University of New Hampshire
New Hampshire Veterinary Diagnostic Laboratory
21 Botanical Lane
Durham, NH 03824-3590
Phone:(603) 862-2726
Fax:(603) 862-0179
www.nhvdl.unh.edu

Final Report

[redacted]
TUFTS WILDLIFE CLINIC
200 WESTBORO RD
NO GRAFTON , MA 01536

UNH Case#: [redacted]
Date Received: 02/27/15
Owner:
Case Id: [redacted]
Species: Bald Eagle

Pathology Report

Specimen:
Formalin fixed tissues are submitted from a mature male (greater than 5 years of age) bald eagle (*Haliaeetus leucocephalus* [redacted]).

Histopathology:
Slides A –D - Autolysis is moderate to marked (one tissue section cannot be identified).
Liver, 4 sections : The sinusoids are congested. Numerous large clusters of ova are present within cavitated to tract like spaces within the liver: ova have a thick yellow wall and opercula and contain larvae (miracidia). Dense cellular infiltrates and aggregates of macrophages containing abundant granular brown pigment surround the egg clusters. Large areas of hemorrhage are noted.
Heart: There are multiple irregular regions of hemorrhage within the left ventricular myocardium. Myocardiocytes in the affected area exhibit slight lytic change and are glassy (autolysis is however, prominent).
Parasite: A large metazoan parasite with a distinct body cavity is present on the slide: It has a thick cuticle and hypodermis, thick coelomyarian musculature and contains a prominent intestine lined by tall columnar cells with a brush border, abundant gonads, and a large uterus and numerous mamillated eggs.

Comment:
Acute myocardial hemorrhage is quite striking in the submitted section of heart. Hemorrhage was also present in the liver. While myocardial hemorrhage could have resulted from blunt trauma, I'm not sure I could attribute this damage to intraspecific fighting. A bleeding diathesis, such as that caused by rodenticide toxicity, is a possible alternative to trauma for the cause of these lesions. Moderate to severe hepatic trematodiasis is also present.
Also submitted were large round worms measuring ~ 1.5 – 2 mm in cross section and 4 – 7 cm in length. Morphologically, these appear to represent ascarids. Ascarids are common in birds of prey and include the genera *Ascaridia*, *Porrocaecum*, and *Contracaecum*. Small numbers of these worms are not usually pathogenic, but in large numbers unthriftiness, weight loss and intestinal obstruction can occur.

Diagnosis:
1. Left ventricular myocardial hemorrhage, acute, marked
2. Hepatic hemorrhage, acute, moderate
3. Hepatic trematodiasis (liver flukes), moderate to severe
4. Round worms – probable ascarids

[redacted]

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