

Virulent Newcastle Disease in Cormorants in Ohio 2010

Late in August, a male double-crested cormorant was submitted to the Ohio Animal Disease Diagnostic Laboratory (ADDL) by a veterinarian from Northeast Ohio. The bird was presented with weakness, anorexia, depression, neurologic signs and subsequently died. The veterinarian indicated it was the fourth double-crested cormorant from the same area (Geauga County) to die with similar clinical signs and presentation. The Ohio ADDL found the bird to be positive for Newcastle Disease on a PCR screen test. Samples were forwarded to USDA NVSL, in Ames Iowa, which subsequently confirmed the test and also isolated the virus. Sequencing analysis indicated that the isolate is a virulent strain of Newcastle Disease virus.

In late August, the Ohio Department of Natural Resources identified another small group of cormorants from Lake County with similar signs. These birds were found to be positive for virulent Newcastle Disease virus by the National Wildlife Health Center in Madison Wisconsin. About the same time, a virulent strain of Newcastle disease was also reported to be responsible for the death of nearly 1000 gulls and 500 cormorants in Minnesota.

The practical implication of this finding is that Ohio poultry producers should practice sound biosecurity procedures, including the monitoring of their flocks for signs of illness and taking steps to prevent wild birds from having contact with their flocks.

Virulent Newcastle disease has not been detected in Ohio poultry flocks. If birds show clinical signs suggestive of this disease, producers should immediately contact their veterinarian, or the State Veterinarian. Such signs of disease – which may vary among birds - include difficulty breathing, profuse diarrhea, discharge from eyes and beak, swelling and darkening of tissues around the eyes, tremors, spasms, circling, twisting of the head and neck, paralysis and death within 2-3 days. Many birds may be affected and mortality may be high. Similarly, cormorants, gulls and pelicans (and Rock pigeons) suspected to have the disease should be reported to the local Department of Natural Resources (DNR) area wildlife office.

Typically, Newcastle Disease is an avian disease. However, it can cause conjunctivitis (pink eye) in human. This is the first reported virulent Newcastle Disease in waterfowl in Ohio. The ODA and ODNR will continue to monitor and report any future cases.

10/20/10