



## Engaging in Reciprocity to Mitigate the Impact of Climate Change

### Organization:

**Title:** Engaging in Reciprocity to Mitigate the Impact of Climate Change

**Summary:** Students discuss environmental threats to Manoomin including climate change and infer how these environmental affects impact the cultural practices associated with harvesting Manoomin. Students research and present on an individual or community organization fighting to preserve and protect Manoomin.

**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:** 1 class period

**Learning Environment:** Classroom, online

**Season:** All

### Materials:

- Learning Activity 1: The Ohèn:ton Karihwatéhkwén from the Indigenous Knowledge Bundle
- Access to computers to conduct research

### Curriculum Links:

Grade 9 Destreamed: A2.4, A2.5, B1.1, B1.2, B1.3, B2.4, B2.6, B2.7

Grade 10 Academic: A1.3, A1.7, A1.9, A1.10, A1.11, A2.2, D1.1, D1.2, D2.9

Grade 10 Applied: A1.3, A1.7, A1.9, A1.10, A2.2, D1.1, D2.7

### Meta Data:

**Content Type:** Activity

**Bundle:** Food

**Theme:** Global Climate Change

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

**Curriculum Focus:** 9, 10

- Given the specific growing needs required by Manoomin, students hypothesize in discussion the ways in which climate change may impact Manoomin locally. Students also discuss how other factors such as biodiversity loss, invasive species, contaminants in the environment, and human behaviors (water use) may impact Manoomin growth. It is important to note that climate change is only one factor impacting Manoomin. It is also greatly impacted by water use and water level management. Students should further reflect on how these threats to wild rice will impact the cultural practice associated with the growing, harvesting, and preparation of Manoomin. Time permitted



this could be extended into an inquiry project with small groups researching different threats to Manoomin locally.

## Extension Activity: The Ohèn:ton Karihwatéhkwén

- Teachers review Learning Activity 1: *The Ohèn:ton Karihwatéhkwén* from the Indigenous Knowledge Bundle with students.
  - To do this Students listen to a song containing the Ohèn:ton Karihwatéhkwén (in language: <https://www.youtube.com/watch?v=0PztCBgXxio> ).
  - Students watch a video clip embedded on the QUILLS website of Kanyen'kehá:ka (Mohawk), Wolf Clan educator Liv Rondeau sharing the Ohèn:ton Karihwatéhkwén.
  - Additionally, students watch a clip embedded in the ten-minute video accompanying this Learning Bundle of Liv Rondeau sharing and discussing the cultural significance of the Ohèn:ton Karihwatéhkwén.
  - Students reflect on the value and importance of all things in the natural world and, accordingly, the importance of protecting Manoomin in addition to all of its relatives that rely on it and on which it relies.
- Students then conduct further research into resistance movements intended to protect Manoomin. Background Information:
  - <https://ijc.org/en/climate-change-and-dams-present-challenges-wild-rice-rainy-lake>
  - <https://www.blackduckwildrice.net>
  - <https://www.aljazeera.com/features/2016/2/20/canadas-wild-rice-wars>
  - <https://gem.cbc.ca/media/cbc-docs-pov/s04e01>

Students prepare a “*Snapshot of Resistance*” focused on the work of a local community member who is fighting to protect Manoomin. Work should include information on the positive impact of wild rice on local habitat (ie: wild rice filters water and provides food and nesting materials for animals such as loons and muskrats) as well as a discussion of how the revival of practices not only has the potential to revitalize culture, but also to promote biodiversity.

The learning represented in these activities reflects Big Idea A. in the Indigenous Knowledge Learning Bundle: “Indigenous knowledge is contained in language and storytelling”. To help your students learn more about this foundational idea check out the Learning Activities titled: *Ohèn:ton Karihwatéhkwén (The Words that Come Before All Else)*, *The Importance of Storytelling*, and *Creation Stories and Language* found in the *Indigenous Ways of Knowing and Being with the Natural World* Learning Bundle (Grades 7-10).



# QUILLS

Queen's University Indigenous Land-Based Learning STEM  
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The learning represented in these activities 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 your 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).