



Montana Fish, Wildlife & Parks

1400 S. 19th Street
Bozeman, MT 59718

Lab Accession Number: 185647
Field Number:
Seizure Tag Number:
Date Seized:
Date disposed: save carcass

Species: Grizzly Bear
Age estimate: Yearling
Location: Oldman Lake, Glacier Park

Necropsy Findings

History:

The carcass is that of yearling male grizzly bear (*Ursus arctos*) from Oldman Lake, Glacier National Park. This cub was caught in a snare on July 28. He was chemically immobilized with Telazol, and recovered uneventfully. On 8/17/09, the sow had to be humanely dispatched because she posed a threat to human safety. This male cub and his sibling were both darted with Telazol. When field personnel approached this cub, they determined that he was not breathing sufficiently but still had detectable heart beat. The biologist quickly began resuscitation efforts, however the cub did not respond and died shortly thereafter.

Gross Necropsy Findings:

The dart wound was found ventrally on the right side of the neck, just cranial to the humerus. Upon removal of the hide, a large amount of clotted subcutaneous blood was found surrounding the dart wound, up to the right shoulder, and extending down the right side of the chest, the ventral aspect of the neck, and down the right front leg. Further dissection revealed still more clotted blood between tissue planes and muscle layers in all these areas and extending down to the body wall. The source of the blood was the right jugular vein. The clot could not be completely separated from the vein at the site of the laceration. Hematoma was found within the tunica adventitia (thin outermost layer) of the vein.

No hemorrhage or petechial were found on the mucous membranes, sclera of the eye, or the heart. The heart and lungs appeared normal, however the left ventricle was completely void of blood. A small amount of clotted blood was found in the right ventricle. No free blood was found in the chest cavity. The liver was pale grey in color, however liver structure was apparently normal. The spleen was contracted and also completely void of blood. The gastrointestinal tract appeared normal. The kidneys also appeared normal and were surrounded by a moderate amount of fat. Skeletal muscle was slightly pale. No free blood was found in the abdominal cavity.

Diagnosis:

Necropsy findings indicate that the bear cub died of acute hemorrhage. The finding of large amounts of clotted blood, along with evidence of the body's response to acute blood loss (empty heart, pale grey liver, contracted spleen) support this diagnosis. Although the initial wound created by the dart was close to the jugular vein, it did not appear to hit it directly. Two possibilities exist that may have resulted in the laceration of the jugular vein. First, because of its proximity to the right humerus, the dart would have been likely to move around as the bear walked. This motion may have been what allowed the sharp dart tip to lacerate the jugular vein. Another possibility to consider is that the force of the drug being expelled from the dart under pressure tore the jugular vein.

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