mediastinal, bronchial, mesenteric, and lumbar cut transversely.
- ✓ Opened rib or longitudinally sectioned half femur: Marrow must be exposed for proper fixation.
- ✓ Oral/pharyngeal mucosa and tonsil: Plus any areas with erosions, ulcerations, or proliferative lesions.
- ✓ Pancreas: Representative sections from two areas including central ducts.
- ✓ Pituitary glands: Entire gland.