



Manoomin and its Preferred Growing Conditions

Organization:

Title: Manoomin and its Preferred Growing Conditions

Summary: Students learn about the cultural significance of Manoomin for the Anishinaabe and about its preferred growing conditions. Next, students hypothesize and conduct tests to determine whether Manoomin could grow at their location.

Inquiry Question: Inquiry Question 5: What are some ways Indigenous communities are engaging in reciprocal relationships with each other and the natural world in order to mitigate the negative impacts of climate change?

Duration: Approximately 2-3 class periods

Learning Environment: Classroom, outdoor

Season: Summer, Spring, Fall

Materials:

- Projector
- Black Duck Wild Rice: The Resurgence of Indigenous Food Sovereignty within the Kawartha Lakes Region: <https://www.youtube.com/watch?v=rKv2ikzxOU>
- Case-study of Black Duck Wild Rice written by Paula Anderson: <http://nourishingontario.ca/black-duck-wild-rice-a-case-study/>
- *Cottagers and Indians* (2019) by Drew Hayden Taylor
- Growing Manoomin.ppt
- Growing Manoomin.pdf
- pH paper
- Device to measure lake depth
- Device to measure the chemical properties of substances that comprise lake sediment (testing equipment made available at the Elbow Lake Environmental Education Centre ELEEC)

Curriculum Links:

Grade 9 Destreamed: A1.1, A2.3, A2.4, B1.1, B1.2, B1.3, B2.1, B2.5

Grade 10 Academic: A1.1, A1.5, A1.6, A1.10, D1.1, D1.2, D2.9

Grade 10 Applied: A1.1, A1.5, A1.6, A1.10, D1.1, D1.2, D2.7

Meta Data:

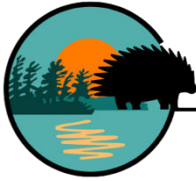
Content Type: Activity

Bundle: Food

Theme: Global Climate Change

Subject Area: Biology, Chemistry, Environmental Education, Geography, History, Outdoor Education, Science, Social Studies

Curriculum Focus: 9, 10



- Students watch the following video that explains the cultural significance/importance of Manoomin to the Anishinaabe locally:
Black Duck Wild Rice: The Resurgence of Indigenous Food Sovereignty within the Kawartha Lakes Region: <https://www.youtube.com/watch?v=rKv2ikzxOU>
- Teachers and/or students read through the following case-study of Black Duck Wild Rice written by Paula Anderson to learn more:
<http://nourishingontario.ca/black-duck-wild-rice-a-case-study/>
- Teachers may also wish to collaborate with the Language teacher by suggesting that the students read the book *Cottagers and Indians* (2019) by Drew Hayden Taylor in English class.
- Students review PPT made available in the **Manoomin Presentation.ppt** detailing the importance of Manoomin to the Anishinaabe locally.
- Students then read worksheet made available in the **Growing Manoomin.pdf** focused on growing Manoomin. Students learn about how it relies on very specific ecological factors in order to thrive.
- After learning about what these factors are, students are broken into groups. In groups, students hypothesize whether wild rice could be grown at the Elbow Lake Environmental Education Centre (or another site they are located near). Use the **Growing Manoomin.pdf** to guide this process. Students test several different sites at Elbow Lake (or other location if applicable) including the water depth, pH, conductivity, and the presence of other indicator species. After conducting these tests on the water and climatic features of Elbow Lake, groups will determine if they think wild rice could grow in Elbow Lake and where on the lake would be optimal.

The learning represented in these activities reflects Big Idea B. in the Indigenous Knowledge Learning Bundle: “Indigenous Knowledge is Place-Based”. To help your students learn more about this Big Idea check out the Learning Activities titled: *Land-Based Meditation*, *Land Acknowledgement Workshop*, *Ceremony Ensures Right Relations with the Land*, *The Clan System*, and *The 13 Moons* found in the *Indigenous Ways of Knowing and Being with the Natural World* Learning Bundle (Grades 7-10). Learning also reflects Big Idea C. in the Indigenous Knowledge Learning Bundle: “Reciprocity, Interdependence, and Holism are at the Heart of Indigenous Ways of Knowing and Being”. To help students learn more about these concepts, foundational to Indigenous ways of knowing and being, check out the Learning Activities titled: *Holism*, *The Honorable Harvest*, and *Our Responsibilities* found in the *Indigenous Ways of Knowing and Being with the Natural World* Learning Bundle (Grades 7-10).