



CWHC Ontario/Nunavut Dead Bird West Nile Virus Testing Summary for 2021

The CWHC Ontario/Nunavut Region has tested 70 birds for the presence of West Nile Virus (WNV) in 2021. All corvids and raptors submitted to the CWHC during the season were tested along with any other birds with known susceptibility, exhibiting neurological signs, or showing lesions consistent with WNV. Of the 70 tested, 12 confirmed positive for the virus by real-time RT-PCR.



Figure 1. Location of birds tested for West Nile Virus in Ontario in 2021. Red locations tested positive, yellow tested negative.



Corvid species still account for the majority (7 out of 12 positive specimens) of West Nile Virus cases in 2021, but we continue to detect the virus in new species. Our earliest detection in 2021 was a Loggerhead Shrike found dead in Cambridge, Ontario. Since then, the CWHC has confirmed West Nile Virus in other non-corvid species including a Cooper's Hawk and three Red-tailed Hawks (Table 1). This year we did not have any waterfowl/shorebirds test positive for West Nile virus.

Table 1. Species breakdown for birds testing positive for West Nile virus in 2021.

Species	Tested	Positive
Corvids		
American Crow	18	4
Blue Jay	10	2
Common Raven	4	1
Raptors		
Bald Eagle	3	0
Cooper's Hawk	5	1
Eastern Screech-Owl	3	0
Great Horned Owl	3	0
Red-tailed Hawk	9	3
Sharp-Shinned Hawk	2	0
Song Birds		
American Robin	1	0
Chimney Swift	1	0
House Sparrow	2	0
Loggerhead Shrike	4	1
Waterfowl and Waterbirds		
Double-Crested Cormorant	5	0
Totals	70	12



Table 2. Species, date, and locations for dead birds tested by PCR for West Nile virus in 2021.

Common Name	Date Received	City	WNV Diagnosis
American Crow	2021-02-03	Waterloo	Negative
Common Raven	2021-03-22	Caledon	Negative
Blue Jay	2021-03-22	Toronto	Negative
Sharp-Shinned Hawk	2021-05-14	Bleazard Valley	Negative
Loggerhead Shrike	2021-05-25	Cambridge	Negative
Loggerhead Shrike	2021-05-27	Cambridge	Positive
Blue Jay	2021-06-01	West Lorne	Negative
Common Raven	2021-06-01	Greater Sudbury	Negative
Eastern Screech-Owl	2021-06-03	Ridgetown	Negative
American Crow	2021-06-16	Fergus	Negative
Sharp-Shinned Hawk	2021-06-24	Oakville	Negative
Red-Tailed Hawk	2021-06-24	Toronto	Negative
Great Horned Owl	2021-06-24	Oshawa	Negative
Chimney Swift	2021-06-24	Toronto	Negative
Blue Jay	2021-06-29	St. Thomas	Negative
Blue Jay	2021-06-29	St. Thomas	Negative
American Crow	2021-07-06	Thunder Bay	Negative
American Crow	2021-07-06	Thunder Bay	Negative
American Crow	2021-07-06	Thunder Bay	Negative
Blue Jay	2021-07-07	Conestogo	Negative
American Crow	2021-07-08	Barrie	Negative
American Crow	2021-07-13	North Bay	Negative
American Crow	2021-07-14	Alton	Negative
Cooper's Hawk	2021-07-16	Toronto	Negative
American Crow	2021-07-20	Guelph	Negative
American Crow	2021-07-20	Port Elgin	Negative
American Crow	2021-07-20	Port Elgin	Negative
American Crow	2021-07-20	Port Elgin	Negative
American Robin	2021-07-20	Guelph	Negative
Blue Jay	2021-07-22	Niagara Falls	Negative
Red-Tailed Hawk	2021-07-27	Toronto	Negative
Cooper's Hawk	2021-07-27	Toronto	Negative
Cooper's Hawk	2021-07-27	Oakville	Negative
Red-Tailed Hawk	2021-07-28	Smithville	Negative
Eastern Screech-Owl	2021-07-28	Minto	Negative
Eastern Screech-Owl	2021-07-28	Barrie	Negative
Cooper's Hawk	2021-07-29	Brampton	Positive



Common Raven	2021-08-06	Alliston	Negative
American Crow	2021-08-11	Hamilton	Positive
American Crow	2021-08-11	Hamilton	Positive
Blue Jay	2021-09-02	Oakville	Positive
American Crow	2021-09-03	Guelph	Positive
Red-Tailed Hawk	2021-09-09	Toronto	Positive
Red-Tailed Hawk	2021-09-09	Toronto	Positive
American Crow	2021-09-09	Toronto	Positive
Red-Tailed Hawk	2021-09-09	Mississauga	Positive
Red-Tailed Hawk	2021-09-09	Toronto	Negative
Red-Tailed Hawk	2021-09-09	Toronto	Negative
Great Horned Owl	2021-09-09	Brampton	Negative
Great Horned Owl	2021-09-09	Toronto	Negative
Double-Crested Cormorant	2021-09-09	Toronto	Negative
Red-Tailed Hawk	2021-09-09	Toronto	Negative
House Sparrow	2021-09-09	Toronto	Negative
House Sparrow	2021-09-09	Toronto	Negative
Double-Crested Cormorant	2021-09-09	Toronto	Negative
Cooper's Hawk	2021-09-09	Toronto	Negative
American Crow	2021-09-09	Toronto	Negative
Blue Jay	2021-09-09	Drayton	Negative
Blue Jay	2021-09-14	Welland	Positive
Blue Jay	2021-09-15	Guelph	Negative
Double-Crested Cormorant	2021-09-21	Prince Edward	Negative
Bald Eagle	2021-09-21	Kitchener	Negative
Double-Crested Cormorant	2021-09-21	Carrying Place	Negative
Double-Crested Cormorant	2021-09-21	Prince Edward	Negative
Bald Eagle	2021-09-24	Cochrane	Negative
Loggerhead Shrike	2021-09-27	Cambridge	Negative
American Crow	2021-09-28	Sudbury	Negative
Common Raven	2021-10-04	Guelph	Positive
Bald Eagle	2021-10-06	Ignace	Negative
Loggerhead Shrike	2021-10-19	Kawartha Lakes	Negative

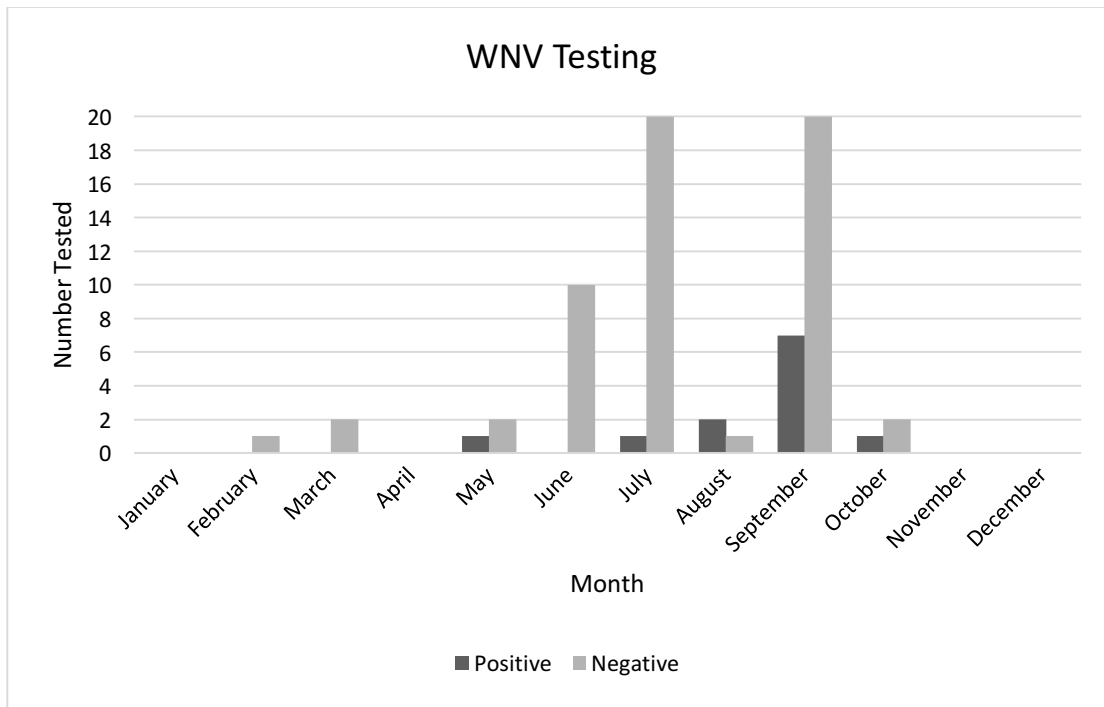


Figure 2. WNV testing completed by month in 2021.

Note: This report is only accurate to date of publishing and only accounts for mortalities that occurred in 2021. Any cases submitted during 2021 that died during a previous year have been removed.