

A satellite-style map of Canada is shown, with the northern regions appearing in shades of white and light blue, indicating snow or ice. The southern regions are in various shades of green and brown, representing different vegetation and terrain. Overlaid on the map is the title "Soils and Vegetation of Canada" in a large, bold, brown, 3D-style font. The text is arranged in two lines: "Soils and Vegetation" on the top line and "of Canada" on the bottom line, centered horizontally.

Soils and Vegetation of Canada

Think and Share Activity

What is soil?

Why do you think soil is important to all of us?



Gravel

what is soil
made of ?



Water



Sand



Air



Silt



Nutrients



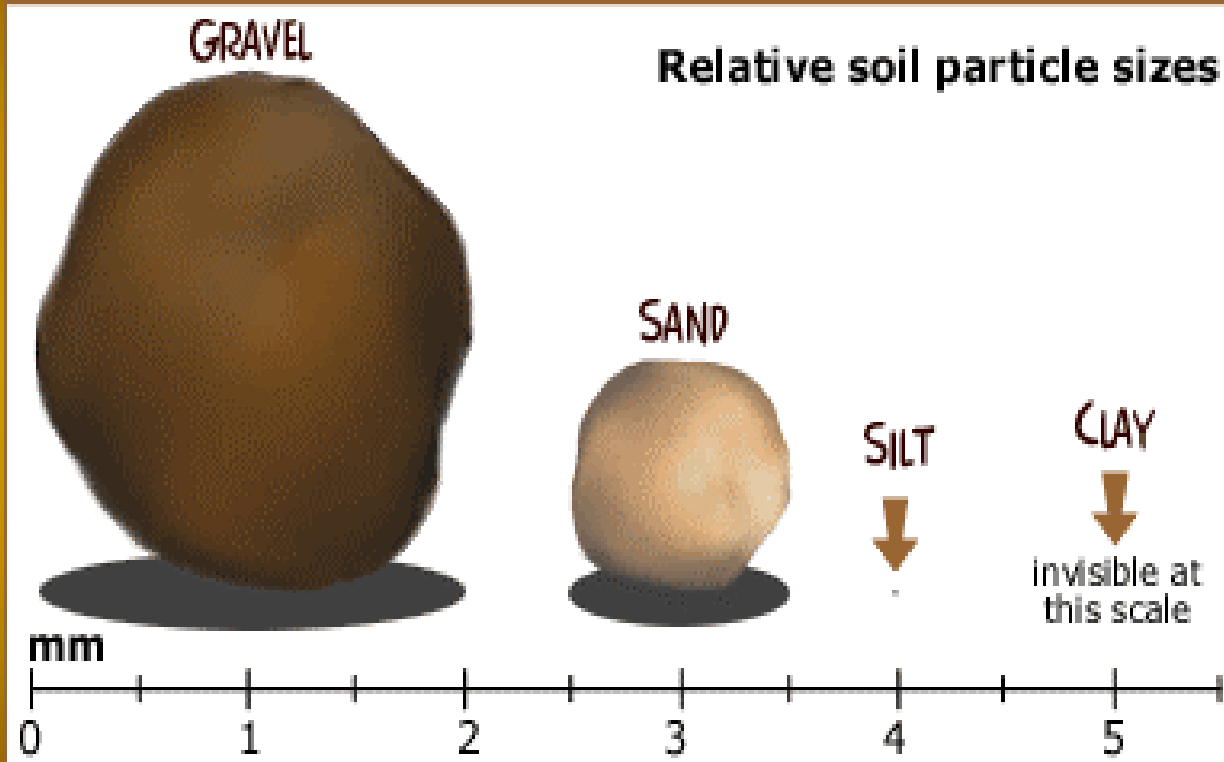
Clay



organic
things



How big are soil particles?

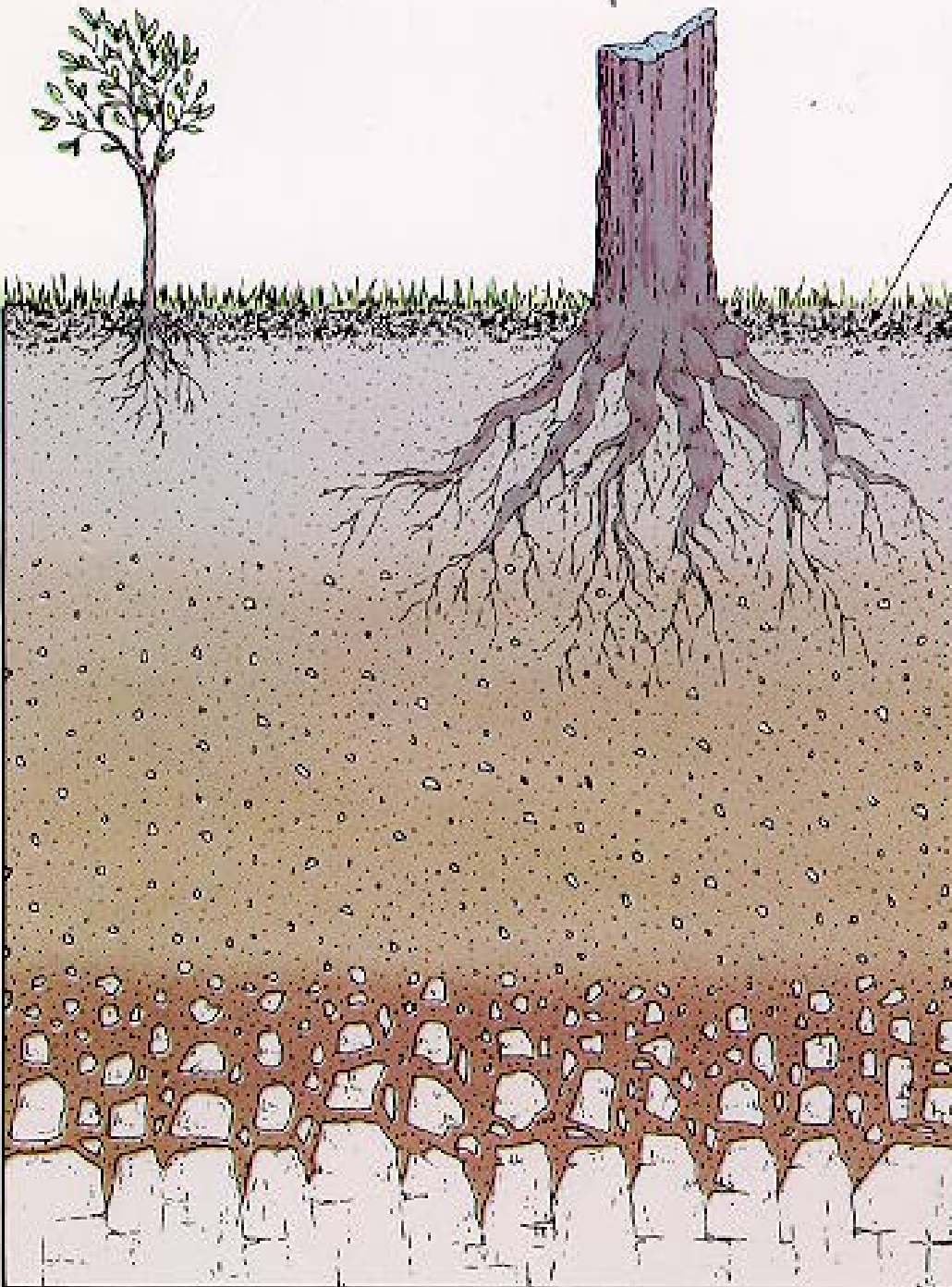


What are Soil Horizons?

If you dig a deep hole, you will see that soil is made of layers, called horizons.



Soil Horizons



‘O’ horizon is the humus layer , with partially decomposed organic mater

‘A’ horizon is the topsoil, dark and rich

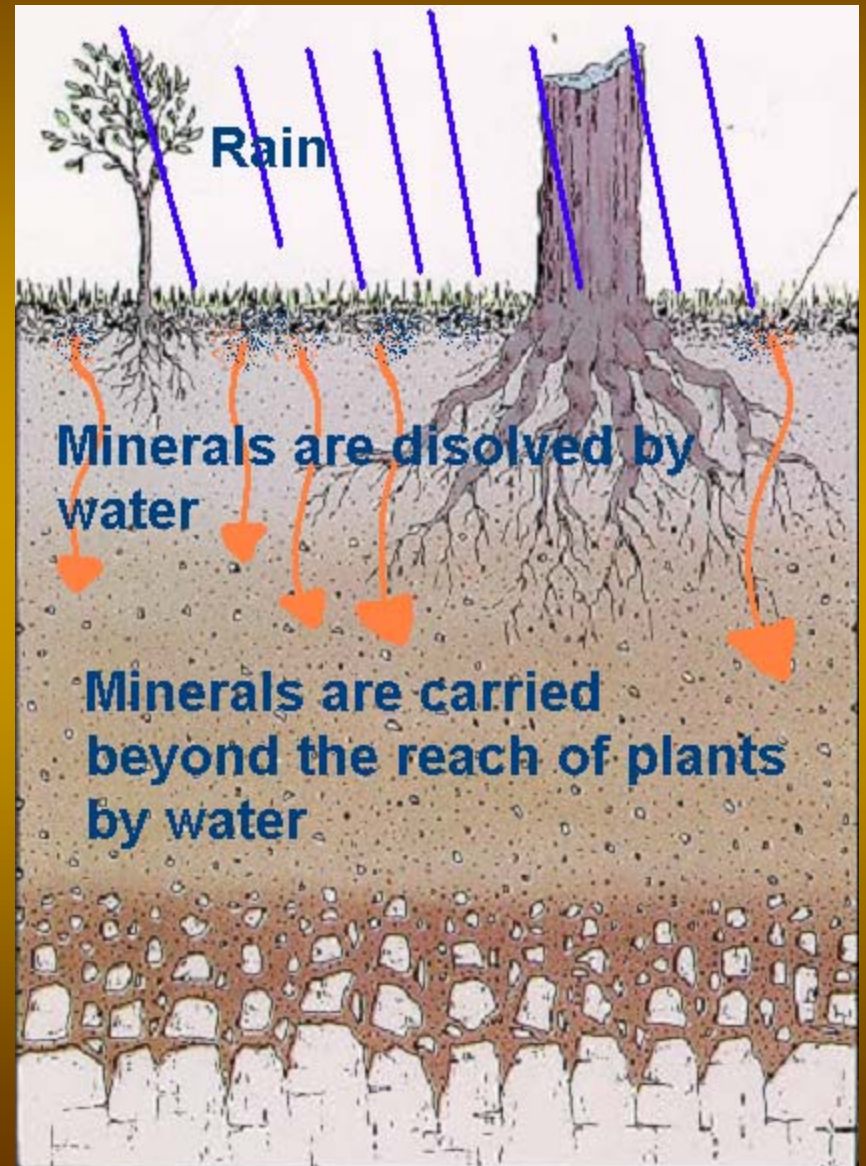
‘B’ horizon is the subsoil, many minerals are built up in it

‘C’ horizon is unfertile, with broken up rock fragments

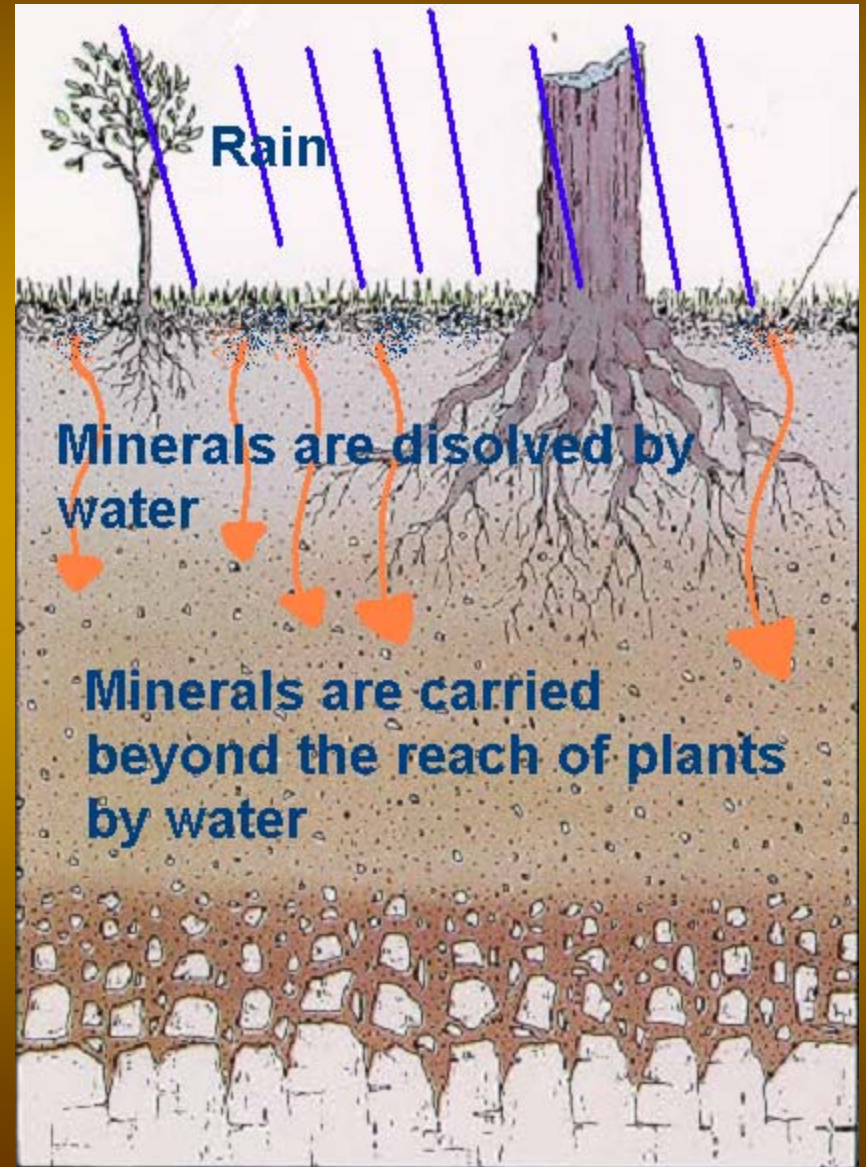
‘D’ horizon is unfertile, solid bedrock

What is Soil Leaching?

Loss of nutrients caused by the draining of water through the soil.



What is Soil Leaching?

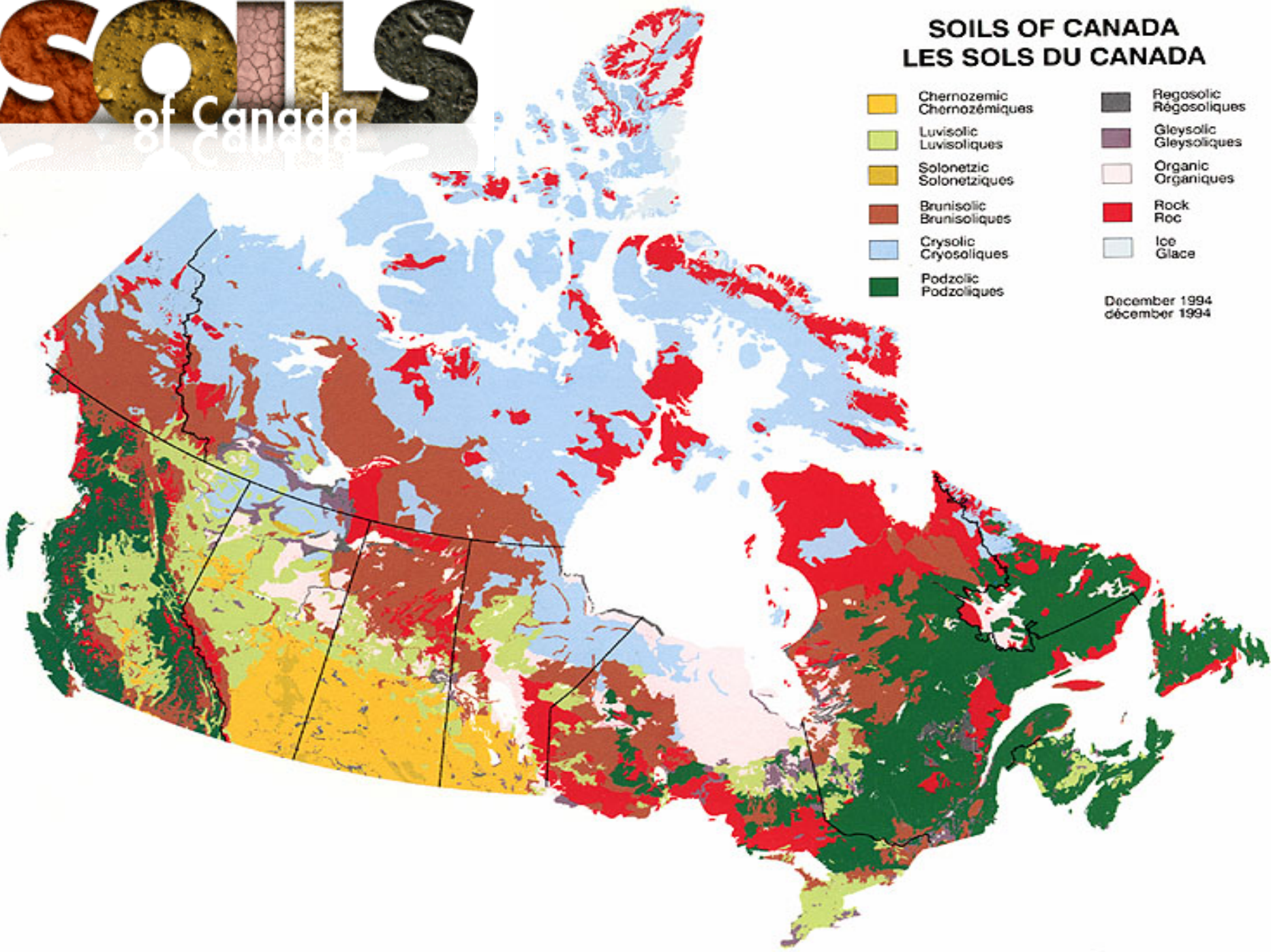


SOILS of Canada

SOILS OF CANADA LES SOLS DU CANADA

- | | | | |
|---|-------------------------------|---|---------------------------|
|  | Chernozemic
Chernozémiques |  | Regosolic
Régosoliques |
|  | Luviosolic
Luviosoliques |  | Gleysolic
Gleysoliques |
|  | Solonchic
Solonchiques |  | Organic
Organiques |
|  | Brunisolic
Brunisoliques |  | Rock
Roc |
|  | Cryosolic
Cryosoliques |  | Ice
Glace |
|  | Podzolic
Podzoliques | | |

December 1994
décembre 1994



MOUNTAIN

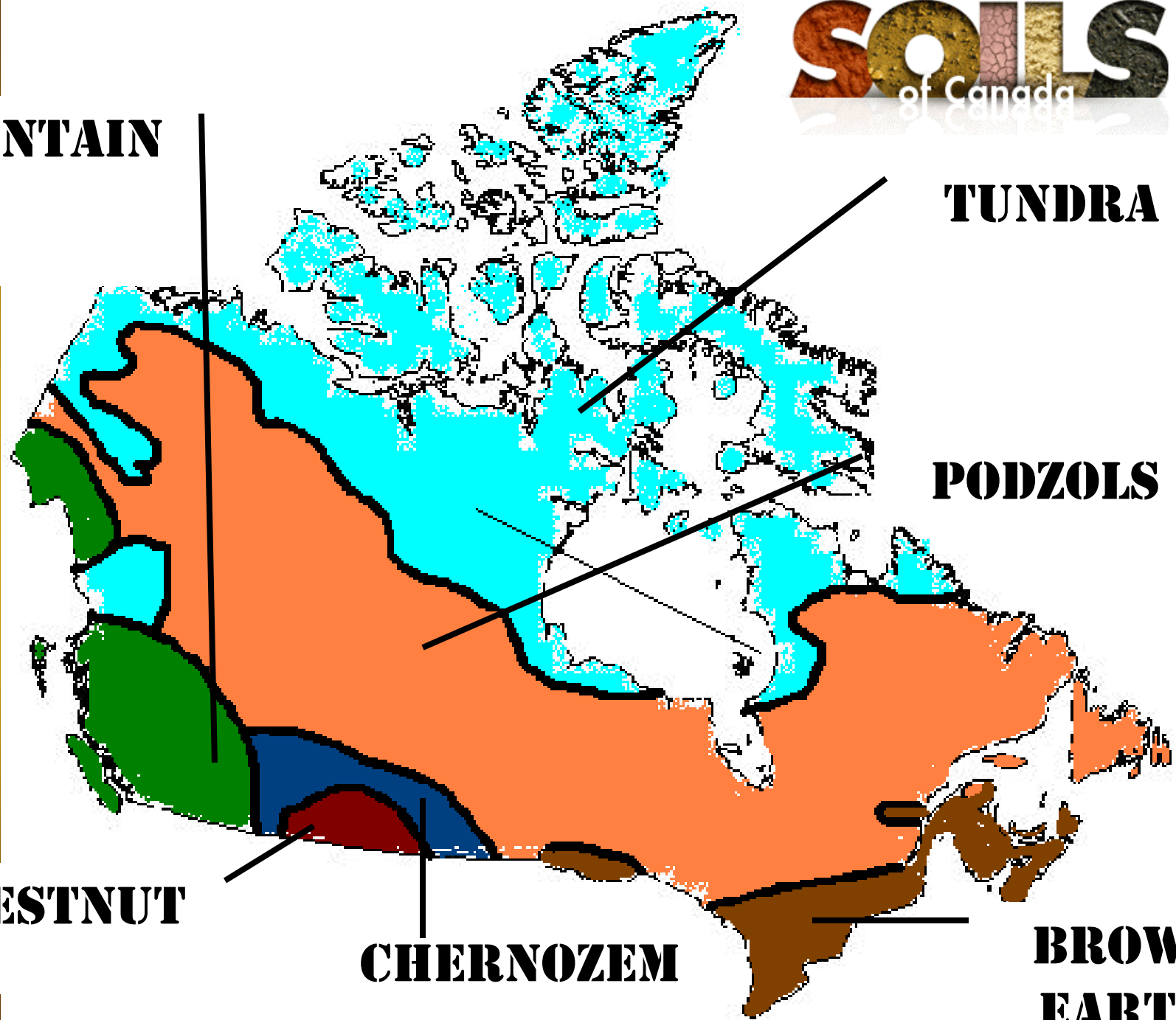
TUNDRA

PODZOLS

CHESTNUT

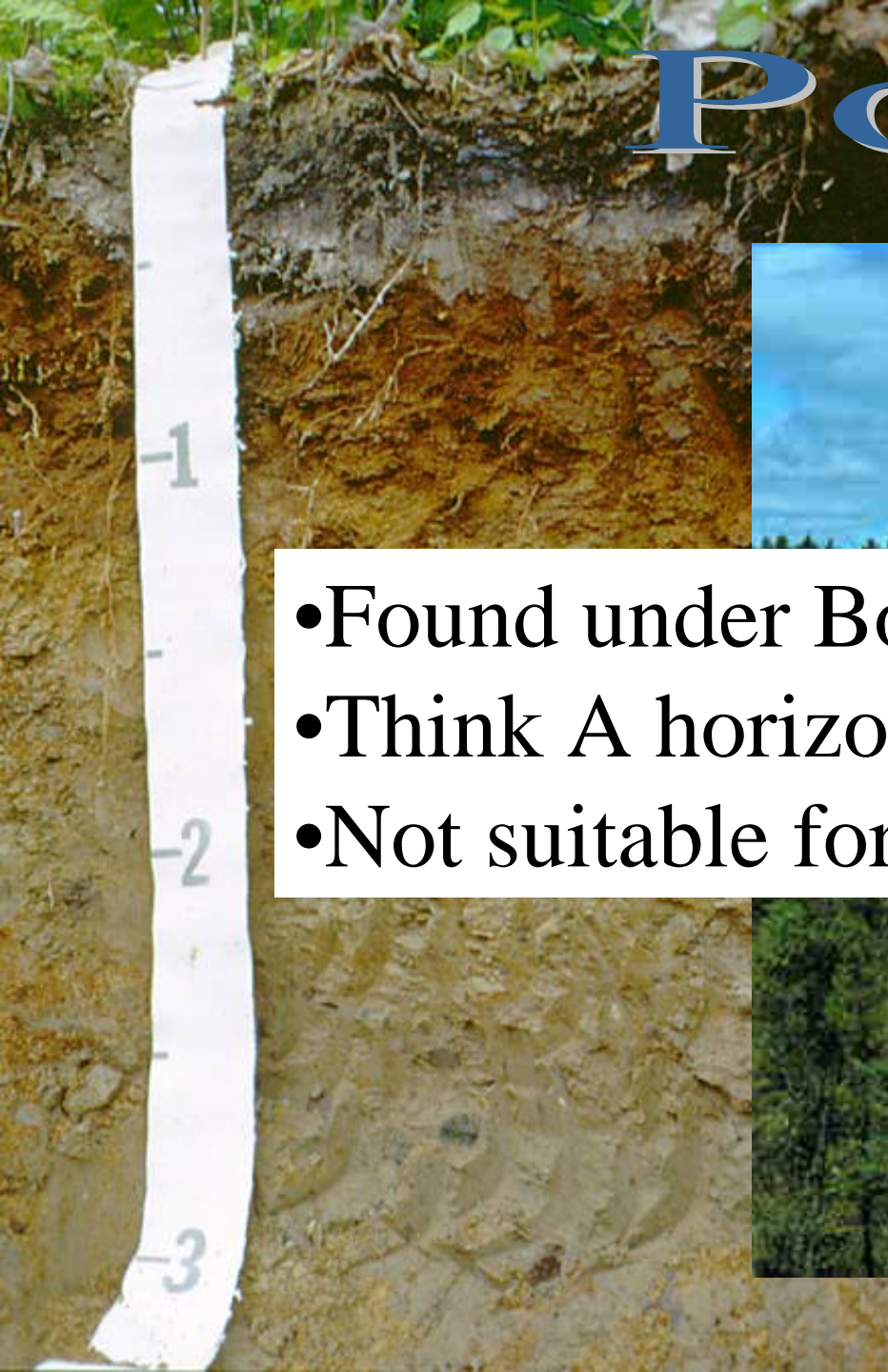
CHERNOZEM

**BROWN
EARTH**

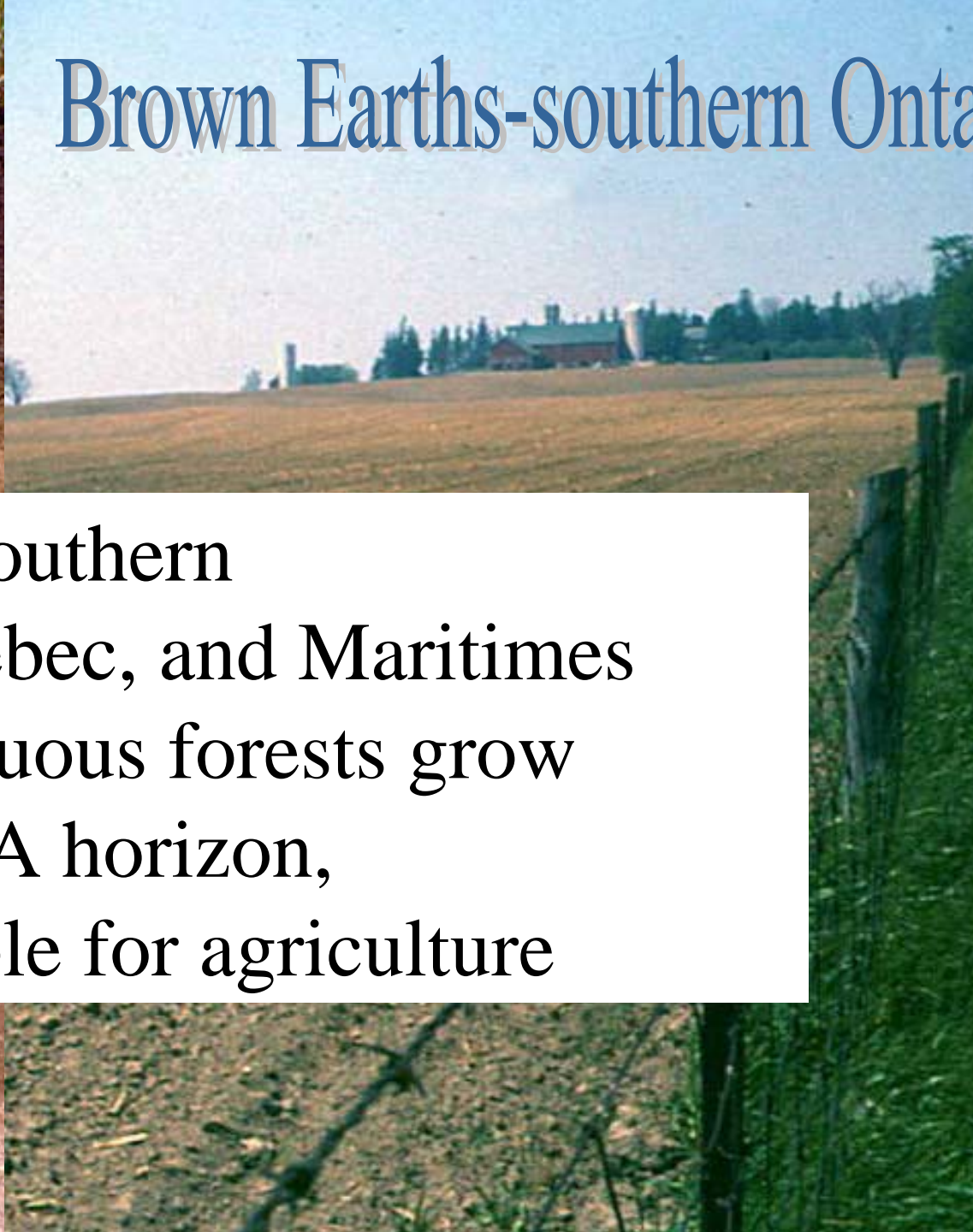
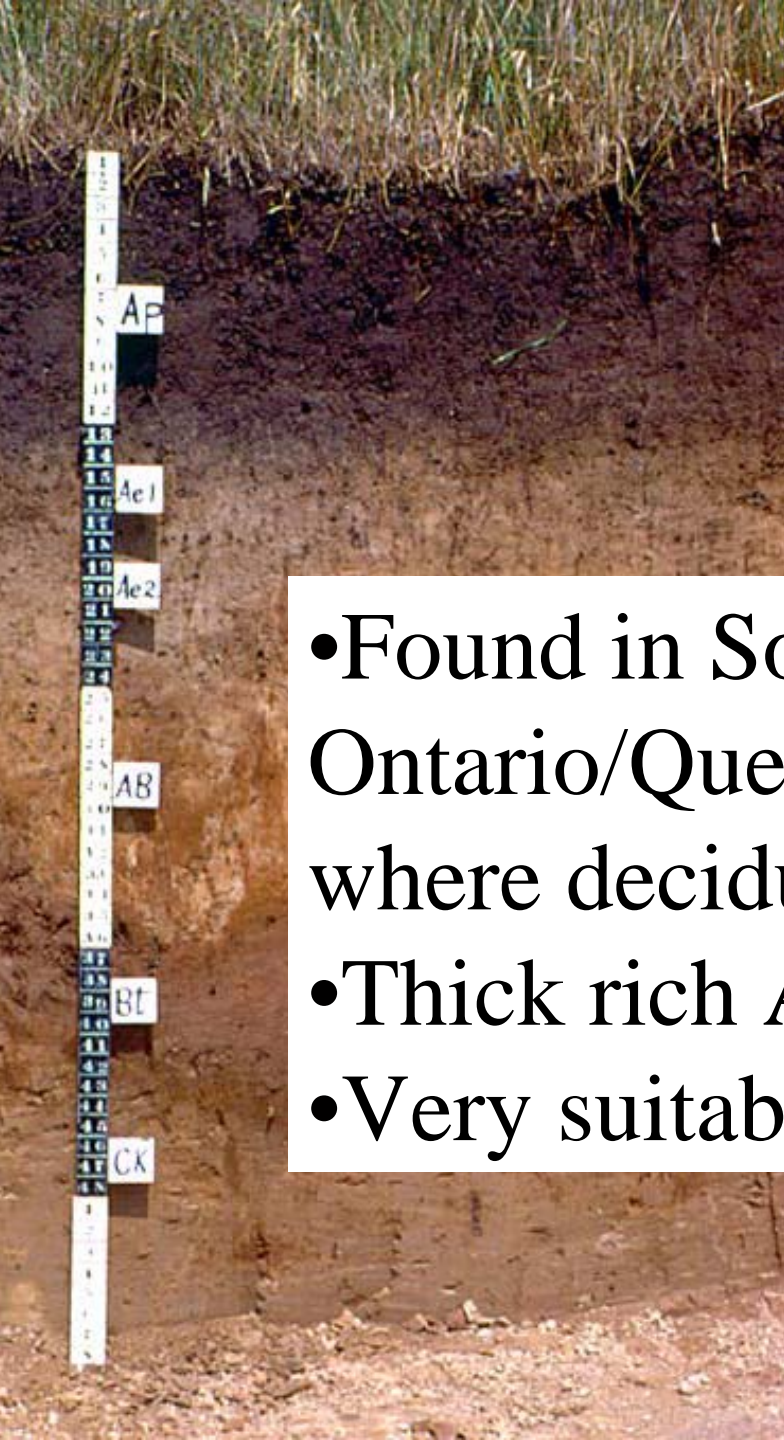


Podzols

- Found under Boreal conifer forests
- Think A horizon, often acidic
- Not suitable for agriculture



Brown Earths-southern Ontario

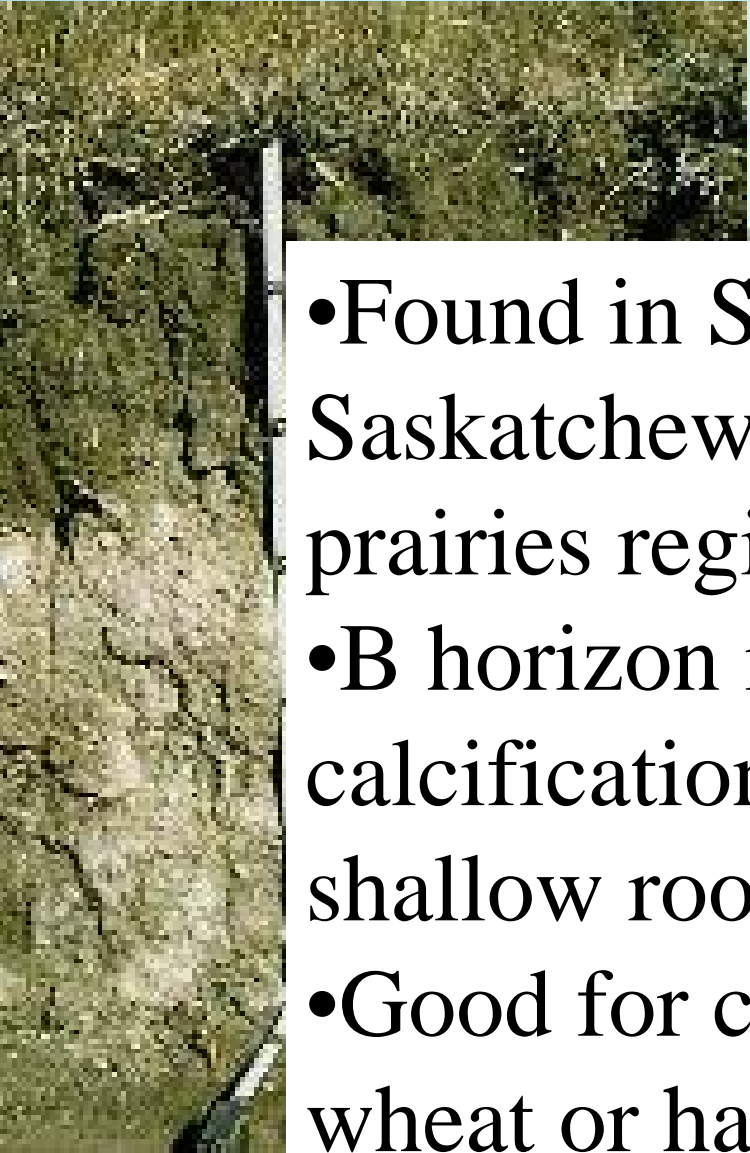


- Found in Southern Ontario/Quebec, and Maritimes where deciduous forests grow
- Thick rich A horizon,
- Very suitable for agriculture

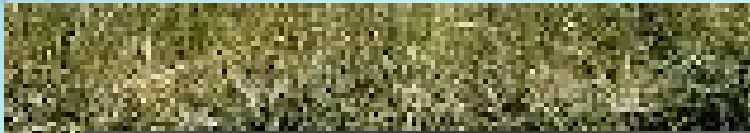
Chernozem Soil

- Found in Alberta, Saskatchewan and Manitoba in the tall grass prairies region
- A dark grassland soil, A horizon was formed by slow decomposition of the roots of grasses.
- Good for growing crops that don't need a lot of moisture like wheat, canola & rye. Good for cattle ranching too.

Chestnut Soils

- 
- Found in Southern Alberta & Saskatchewan in the short grass prairies region
 - B horizon is hard due to calcification, so plants need to have shallow roots
 - Good for cattle ranching, growing wheat or hay

Dust Bowl 1930's

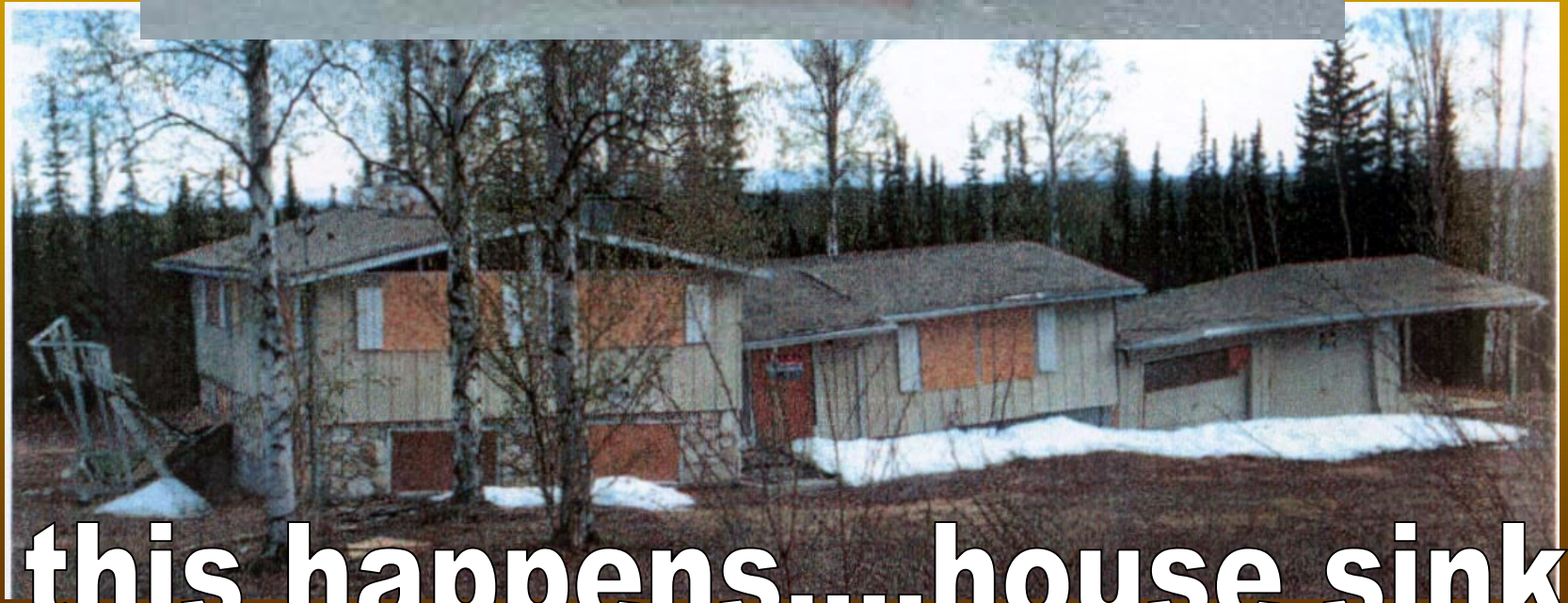


Tundra

- Artic soil type in the Yukon, Northwest Territories, Nunavut, around the Hudson Bay and northernmost part of Quebec
- Is a mineral or organic soil that has perennially frozen material (permafrost) within 1 m of the surface
- Suitable for grazing of tundra animals

Permafrost

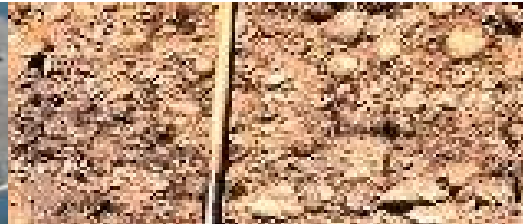
Special building required on permafrost



or this happens....house sinks

Mountain Soils

- Soil type mountain area of British Columbia, Alberta & Yukon
- Thin soil with rocky B & C horizon
- Suitable for growing conifer forests

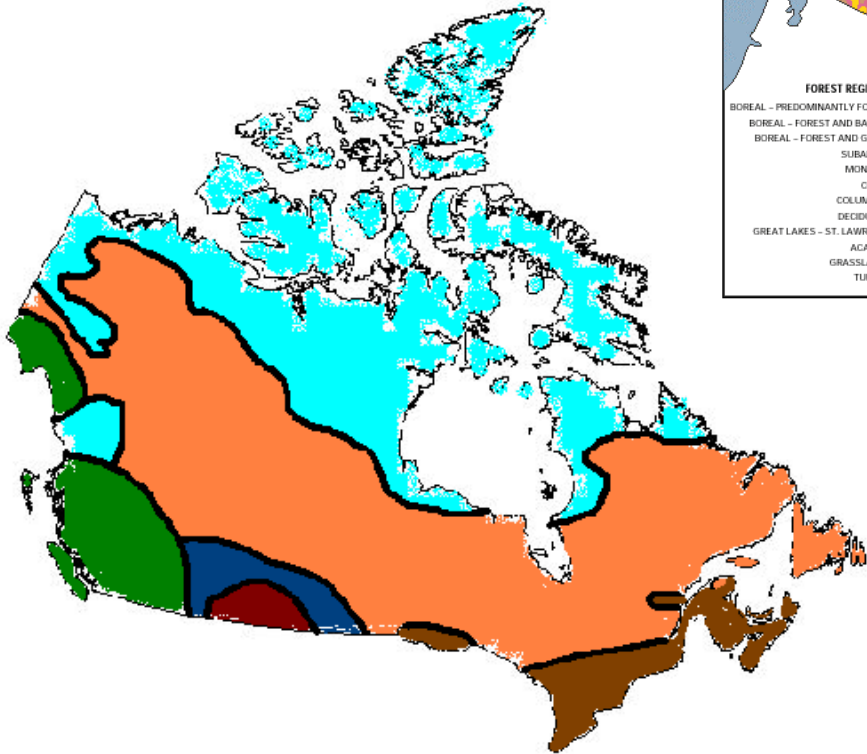


Forest Regions of Canada



FOREST REGIONS	PRINCIPAL TREE SPECIES
BOREAL - PREDOMINANTLY FOREST	White spruce, black spruce, balsam fir, jack pine, white birch, trembling aspen
BOREAL - FOREST AND BARREN	White spruce, black spruce, tamarack
BOREAL - FOREST AND GRASS	Trembling aspen, willow
SUBALPINE	Engelmann spruce, alpine fir, lodgepole pine
MONTANE	Douglas-fir, lodgepole pine, ponderosa pine, trembling aspen
COAST	Western red cedar, western hemlock, Sitka spruce, Douglas-fir
COLUMBIAN	Western red cedar, western hemlock, Douglas-fir
DECIDUOUS	Beech, maple, black walnut, hickory, oak
GREAT LAKES - ST. LAWRENCE	Red pine, eastern white pine, eastern hemlock, yellow birch, maple, oak
ACADIAN	Red spruce, balsam fir, maple, yellow birch
GRASSLANDS	Trembling aspen, willow, bur oak
TUNDRA	

Forest Regions of Canada



MOUNTAIN

TUNDRA

PODZOLS

CHESTNUT

CHERNOZEM

**BROWN
EARTH**

