

Bogs

Bogs are peatlands that have a thick layer of poorly decomposed organic material (peat). Bogs are raised above the surrounding ground level. Of all wetlands, bogs are the most nutrient-poor systems. They are very widespread across Canada, particularly in the arctic and sub-arctic regions.

Identifying Characteristics

- Moisture is received from rain, snow and fog
- Water table at or near surface
- Nutrient poor
- Low diversity of plant species
- Common plants include sphagnum moss, ground and tree lichens, low-lying shrubs, and stunted black spruce
- Deep peat layer formed by slowly decomposing organic materials
- Acidic environment

Benefits and Functions

- Peatlands store carbon and reduce the effects of global warming
- Help prevent downstream flooding by absorbing precipitation
- Support plants commonly used by people, including cranberries, blueberries, and Labrador tea



Treed bog, near Ross River—J. Hawkings

Types of Bogs

- **Open bogs** are comprised mostly of sphagnum moss and sparse sedges
- **Shrubby bogs** support low-lying shrubs, bog cranberry, and blueberries
- **Treed bogs** are identified by stunted black spruce with a moss and shrub understory



Shrubby bog, near Old Crow—J. Hawkings



Open bog, near Old Crow—J. Hawkings



black spruce

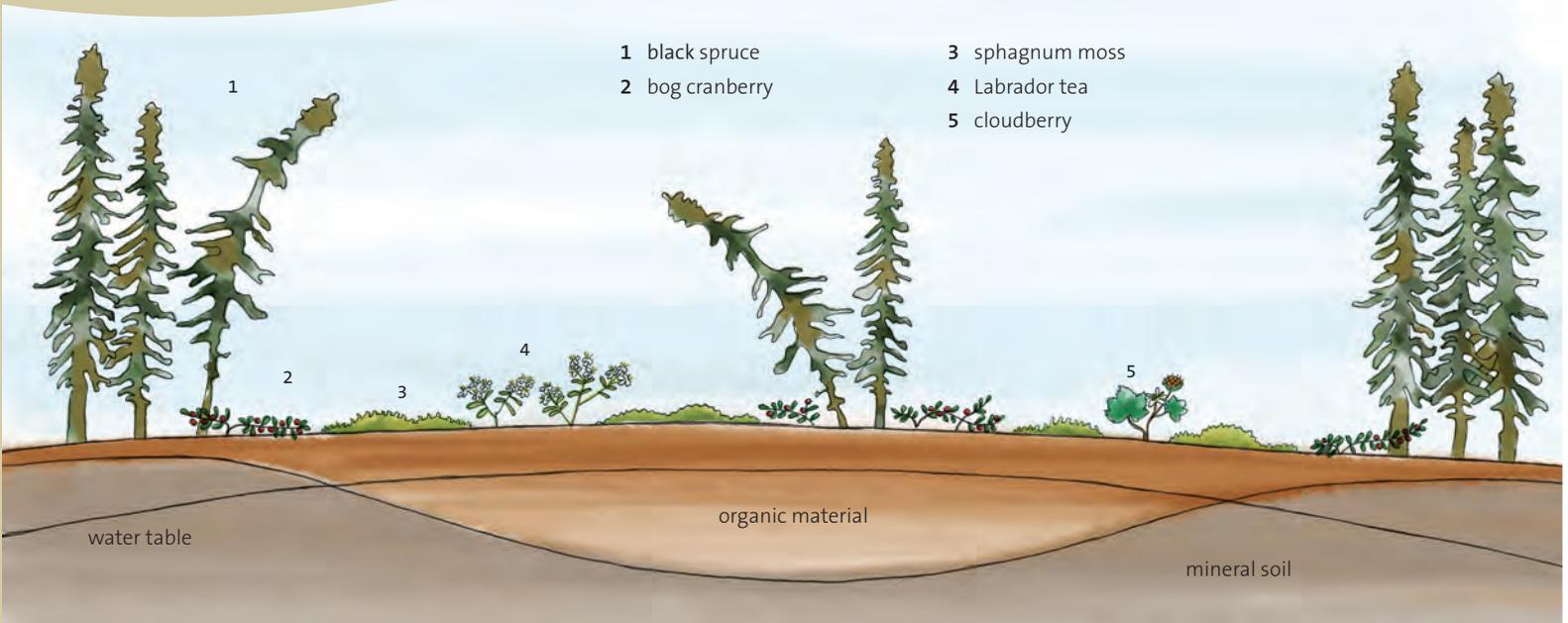
Drunken Forest

Bogs are commonly associated with permafrost features on the landscape. Black spruce trees that appear to be leaning in multiple directions are often an indication of either melting or heaving permafrost below the surface. Permafrost occurs in regions where the soil remains frozen throughout the year.



Black spruce drunken forest
—Yukon Government

Yukon Wetlands Bogs



- 1 black spruce
- 2 bog cranberry
- 3 sphagnum moss
- 4 Labrador tea
- 5 cloudberry

Bogs have two distinct peat layers, the top living layer that can contain and release large amounts of water to maintain the water table, and a lower dead layer which can store large amounts of water. Plants found in bogs must be very adaptable to humidity, acidity and nutrient-poor soils. Bogs are known to be nutrient poor because minerals are received only by aerial deposition (pollen, ash, and dust). Black spruce are often associated with northern bog systems, however open and shrubby bogs are also common.

For centuries people have used bogs to gather food and medicinal ingredients.



Top: Cranberries and lichens
—Yukon Government



Middle: Woodland caribou
— C. Eckert

Bottom: Labrador tea
—Yukon Government



Sundew—S. Forest

