

# QUILLS

Queen's University Indigenous Land-Based Learning STEM Queen's University Biological Station

## Indigenous Land-Based Knowledge

### Organization:

Title: Indigenous Land-Based Knowledge

**Summary**: Through discussion and an optional plant identification activity, students learn about Indigenous Land-Based Knowledge. Students also examine a particular case study in which Indigenous land-based knowledge is being used by community members in Saugeen First Nation to monitor, understand, and raise awareness about how climate change is impacting the local whitefish population. To consolidate learning, students can engage in an optional long term monitoring project of their own.

**Inquiry Question:** Inquiry Question Four (Gifts of the Lake): How does Indigenous knowledge help us to understand the impact of climate change?

Duration: 1 class period

Learning Environment: Classroom, outdoor

Season: Summer, Spring, Fall

Materials:

- Computer with projector
- Access to the Elbow Lake Environmental Education Centre
- Indigenous Land-Based Knowledge.pdf
- Learning from the Plants.pdf
- Indigenous and WS Plant Knowledge.pdf
- Bagidiwaad Alliance.pdf
- Discussion Questions.pdf

#### Curriculum Links:

Grade 9 Destreamed: A1.1, A1.5, A2.3, B1.1, B1.2, B1.3, B2.4, B2.6 Grade 10 Academic: A1.4, A1.10, A1.11, D1.1, D1.2, D2.3, D2.9, D3.8 Grade 10 Applied: A1.4, A1.10, A1.11, D1.1, D2.7, D3.7

#### 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

We recommend inviting an Indigenous Knowledge Keeper or community member in to help communicate holistically what Indigenous Knowledge is to your students.





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Teacher discusses with students how, like Western Scientists, Indigenous peoples also often examine bodies of water to understand the impacts of climate change on their communities. Indigenous ways of knowing are often referred to as Traditional Ecological Knowledge (TEK). In the QUILLS program, however, we refer to these ways of knowing and being as Indigenous Land-Based Knowledge (IK). This is because TEK often ignores the holistic nature of IK. IK is a type of observational land-based knowledge gathered over time. IK is valuable, as understanding how a land-base has changed over time can complement the knowledge collected by scientists.

 Teacher shows the following video as a way of introducing TEK/IK: <u>https://www.youtube.com/watch?v=xlGnve1cjOY</u> To further introduce IK, teacher can lead a discussion with students. Background information is provided for teachers in the **Indigenous Land-Based Knowledge.pdf.**

**Optional Extension:** 

• Students engage in activity found in Learning from the Plants Creating your own Food Guide.pdf to learn more about Indigenous land-based knowledge. To facilitate the activity use Indigenous and WS Plant Knowledge.pdf.

### Activity:

- Students learn about a specific case in which Indigenous land-based knowledge is being utilized to make important change. Natasha Akiwenzie and Victoria Serda from Saugeen First Nation on the Bruce Peninsula shared with QUILLS how the community is using Indigenous land-based knowledge to monitor, understand, and raise awareness about the impact of climate change on their local white fish population.
- Teacher shows students the following video to introduce them to the impact of climate change on white fish populations in the Georgian Bay: *Adikameg and Ice:* <u>https://www.youtube.com/watch?v=E1elomzTWyw</u>
- Students then read story written by the Natasha Akiwenzie (co-founder of the Bagidiwaad Alliance): <u>https://climateinstitute.ca/publications/the-bagidawaad-alliance/</u> found in **Bagida'waad Alliance Case Study.pdf.**
- Last, in discussion with teacher students answer the questions found in **Discussion Questions.pdf.**

**Optional Extension:** 

 Students engage in their own long-term observational monitoring project by interviewing family members, teachers, or friends who have lived in the Kingston/ Frontenac Arch area about what local lakes looked like in past generations and changes that have been observed. Students can share their findings in a class Talking Circle. (Instructions regarding how to conduct a talking circle in a good way are included in the QUILLS Teacher's Guide.)