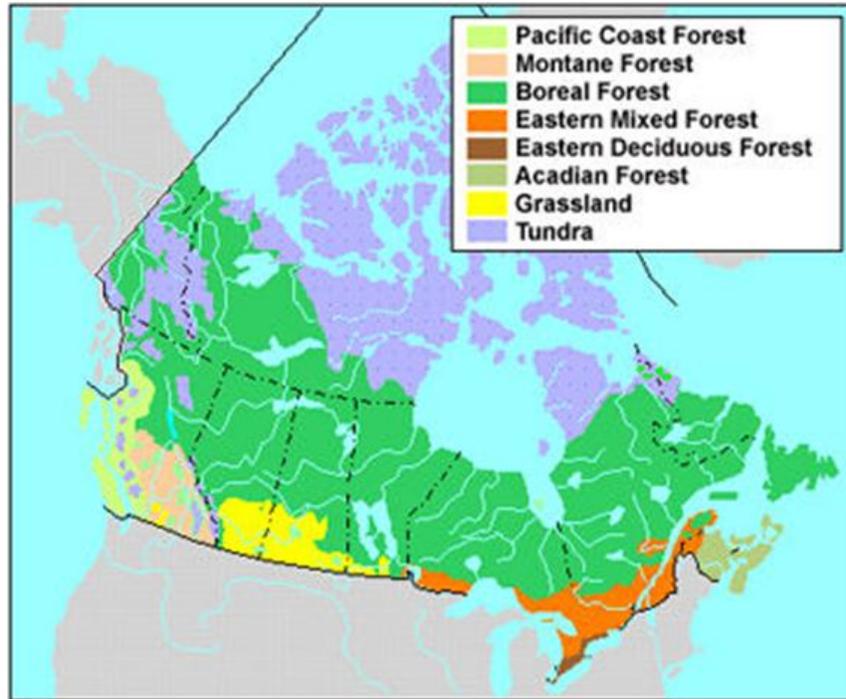


Canada's Boreal Forest

Canada's Boreal Forest region stretches 10,000 continuous kilometers across Canada's breadth. Its size rivals even that of the Amazon Rain Forest! As one of the world's greatest remaining forests, the boreal forest provides an important haven for the many creatures that inhabit its vast canopy, lakes and wetlands. From afar, this rugged green swath of vegetation seems tranquil and untouched; free from roads, development and human influences. Such is not the case. Forest harvesting, hydropower development and mineral exploration and mining have drastically altered the forest landscape. Sound management is a must to ensure conservation efforts are practiced to protect the Boreal Forest for future generations.

The bison, North America's largest land mammal, wanders throughout the northern boreal forest while the world's smallest carnivore, the least weasel, has its primary residence in the regions underground. The world's largest population of woodland caribou, black bears, and wolves roam this frontier and billions of birds such as warblers, thrushes, waterfowl and shorebirds, frequent this region to court, breed and raise their young.

This forest is characterized by a northern climate resulting in cold soils, slow decomposition of organic matter, low nutrient levels and slow tree growth. White spruce and black spruce symbolize the Boreal Forest, with numerous other softwood (coniferous) and hardwood (deciduous) species. The Boreal Forest is also home to hundreds of First Nations communities that rely on the forest's resources.



In Saskatchewan, the Boreal Forest is described through the ecological classification system (ECS). This system is based on the characteristics of the ecosystem components of air, water, land, biota and humans.

The first level of classification is **Ecozones** of which Saskatchewan has four:

Taiga Shield	Boreal Shield
Boreal Plain	Prairie

Ecozones are characterized by major physiographical features.

Ecozones are subdivided into **Ecoregions** which have distinct climate zones and regional landforms.

Ecoregions are further divided into **Ecodistricts** (landscape areas) with distinct landforms, relief, surface geological material, water bodies, vegetation and land.

The Ecodistrict (landscape area) is further divided into **Ecosites** which are identified by specific plant species that are common or is a typical expression of available moisture and nutrients, e.g., blueberry. A good knowledge level of most of the plants in the forest is required at this level.

1. TAIGA SHIELD ECOZONE

land of little sticks and lakes north of Lake Athabasca,
Wollaston and Reindeer Lakes
transition between Boreal Shield and the Southern Arctic
mineral exploration

Selwyn Lake Upland Ecoregion

NE corner of Saskatchewan flat lichen woodlands with black
spruce barren-ground caribou and arctic fox

Taiga Lake Upland Ecoregion

north side of Lake Athabasca rugged Precambrian rock black
spruce and jack pine willow ptarmigan

2. *BOREAL SHIELD ECOZONE – 1/3 of the province
forest and shield

2 distinct ecoregions: sand over rock and rock (outcrops)
black spruce and jack pine arctic grayling and lake trout
(cold water fish)

Athabasca Plain Ecoregion – sand over rock flat landscape
jack pine and lichen uranium mining

Churchill River Upland Ecoregion – the largest ecoregion
in the province
40% of the area is covered with lakes and fast flowing rivers jack
pine and black spruce bald eagles gold and uranium forest
industry, fur trapping, hunting, tourism, sports fishing

3. BOREAL PLAIN ECOZONE

3 ecoregions W-E-S level to gently rolling landscape with
pockets of upland: Porcupine Hills, Pasqua Hills, and
Duck Mountain
covered with 100 to 250 meters of glacial sediment
species richness and productivity high

Mid-Boreal Upland Ecoregion

major upland with flat top merchantable timber beaver warm water
fish: northern pike, walleye, whitefish

Mid-Boreal Lowland Ecoregion

low-lying area fens and peatlands (sedges and peatmoss)

Cumberland delta – levees and river channels
moose, muskrat and loon northern pike forestry, ecotourism,
hunting, sports fishing, hiking, wildlife viewing

Boreal Transition Ecoregion

forest and agriculture aspen most common over white spruce and jack pine fewer wetlands and lakes
river valleys of the North and South Saskatchewan Rivers forestry mills in Meadow Lake and Hudson Bay lots of red squirrel

4. PRAIRIE ECOZONE – grassland level to gently rolling landscape plus the Cypress Hills farming

Aspen Parkland Ecoregion

aspen groves and fescue grass aspen on moister sites river valley, sloughs and potholes (ducks)

Mixed Grassland Ecoregion

mid and short grasses wheat grass, speargrass and blue gramma grasses

50% cultivated and rangeland (cattle) oil and natural gas

Grasslands National Park pronghorn antelope

Cypress Upland Ecoregion

flat top upland cobble stone lodgepole pine north facing slopes are treed south facing slopes are grass rangeland

www.saskschools.ca/curr_content/science9/.../lesson06t.html

www.virtualsk.com/maps/index.html