

## **Saint John's Outdoor University Field Trip Overview**

### **Maple Syruping**

**Objective:** Students will discuss the main concepts of maple syruping, including its North American history, tree anatomy, mechanism of sap flow, and winter tree identification. Students will also participate in hands-on activities of the maple syrup production process, including maple tree tapping, maple sap collection, a tour of the sugar shack and evaporator, and taste testing a sample of real maple syrup.

#### **Field Activities:**

**Maple Tree Tapping:** Students will learn how to identify maple trees during the winter and participate in the process of correctly tapping a tree for sap flow. Students will also discuss how sap flows and why spring is the favored time for sap collection.

**Maple Sap Collecting:** Students will work in teams to participate in collecting sap from the tapped trees and transporting the sap to a central collection area.

**Sugar Shack and Evaporator Tour:** Students will see how the sap is converted to syrup by viewing the working evaporator and a small-scale model. Students will also discuss and view the entire syrup-making process, including measuring the sugar content, evaluating the grade of syrup, filtering the syrup, and bottling procedures.

**Taste Test!:** Students will be able to taste a sample of real maple syrup made at Saint John's. Students will also learn the difference between real maple syrup and other types of syrup. Everyone's favorite part!

#### **Key points covered in each class: (dependent on age of students)**

- Tree Tapping
  - identifying maple trees in the winter
  - procedure for correct tree tapping
  - why and how sap flows
  - tree anatomy
- Sap Collection
  - collection of sap from trees
  - importance of team work
  - what about all the bugs??
- Sugar Shack and Evaporator
  - Rule of 86
  - equipment used (hydrometer, refractometer, temperature gauge)
  - evaporation process
  - finishing and filtering syrup
  - history of syruping by Native Americans and at Saint John's

#### **Other resources for maple syruping information:**

Overview of history and process of maple syruping at Saint John's

[www.csbsju.edu/outdooru/abbeyarboretum/maplesyrup](http://www.csbsju.edu/outdooru/abbeyarboretum/maplesyrup)

[www.andersonsmaplesyrup.com](http://www.andersonsmaplesyrup.com) Order your own supplies at Anderson's Maple Syrup

*At Grandpa's Sugar Bush* by Margaret Carney and Janet Wilson

*Sugaring Time* by Kathryn Lasky

*Keepers of the Earth* by Michael J. Caduto and Joseph Bruchac.

Chapter 17 'Manabozho and the Maple Trees'