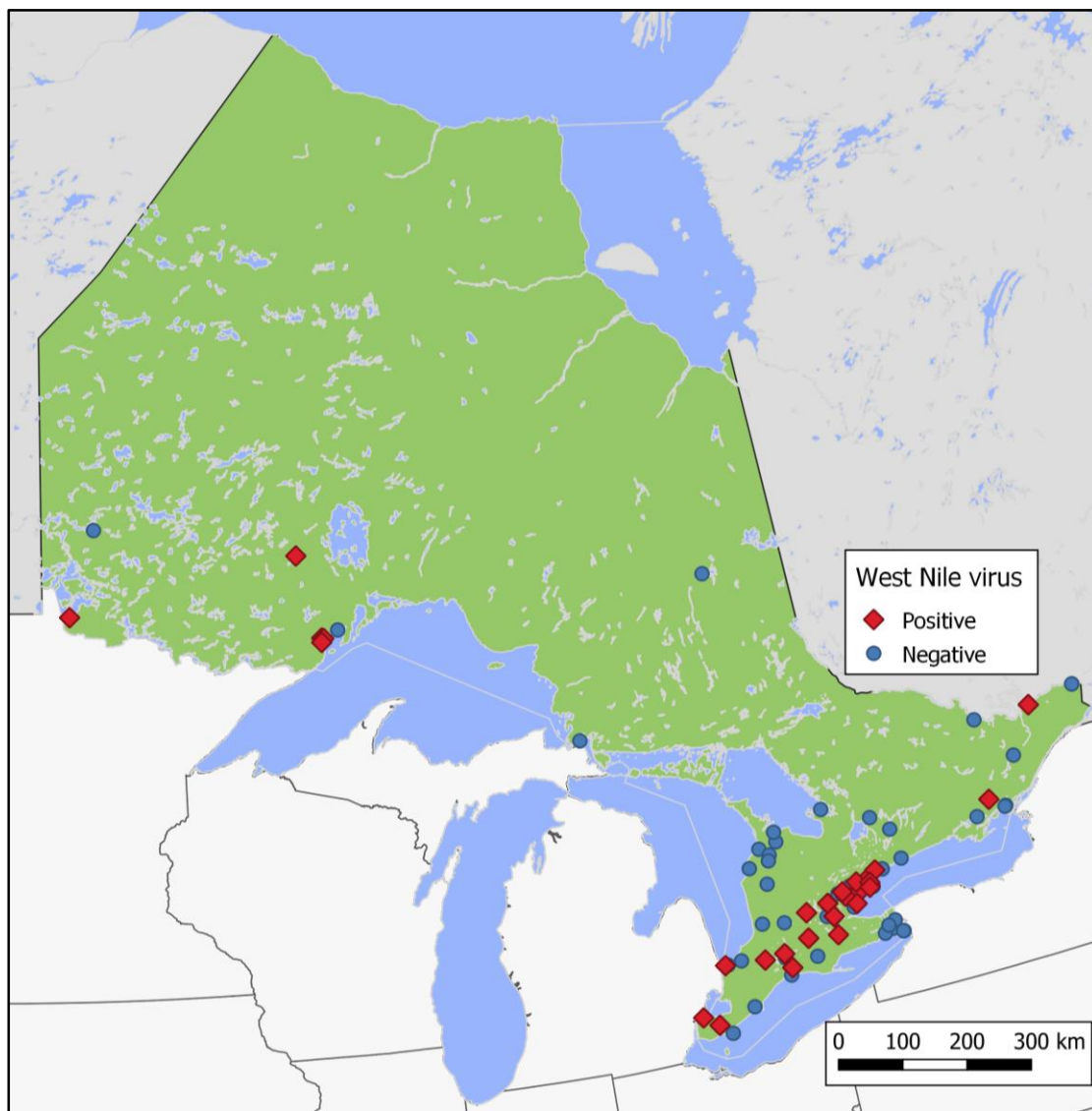




## CWHC Ontario/Nunavut Dead Bird West Nile Virus Testing Summary for 2018

The CWHC Ontario/Nunavut Region has tested 94 birds for the presence of West Nile Virus (WNV) in 2018. 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 94 tested, 41 were confirmed positive for the virus by real-time RT-PCR.



**Figure 1.** Location of birds tested for West Nile Virus in Ontario in 2018.  
Red locations tested positive, blue tested negative.



With corvid species accounting for only 23 of the 41 birds which tested positive for West Nile virus, a widening range of additional species have also tested positive in 2018. The earliest detection in 2018 was an American Crow found dead in Toronto, Ontario on July 4th, 2018. Since then, the CWHC has confirmed West Nile virus in unlikely species including Herring Gulls, Ring-Billed Gulls, and in Loggerhead Shrikes (Table 1). The number of positive Gulls this year are definitely an interesting change, especially as one of these gulls exhibited histological and immunohistochemical evidence to support West Nile virus as the cause of death in this bird. This change seems to fit with a recent trend of West Nile virus detection in waterfowl/waterbirds with the positive Double-crested Cormorant, Mallard Duck, and Trumpeter Swan in 2017.

**Table 1.** Species breakdown for birds testing positive for West Nile virus in 2018.

Species	Tested	Positive
<b>Corvids</b>		
American Crow	24	22
Blue Jay	2	1
Common Raven	1	0
<b>Raptors</b>		
Bald Eagle	2	1
Barred Owl	1	0
Cooper's Hawk	2	1
Eastern Screech-Owl	2	0
Great Horned Owl	7	0
Northern Harrier	1	1
Northern Saw-Whet Owl	1	0
Red-tailed Hawk	7	4
Snowy Owl	6	0
<b>Song Birds</b>		
American Robin	2	0
Eastern Bluebird	1	0
Loggerhead Shrike	9	5
Rock Pigeon	1	0
Swainson's Thrush	1	0
<b>Waterfowl and Waterbirds</b>		
American White Pelican	1	1
Double-crested Cormorant	6	0
Great Blue Heron	2	0
Herring Gull	8	3
Piping Plover	1	0



Species	Tested	Positive
Ring-Billed Gull	2	2
Other		
Common Grackle	1	0
Red-Winged Blackbird	1	0
Ruffed Grouse	2	0
<b>Totals</b>	<b>94</b>	<b>41</b>

**Table 2.** Species, date, and locations for dead birds tested by PCR for West Nile virus in 2018.

Common Name	Date of Death	City	WNV Diagnosis
American Crow	2018-04-29	London	Negative
Eastern Bluebird	2018-05-17	Teeswater	Negative
Snowy Owl	2018-05-23	Kincardine	Negative
Snowy Owl	2018-05-25	Owen Sound	Negative
American Crow	2018-05-31	London	Negative
Great Horned Owl	2018-06-02	Oakville	Negative
Snowy Owl	2018-06-02	Dobbinton	Negative
Loggerhead Shrike	2018-06-05	Cambridge	Negative
Loggerhead Shrike	2018-06-06	Hamilton	Negative
Snowy Owl	2018-06-07	Chesley	Negative
Ruffed Grouse	2018-06-26	Allenford	Negative
American Crow	2018-07-04	Toronto	<b>Positive</b>
Great Horned Owl	2018-07-05	Welland	Negative
American Crow	2018-07-07	Yarker	<b>Positive</b>
Bald Eagle	2018-07-10	Windsor	<b>Positive</b>
Snowy Owl	2018-07-14	Bluewater	Negative
American Crow	2018-07-17	London	<b>Positive</b>
Double-Crested Cormorant	2018-07-18	Kingston	Negative
Double-Crested Cormorant	2018-07-19	Kingston	Negative
Common Raven	2018-07-19	Grassy Narrows First Nation	Negative
American Crow	2018-07-23	Sarnia	<b>Positive</b>
American Crow	2018-07-24	St. Thomas	<b>Positive</b>
American Crow	2018-07-24	Strathroy	<b>Positive</b>
American Crow	2018-07-24	Guelph	<b>Positive</b>
Red-Tailed Hawk	2018-07-25	Toronto	<b>Positive</b>
American Crow	2018-07-26	Mississauga	<b>Positive</b>



Common Name	Date of Death	City	WNV Diagnosis
American Crow	2018-07-27	Toronto	<b>Positive</b>
Common Grackle	2018-07-31	Tyendinaga Mohawk Territory	Negative
Loggerhead Shrike	2018-07-31	Cambridge	<b>Positive</b>
American Crow	2018-08-02	Ohsweken	<b>Positive</b>
Double-Crested Cormorant	2018-08-02	Toronto	Negative
Piping Plover	2018-08-03	Bowmanville	Negative
Double-Crested Cormorant	2018-08-03	Toronto	Negative
American White Pelican	2018-08-03	Lake of the Woods	<b>Positive</b>
Bald Eagle	2018-08-03	Renfrew	Negative
Double-Crested Cormorant	2018-08-04	Toronto	Negative
Loggerhead Shrike	2018-08-05	Hamilton	<b>Positive</b>
Blue Jay	2018-08-05	Toronto	Negative
American Crow	2018-08-05	Thunder Bay	<b>Positive</b>
Loggerhead Shrike	2018-08-06	Hamilton	<b>Positive</b>
Ring-Billed Gull	2018-08-06	Toronto	<b>Positive</b>
American Crow	2018-08-07	Thunder Bay	<b>Positive</b>
Red-Tailed Hawk	2018-08-07	Oakville	<b>Positive</b>
Red-Tailed Hawk	2018-08-08	Mississauga	<b>Positive</b>
Red-Tailed Hawk	2018-08-10	Toronto	<b>Positive</b>
Herring Gull	2018-08-11	Hawkesbury	Negative
Herring Gull	2018-08-11	Hawkesbury	Negative
Herring Gull	2018-08-11	Hawkesbury	Negative
Herring Gull	2018-08-11	Hawkesbury	Negative
American Crow	2018-08-13	Thunder Bay	<b>Positive</b>
American Crow	2018-08-13	Thunder Bay	<b>Positive</b>
Great Horned Owl	2018-08-13	Welland	Negative
Red-Tailed Hawk	2018-08-13	Niagara Falls	Negative
Red-Tailed Hawk	2018-08-13	Fort Erie	Negative
Great Horned Owl	2018-08-13	Halton Hills	Negative
Great Horned Owl	2018-08-13	Mitchell	Negative
Eastern Screech-Owl	2018-08-13	Smith Falls	Negative
Loggerhead Shrike	2018-08-13	Hamilton	<b>Positive</b>
Great Blue Heron	2018-08-14	Wyoming	Negative
American Crow	2018-08-15	Mississauga	<b>Positive</b>
Red-Tailed Hawk	2018-08-17	Fort Erie	Negative
Great Horned Owl	2018-08-17	Wainfleet	Negative
American Crow	2018-08-17	Woodstock	<b>Positive</b>



Common Name	Date of Death	City	WNV Diagnosis
American Crow	2018-08-17	Woodstock	<b>Positive</b>
Loggerhead Shrike	2018-08-17	Hamilton	Negative
American Crow	2018-08-17	Toronto	<b>Positive</b>
Eastern Screech-Owl	2018-08-18	Chatham-Kent	Negative
Northern Saw-Whet Owl	2018-08-18	Brampton	Negative
Great Horned Owl	2018-08-20	Courtland	Negative
Snowy Owl	2018-08-20	Timmins	Negative
Herring Gull	2018-08-20	Toronto	<b>Positive</b>
Ring-Billed Gull	2018-08-22	Toronto	<b>Positive</b>
Loggerhead Shrike	2018-08-24	Kawartha Lakes	Negative
Cooper's Hawk	2018-08-31	Guelph	Negative
Rock Pigeon	2018-08-31	Lindsay	Negative
Swainson's Thrush	2018-09-05	Sault Ste. Marie	Negative
Double-Crested Cormorant	2018-09-06	Port Stanley	Negative
American Crow	2018-09-07	Georgetown	<b>Positive</b>
American Crow	2018-09-07	Toronto	<b>Positive</b>
Northern Harrier	2018-09-09	Gull Bay	<b>Positive</b>
American Crow	2018-09-12	Guelph	<b>Positive</b>
Herring Gull	2018-09-12	Orléans	<b>Positive</b>
Herring Gull	2018-09-12	Orléans	<b>Positive</b>
Loggerhead Shrike	2018-09-19	Hamilton	<b>Positive</b>
American Crow	2018-09-19	Wellesley	<b>Positive</b>
Cooper's Hawk	2018-09-20	Georgetown	<b>Positive</b>
Great Blue Heron	2018-09-28	Sarnia	Negative
Herring Gull	2018-09-28	Toronto	Negative
Ruffed Grouse	2018-10-05	Kemble	Negative
Red-Winged Blackbird	2018-10-11	Deseronto	Negative
American Robin	2018-10-18	Pickering	Negative
American Robin	2018-10-18	Pickering	Negative
Blue Jay	2018-10-26	South Woodslee	<b>Positive</b>
Barred Owl	2018-11-01	Shuniah	Negative