

**New York State Department of Environmental Conservation  
Division of Fish, Wildlife, and Marine Resources  
Wildlife Pathology Unit  
108 Game Farm Road, Delmar, NY 12054**



**M E M O R A N D U M**

**TO:** Dr. Holly Cheever  
**FROM:** Dr. Ward Stone  
**SUBJECT:** Progress Report on Mulard Ducks (2)  
WPU Case #05-38-07A&B  
**DATE:** December 2, 2005

**History:** The hybrid, male ducks were received by the Wildlife Pathology Unit on October 3, 2005.

**Gross Pathology:** Both adult males, with yellow paste filling the esophagus and up to the covering the glottis. The lungs were edematous and hemorrhagic. The livers showed extreme hepatomegaly and light color. Both had bumblefoot lesions on the plantar surfaces of both feet. Bony-swellings were present in the right and left lateral bill of (A). Several small pieces of aluminum were present in the gizzard of (A). The diagnosis based on necropsy was that death resulted from pneumonia.

**Histopathology:** Severe steatosis of the liver, acute bronchopneumonia patchy and consistent with gross pathology impression of an aspiration pneumonia. Severe pulmonary congestion. Autolysis of multiple organs.

**Comments:** The birds died at the time of force feeding. They were filled with food paste from the proventricular area to the region of the glottis. The ducks had pneumonia and severe hepatomegaly which causes respiratory stress by displacing air sacs. The birds had sore feet from bumblefoot.

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It would appear that the stresses of the final forced-feeding caused an acute respiratory limitation on ducks already suffering from pneumonia and severe hepatomegaly restricted respiratory activity due to liver pressure on air sacs. This killed the ducks.

Dr. Ward B. Stone  
Wildlife Pathologist

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