

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

### Rope Making

### Organization

Title: Rope Making

**Summary**: Students learn what rope is made from by local Indigenous groups, make their own rope, and practice knot tying. Teachers leads a discussion with students regarding the impact of invasive species such as purple loosestrife on Indigenous land-based practices such as cattail mat weaving, basket making and rope making.

**Inquiry Question:** Inquiry Question 1. What are some local culturally significant tools and technologies that when utilized enter local Indigenous groups into a relationship of reciprocity

with the natural world? **Duration:** 2-3 class periods

Learning Environment: Classroom, outdoor

Season: All Materials:

Rope Making Activity.pdf

- Video by Anishinaabe Knowledge Keeper Caleb Musgrave (publicly available on the Canadian Bushcraft YouTube channel) focused on how to create rope. Caleb Musgrave-Basics of Cordage: <a href="https://www.youtube.com/watch?v=HUhuqtHR3Rc">https://www.youtube.com/watch?v=HUhuqtHR3Rc</a>
- Video segment on the QUILLS website of Mandy Wilson, a member of Shabot
   Obaadjiwan First Nation, and woman of mixed ancestry including Haudenosaunee and
   Algonquin, demonstrating how to make rope from cattails
- Optional Extension Activity: Rope Making Board Instructions.pdf
- Knot Tying Instructions.pdf
- Purple Loosestrife Cordage Implications.pdf
- Access to the Elbow Lake Environmental Education Centre

#### **Curriculum Links:**

Grade 7 Science and Technology: A1.1, A1.3, A3.3, B1.2, B1.3, B2.5

Grade 9 Science: A1.1, A1.3, A2.2, A2.3, A2.5, B1.3, B2.7

Grade 9 Academic Geography: C1.4

#### Meta Data:

**Content Type:** Activity

Bundle: Tools

**Theme:** Invasive Species

Subject Area: Biology, Environmental Education, Geography, Outdoor Education, Science,

**Curriculum Focus:** 7, 9



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This activity is offered at the Elbow Lake Environmental Education Centre.

Note that if harvesting materials from the land to make cordage an Indigenous community members should be invited into the learning environment to provide teachings related to the Honorable Harvest.

- Rope making is a universal activity that Indigenous and non-Indigenous peoples from around the world engage(d) in.
- Traditionally rope was utilized by local Indigenous groups for many different purposes. For
  instance, it was used to make snowshoes, make fishing nets and lines, engage in hunting
  and trapping, carry, and lift heavy items, etc. It was also used to build structures such as
  wigwams and long houses where people lived.
- Locally, Anishinaabe Knowledge Keeper, Caleb Musgrave, from Hiawatha First Nation in his
  program Canadian Bushcraft and Candace Lloyd whose family is from Cross Lake Island,
  Saskatchewan and Sault St. Marie, Ontario teach that rope was/is made from harvesting a
  number of things including bark, roots, grasses, vines shoots, rawhide, intestines,
  tendons/sinews, etc.
- Handout on materials used to make rope can be found in Rope Making Activity pdf. Please
  note that an Indigenous community member should be invited into the learning
  environment and the principles of the Honorable Harvest should be followed when
  collecting materials for rope making. To learn more about the Honorable Harvest review
  Learning Activity 6: The Honorable Harvest from the Indigenous Knowledge Learning
  Bundle.
- Students watch the following video by Anishinaabe Knowledge Keeper Caleb Musgrave (publicly available on the Canadian Bushcraft YouTube channel) focused on how to create rope. Caleb Musgrave- Basics of Cordage: https://www.youtube.com/watch?v=HUhuqtHR3Rc
- Students can also watch video segment on the QUILLS website of Mandy Wilson, a member of Shabot Obaadjiwan First Nation, demonstrating how to make rope from cattails.
- Using the worksheet titled Rope Making Activity.pdf students engage in rope making with teacher. Worksheet distills teachings from video featuring Mandy Wilson into steps that can be followed by students. This activity will also be offered at ELEEC.

### Extension:

• Teacher can use rope created by students to create a rope tying station in their classroom (or at Elbow Lake). Store bought rope can also be used. Students learn different knots using examples on the knot board and are given the opportunity to master knots using loose strands of rope provided on the board.



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- Anishinaabe Knowledge Keeper Caleb Musgrave from Hiawatha First Nations shares in his
  podcast Canadian Bushcraft that some useful knots to know are the clove hitch, the jam
  knot, the taut-line hitch, the prussik/larkspur, the event slippery hitch, the bowline, the
  square knot, the sheet bend, and the square lashing.
- Instructions regarding how to build a rope board are included in the **Optional Extension Activity**: **Rope Making Board Instructions.pdf**
- Instructions regarding how to tie different knots is included in the Knot Tying Instructions.pdf.

### Western STEM Connection:

Students review the following study by reading through handout in **Purple Loosestrife Cordage Implications.pdf** and watching video linked to on sheet.

Colautti, R. I., and Barrett, S. C. H. (2013). Rapid adaptation to climate facilitates range expansion of an invasive plant. Science, 342(6156), 364-366.

- Teachers leads a discussion with students regarding the impact of invasive species such as purple loosestrife on Indigenous land-based practices such as cattail mat weaving, basket making and rope making. Discussion should also touch on the implication that climate change has on purple loosestrife adaptations showing the complexity of the interplay between many of the threats facing the environment.
- When reflecting on how purple loosestrife changes with climate change, reflect on what this
  means for native plant species ie: in many cases native species not only have to deal with
  the impact of a changing climate but also with increased competition from invasive species
  (like purple loosestrife) more adept at adaptation.



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The learning represented in this activity 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).