

**Alberta West Nile Virus Surveillance for 2009
Wild Bird Report**

**Government
of Alberta** ■

Alberta ■

Freedom To Create. Spirit To Achieve.

Overview

When WNV arrived in Alberta in 2003, local bird populations had not been previously exposed and they had no natural immunity or resistance to infection. Members of the crow family (Corvidae: crows, magpies, jays, and ravens) were particularly susceptible and many died as a result of WNV infection. These dead birds became an early warning system to show where and when WNV was active in the province. Health professionals, veterinarians, and the public used the information to assess the risk of possible infection.

However, since dead bird surveillance was initiated in Alberta, a great deal has been learned on WNV activity. We now know that suitable conditions for WNV are limited largely to the Grassland Natural Region of southeastern Alberta where conditions are most favourable for development of *Culex tarsalis*. In addition, the number of dead corvids each summer has declined significantly since WNV first appeared, although the populations of crows and magpies did not decline. It is likely that crows and magpies, as well as all the other birds species exposed to WNV, adapted to the presence of WNV in the ecosystem and developed protective immunity.

The monitoring of dead birds was discontinued in 2007 because it no longer provided new information about WNV; however testing is conducted on suspect cases as a response to public concern.

Specimen Information

Summary information of birds submitted in 2009 to Alberta Fish and Wildlife for WNV testing

Species	Location	Date Collected	Test Result
1 American crow (<i>Corvus brachyrhynchos</i>)	Edmonton, Alberta	August 15, 2009	Test Negative

Bird specimen collected from Edmonton, Alberta

An adult crow was delivered to the Alberta Fish and Wildlife Disease Unit to determine cause of death. The bird was found dead in the collector's backyard within the city limits of Edmonton and was tested for WNV as part of routine diagnostics. The crow tested negative for WNV.

Summary

In 2009, one bird, an American crow (*Corvus brachyrhynchos*) was tested for WNV as a response to public concern. This bird tested negative for WNV.

Thank you to members of the public for providing information regarding dead birds found, and to Fish and Wildlife staff who fielded public phone calls and took appropriate action.