

PROPERTY OWNERS ASSOCIATION ENVIRONMENT VOLUNTEERS



## ENVIRONMENT BULLETIN Conrad Grégoire and David Overholt September, 2023 White Lake: Wild Rice

Wild Rice<sup>1</sup> found in White Lake is Northern wild rice (*Zizania palustris*) and is native to the Great Lake region of North America, the aquatic areas of the boreal forest regions of Northern Ontario, Alberta, Saskatchewan, and Manitoba. Although very likely a native species in White Lake, there are anecdotal reports that duck hunters seeded the lake during the 1940s<sup>2</sup> to attract ducks to the lake.

Wild rice is Canada's only native cereal. It is a wild grass that grows from seed annually and produces a very valuable grain that has been used as a food source for thousands of years by the First Nation peoples in parts of North America. In September, during the riceharvesting season, muskrat, fish, ducks, geese, and migratory birds feed on ripe wild rice seeds. Wild rice filters the waters, binds loose soils, provides protection from high winds and waves along the shorelines, and provides habitat for species at risk, such as least bittern and black terns.

The entire wild rice plant provides food in the summer for herbivores such as Canadian geese, trumpeter swans, muskrats, beavers, white-tailed deer,



<sup>&</sup>lt;sup>1</sup> Abstracted in part from Plenty Canada website: <u>https://www.plentycanada.com/wild-rice--aquatic-ecosystems.html</u>, and Wikipedia.

<sup>&</sup>lt;sup>2</sup> Doug Tilley, personal communication.

and moose. In addition to this, rice worms and other insect larvae feed heavily on natural wild rice. These then provide a rich source of food for small marshland birds. The stems of wild rice provide nesting material for such species as common loons and muskrats. Every stage of growth of natural wild rice provides food and habitat for wildlife; as a result, wild rice stands provide exceptional breeding and nesting areas for an abundance of species.

The life cycle for wild rice is simple. In the late summer, the ripened seed drops off the stem and sinks to the sediment, where it remains dormant until the following spring. Low oxygen levels and warmth typically stimulate germination, but some seeds may remain dormant for five years or longer, which allows the rice to survive occasional crop failures. After germination, there are three distinct growth phases that occur. The seed first begins to sprout in early May when the water temperature reaches about  $7 \circ C$ . For the first three or four weeks of growth, the young plants are under water, which is the defining characteristic of the submerged leaf stage. Then, as the long, thin leaves begin to float on the surface of the water, this becomes the floating leaf stage of growth. Finally, the rice will then grow up out of the water into an upright position to reach the growth stage when it is a mature wild rice plant. Wild rice has a growing season of 106 to 130 days.

White Lake has long supported wild rice beds in many parts of the lake. Over the past several years we have documented the presence of wild rice on the lake. During the summer of 2018, we noticed that wild rice beds in the Village Basin area had increased considerably and now covers a significant area in this basin. This observation led to a complete study of the entire shoreline and shallow areas of White Lake in order to document the areas of wild rice.

As a result of our survey, we have produced a map showing the locations of wild rice beds.

Wild rice was found in most parts of the lake with the exception of Three Mile Bay and most of the western shore except at Sunset Bay, Barry's Island, and the Village Basin.

Clearly there is not enough rice to harvest in quantity and for this reason, it is best to simply allow local wildlife to enjoy this bounty.





Location of Wild Rice Beds on White Lake