



IN REPLY REFER TO:

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Office of Law Enforcement
Clark R. Bavin
National Fish and Wildlife Forensics Laboratory
1490 East Main Street
Ashland, Oregon 97520



March 11, 2015

VETERINARY PATHOLOGY EXAMINATION
PRELIMINARY REPORT

Note: This report outlines the preliminary findings of gross necropsy on the submitted animal evidence. Further evaluation of the case evidence is pending and a final report will be produced when examination of all evidence is complete.

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| Lab Case #: 15-0059 | Submitting Agency: |
| Agency Case #: 2015200932 | USFWS/LE, Albuquerque |
| Pathologist: [REDACTED] | 4901 Paseo del Norte [REDACTED] |
| Case Title: Mexican Grey Wolf #1385, Collared | Albuquerque, NM 87113 |
| | Investigator: [REDACTED] |
| | Suspect(s): |

EVIDENCE RECEIVED

The following evidence was received in the Evidence Unit of the Laboratory on February 20, 2015, and was transferred to the undersigned examiner on March 05, 2015:

Lab 1: "One (1) carcass of Mexican Gray wolf #1385, collared. Note: Collar was separated from carcass for fingerprints examination. Not sent to FWS Lab." [ST#753919: Item#01]

HISTORY

"The wolf was apparently killed in another location and moved to where it was found. Then, the collar was disabled by putting a magnet on top." - per e-mail from [REDACTED] on March 9, 2015

EXAMINATIONS CONDUCTED

LAB-1: The carcass was radiographed (x-rayed), dissected, and examined visually (necropsy examination) for gross pathological lesions. Photographs were taken to document any significant gross pathological findings.

LAB-1 was itemized and the following sub-items were generated:

- LAB-1A Jaw fragments from LAB-1
- LAB-1B Formalin-fixed tissues from LAB-1
- LAB-1C Esophagus contents from LAB-1
- LAB-1D Hair from the esophagus contents from LAB-1

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LAB-1E Skull from LAB-1

EVIDENCE DETAILS – LAB-1

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|-------------------------|----------------------------|-------------------------------|----------------|
| Common name: | Wolf, Mexican gray | Weight: | 22 kg |
| Scientific name: | <i>Canis lupus baileyi</i> | Carcass composition: | Intact carcass |
| Sex: | Male | Nutritional condition: | Fair |
| Lifestage: | Sub-adult | Post-mortem condition: | Good |
| Necropsy Date: | 09-10 March 2015 | | |

POST-MORTEM FINDINGS

RADIOGRAPHIC EXAMINATION: The lower jaw is shattered from the mandibular rami rostrally. The rostral end of the jaw, including the incisors and canine teeth is present in one fragment.

Along the back of the neck there is soft tissue disruption dorsal to C2-C3 and, along the same plane, an indentation ventral to the trachea. The caudal lung fields are of increased radiodensity and the borders are retracted from the dorsal body wall. The stomach is filled with material of a patchy mixed soft tissue and bone density.

Most growth plates are closed. There is slight lucency of the caudal ends of the vertebral bodies. There is incomplete mineralization of the sternbrae and tibial crests.

There is a PIT tag between the shoulder blades.

EXTERNAL EXAMINATION: The body is externally examined at wavelengths from 350 to 650 nm with a red filter and no filter (for UV light). Scattered over the right side of the body are a few individual fibers that photoluminesce at wavelengths from 400-530 nm when viewed with a red filter.

There is fecal matter on the pelage to the left side of the tail. There is palpable muscle wasting over the hips, shoulders and top of the head.

There is a small cluster of fly eggs in the oral cavity.

EVIDENCE OF INJURY: There is dried blood caked in the fur around the head and forepaws. The lower jaw (mandible) is shattered. The fracture edges and oral cavity are dirt-encrusted. The rostral end of the jaw, including the canines, incisors and left and right first premolars remains attached to the head via skin on the left side. When the fractured ends of the rostral mandible are re-apposed, there remains an approximately 3.7 cm long segment of right mandible that is missing, including the second through the fourth premolars. On the left side, there is a furrow-like comminuted fracture that encompasses the premolars; however, fragments or complete sections of all teeth are present on the left side. There are additional, transverse fractures through both mandibular bodies rostral to molar 1 on the right and through the caudal edge of molar 1 on the left. This results in a large fragment of the left mandible containing premolars 3 and 4 and molar 1 that remains largely attached via soft tissues.

Across the dorsal surface of the left front paw, there is a line of three, evenly spaced, cutaneous puncture wounds. The punctures run in a diagonal direction from the base of the digit one claw to the base of digit five. The punctures are each approximately 7 mm in diameter and are spaced approximately 7 mm apart. There is blood

Pathologist Initials (b)(6),(b)(7)(C)

staining the fur around the punctures. The subcutis along the length of the paw to the carpus is hemorrhagic and edematous. The punctures penetrate to, but not through, the bone. The digital extensor muscles are dark red and wet.

The fur is wet, matted and worn circumferentially around the neck (collar site). Along the dorsal-rostral aspect of the collar line, there are coalescing areas of abrasion and fur loss. The area is malodorous. On the ventral aspect of the neck, at approximately ventral midline, there is an approximately 5 mm diameter, shallow puncture. All of the abrasions and puncture are slightly bloody and wet. Underlying this area, an approximately 3 cm wide band of subcutis and muscle is blanched.

The stomach is raggedly torn along the length of the greater curvature. The wall around the tear is mottled red to dark green. Gastric contents remain largely within the lumen and consist of 776 grams of partially masticated tissue and bone including fragments.

INTERNAL EXAMINATION: The subcutis is dry. Subcutaneous adipose stores are scant. Visceral adipose stores are small to moderate. There is moderate skeletal muscle wasting resulting in prominence of the vertebral spine, scapular spines and hip bones.

There are two large bolus-like pieces of haired skin in the lumen and distending the walls of the esophagus. Collectively the ingesta weigh 246 grams. The ingesta is similar to that within the stomach.

The following organs/tissues are grossly within normal limits: brain, eyes, ears, thyroid gland, salivary glands, lymph nodes, trachea, heart, lungs, intestine, spleen, pancreas, liver, gall bladder, kidneys, adrenal glands, urinary bladder, testes and penis.

SUMMARY OF POST-MORTEM FINDINGS

- Jaw; compound, comminuted fracture of the lower jaw (mandible)
- Left front paw; line of puncture wounds through the skin
- Neck; multifocal to coalescing abrasions at the collar site
- Stomach; rupture
- Thin nutritional condition
- Recent meal

Digitally signed by (b)(6),(b)(7)(C)
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Veterinary Pathologist

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