# Identifying Northern Plant Species

**Objective:** To familiarize students with northern plants and their classification

**Introduction**: Both in the past and present, recognizing plant characteristics and naming plants has helped humans to identify and communicate with others about specific plants, whether they be a food source, medicine or aesthetic. This lesson aims to introduce students to naming and recognizing some of the plants in their community.

## **Curriculum Connections:**

Science Strand: Diversity of Life (Plant characteristics, classification, dichotomous keys)

Dene Kede Thematic Units: Animals, People

## Supplies / Materials:

- Plant Watch North booklets or computers to access the website
- Area to observe plants or if not possible plant pictures or samples
- Sketch-books or cameras

**Hook**: Write the Latin names for some common plants in your community (distribution maps are included in the Plant Watch North Booklet). Have students work in partners to 'translate' the Latin name into a common name.



## **Lesson Subject**

Science 6

## **Topic**

Diversity of Life

## Location

Classroom and/or Field

# Length

2 periods

## Date

Spring, ideally before flowing blooming



**Intro Activity**: Ask for a few suggestions to demonstrate that people can refer to plants by many different names (imagine speaking a different language). This is why Latin names are given. Have students notice how the Latin names are written (*Genus species*). Explain that the genus is a generic name (i.e. like a last name) and species a specific name. Many plants are grouped into the same genera by flower type. Species names are usually an adjective.

## Main Activity:

- 1) Have students pick out 4 plants in the booklets/website that live in your community or nearby (alternatively assign these plants)
- 2) Ask students to group plants by similar characteristics (they may choose flower colour, leaf shape, size etc.). Then have them find individual characteristics to break down their group into individuals.
- 3) Have a few share how they came to their groupings. Tell them that they are going to have to identify their plants in the outdoors (or from pictures/samples). Ask them how they will do so if there is no flower (leaf shape, size etc.).
- 4) Have them revise their groupings and individual recognition based on the above. Let them know they made a simple dichotomous key.
- 5) In the next class period take the students outside to observe plants and use their keys. If there are plants they cannot identify have them sketch or photograph those plants. They may want to try to use reference books or community members to help ID them.
- 6) If possible make repeated site visits and record bloom times for identified plants and submit to Plant Watch (see Plant Watch booklet/website for detailed instructions)

**Independent Student Work**: Have students sketch and make notes about the plants they identify in the field.

**Conclusion / Review**: Review plant names and classification. Talk about good observations of plants.

**Homework**: Ask students to visit site repeatedly and make their own observations if class visits are not possible.

## **Resources:**

- 1. Plant Watch North; Your Plantwatch Field Guide for Northern Canada. https://www.naturewatch.ca/plantwatch/
- 2. Wild and Wacky Plants of the NWT: <a href="http://nwtarts.com/sites/default/files/wild\_and\_wacky\_plants\_of\_the\_nwt.pdf">http://nwtarts.com/sites/default/files/wild\_and\_wacky\_plants\_of\_the\_nwt.pdf</a>

3. What's Blooming? Guide to 100+ plants of the NWT by Alexandra Millburn

## **Extension:**

- 1. View plant watch data (Resource 1 use AB data as NWT observations are scant) and see how plant bloom times are being affected by climate change. Link this to the electricity unit and what we can do to be good energy stewards to mitigate climate change.
- 2. Plant an area of native plants in your schoolyard or another public area.