



WHITE LAKE Property Owners Association
Environment Volunteers



ENVIRONMENT BULLETIN

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2021 Cormorant Survey

April 4, 2022

The **double-crested cormorant** (*Phalacrocorax auritus*) is a member of the **cormorant** family of **seabirds**. Its habitat is near rivers and lakes as well as in coastal areas, and is widely distributed across North America, from the Aleutian Islands in Alaska down to Florida and Mexico. They are a native species in Ontario including White Lake.

Measuring 70–90 cm (28–35 in) in length, it is an all-black bird which gains a small double crest of black and white feathers in breeding season. It has a bare patch of orange-yellow facial skin. Five subspecies are recognized. It mainly eats fish and catches its prey by swimming and diving. Its feathers, like those of all cormorants, are not waterproof and it must spend time drying them out after leaving the water. Once threatened by the use of DDT, the numbers of this bird have increased markedly in recent years.



When large numbers of cormorants congregate in a roosting or nesting area, their droppings can kill trees and other vegetation. They also compete for food with loons and other fish-feeding birds. For this reason, the cormorant has been vilified, even though exactly the same can be said of the Great Blue Heron, which also roost communally, and destroy patches of forest or even entire islands where their nests are located. The authors do not support the killing of cormorants because they are a natural species to White Lake and are not present in numbers warranting action.

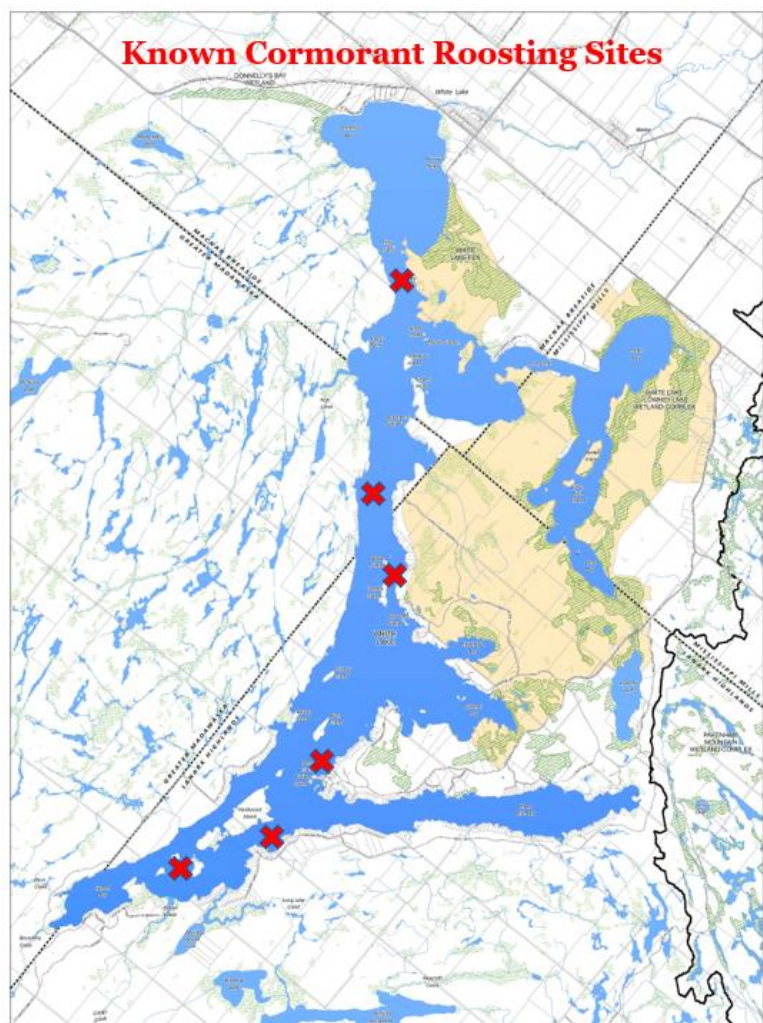
In fact, the Ontario Federation of Anglers and Hunters (OFAH) [web page](#) on cormorants specifically says “Populations of double-crested cormorants are increasing in number and distribution across Ontario’s shorelines. **Where cormorant numbers are high, they can negatively affect terrestrial habitats by chemical and physical means through corrosive acidic guano, and stripping/breaking tree branches. In some cases, cormorant colonies have destroyed entire island ecosystems. Many people are also concerned about potential impacts on fish populations and angling opportunities.**”

Nobody is calling for the extermination of cormorants, just control of populations ‘where cormorant numbers are high’. The goal of our annual cormorant count is to establish baseline population numbers so that we can, in fact, determine when and by how much populations on White Lake are increasing.

Cormorants have been using White Lake for many years. However, their numbers have always remained small. In recent years, we have noticed that the White Lake population of cormorants may be increasing. Also, their roosting habits have changed and they now prefer sites in the southern part of the lake.

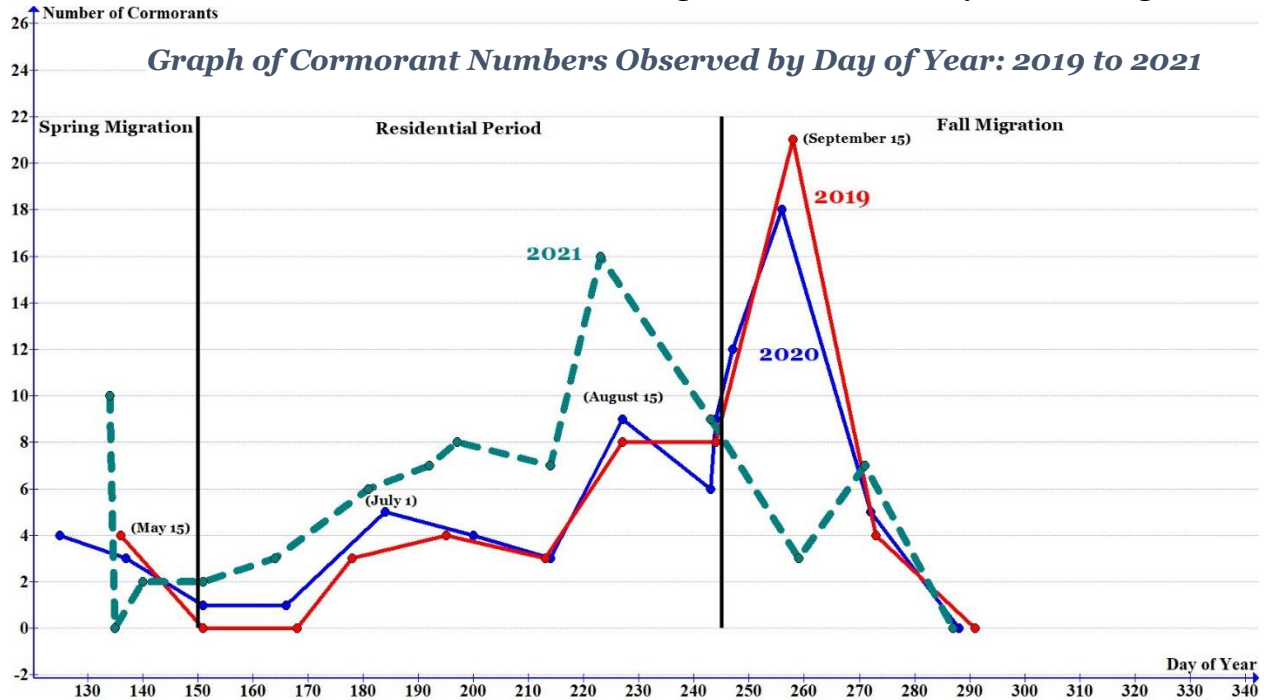
As part of our water quality monitoring program, we decided to start monitoring cormorant numbers on White Lake. Every two weeks we patrol the lake by boat and sample 9 sites in all parts of the lake. Water samples for total phosphorus and plankton counts are collected. Water temperature and clarity measurements are also taken.

During this two-hour period, we collect data on the location and numbers of cormorants. We check all of the roosting sites shown on the map to the right as well as any cormorants we spot in flight or fishing in open water. We do not know the location of the nesting sites at this time, but we know from the scientific literature that cormorants can nest kilometres away from the lake they use for food.



The number of cormorants observed for each date in the graph below can be taken as a minimum number of cormorants, since it is possible that birds in flight or feeding were missed. However, cormorants are communal birds and tend to aggregate in groups rather than be spread out over the entire lake. The graph below shows cormorant observations for three consecutive years.

The graph is divided into three sections marked by the two vertical black lines. During spring, as well as at the end of summer, larger numbers of cormorants are often observed. Most of these birds are migrating to other sites and only stop and linger at White Lake for a week or so. In 2021, we did not observe the higher numbers usually seen during the fall



migration. It is possible that non-resident cormorants did not use White Lake this year, or they arrived and left during the two-week interval between counting dates.

Of greater interest are bird counts taken during the residential period. It is interesting that the data curves are very similar, with populations peaking in mid-May, July 1, and mid-August. It is tempting to suggest interpretations for these points. We can speculate that only adult cormorants are seen on the lake up to late July when youngsters join their parents on the lake.

It is possible that the mid-July cormorant population numbers probably reflects the permanent resident adult population of cormorants on White Lake. This data suggests that there are from 8 to 10 cormorants making White Lake their home. This translates to a minimum of 4 to 5 nesting pairs producing about 7 to 8 offspring, as reflected in the total cormorant count taken in mid-August.

It is clear from the above graph that cormorant numbers may be slowly increasing. We will continue with this initiative and monitor if this increase represents a trend or an isolated occurrence. In any case, the number of cormorants on White Lake remains small.