Landform Regions of Canada

The movement of the earth’s plates, and the resulting folding, faulting, and volcanic activity, have combined with the forces of erosion and weathering to create a variety of landscapes that affect the way we live.
A **Landform Region** is an area of the Earth with a unique set of physical features.
Canada can be Divided into 7 Landform Regions:

1. Western Cordillera
2. Interior Plains
3. Canadian Shield
4. Great Lakes-St. Lawrence Lowlands
5. Appalachian
6. Hudson Bay Lowlands - Arctic Lowlands
7. Innuitian Mountains
Landform Regions of Canada
Canadian Shield

- **Location:**
  - Covers more than half of Canada, including most of Nunavut, Quebec, Labrador, Ontario, and Manitoba, and a large part of Saskatchewan and lesser parts of Alberta and the Northwest Territories.

- **Physical Features:**
  - Relatively flat with rounded hills of metamorphic rock, which are actually the roots of ancient mountains.
  - Some of the world’s oldest rocks can be found here, at or near the surface of the ground.
  - In the last ice-age, glaciers scraped soil away and formed many small lakes.

- **Biological Features:**
  - Covered by boreal forest in the south, and tundra in the north.
  - Many mammals such as moose, caribou, wolverines, weasels, mink, otters, beaver, grizzlies and black bears are present.

- **Resources:**
  - Sparsely populated, farming is poor because the soil is too thin.
  - Rock contains large quantities of valuable metallic minerals such as lead, gold, nickel, copper and zinc.
  - Ideal for recreation due to scenic waterfalls, lakes, rock outcrops, and vast forests.
Landform Regions of Canada
Western Cordillera

• **Location:**
  – Along the **western edge of Canada**, covering most of Yukon territory and British Columbia and western Alberta.

• **Physical Features:**
  – Range after range of high, sharp-peaked **mountains separated by plateaus and valleys, running North to South**
  – Created recently by the collision of the North American and Pacific plates

• **Biological Features:**
  – Herbs, lichens and shrubs at higher elevations and various types of coniferous forest and grasslands at lower elevations
  – Several species have adapted to **the harsh climates of the higher elevations**, including Mountain Goat, Gyrfalcon, White-tailed and Willow Ptarmigan, Water Pipit and Rosy Finch
  – Mule Deer, Rocky Mountain Elk, Stone Sheep, Grizzly Bear and Black Bear are common at lower elevations.

• **Resources:**
  – Lightly populated, travel is difficult
  – Rich in minerals, timber, and sources of hydro electricity
Appalachian Mountains

- **Location:**
  - Covers some of *southern Quebec, and most of the Atlantic Provinces*

- **Physical Description:**
  - *Oldest highland region in Canada*, created when the North American plate collided with Europe and Africa about *300 million years ago*
  - *EROSION has rounded the mountains over time*, creating a landscape of rolling mountains and hills

- **Biological Description:**
  - The Appalachians are characterized by a wealth of *large, beautiful deciduous broadleaf (hardwood) trees*.
  - During the 19th and early 20th centuries the Appalachian forests were subject to severe and destructive logging and land clearing
  - Animals that characterize the Appalachian forests include *squirrels, rabbits and deer*, which have greatly increased in abundance as a result of the elimination of the Gray Wolf and the Eastern Cougar or Mountain Lion by European settlers

- **Resources:**
  - *Long ocean bays provide deep harbours for ocean freighters*
  - *Sedimentary rock rich in non-metallic minerals such as coal*, with some igneous and metamorphic rock containing metallic minerals such as iron and zinc
Innuitian Mountains

• Location:
  – A mountain range in Canada's Arctic territories of Nunavut and the Northwest Territories

• Physical Description:
  – In some locations they measure over 2,500 meters in height, and 1290 km in length
  – Shaped at a time when the North American Plate moved northward
  – They are younger than the Appalachians, and so erosion has not yet rounded them significantly

• Biological Features:
  – They are above the tree line, preventing any vegetation from existing

• Resources:
  – Largely unexplored, due to the hostile climate. They are named after the northern indigenous people, who live in the region.
Landform Regions of Canada

Physiographic Regions:
- Innuitian Region
- Arctic Lowlands
- Canadian Shield
- Hudson Bay Lowlands
- Cordilleran Region
- Interior Plains
- St. Lawrence Lowlands
- Appalachian Region
Great Lakes-St.Lawrence Lowlands

• **Location:**
  – South of the Canadian Shield in Ontario and Quebec
  – Smallest landform region in Canada

• **Physical Description:**
  – Glaciers deposited a huge amount of soil, sand and gravel here, creating a landscape of flat plains with small hills and deep river valleys
  – The great lakes are located in basins gouged out by the glaciers

• **Biological Features:**
  – Prior heavy farming and urban sprawl, this area was home to large mixed forests

• **Resources:**
  – 50% of Canada’s population lives here
  – 70% of Canada’s manufacturing industries and located here
  – Well-suited to farming because of excellent soils and warm climate
Interior Plains

• **Location:**
  - Extends through the middle of Canada from North to South, covering most of Alberta and Saskatchewan, and some of NWT and Manitoba

• **Physical Features:**
  - Very flat, with deep, fertile soil
  - Created when sediments from the Shield and the Rocky Mountains were deposited in shallow inland seas and compressed into layers of sedimentary rock
  - Cold winters, hot summers

• **Biological Features:**
  - The southern part of the interior plains is mostly treeless, with grasses and herbs
  - The northern part is home to a belt of coniferous trees called the boreal forest, which extends from the Rocky Mountains all the way across Canada to Newfoundland, with Spruce, tamarack, and poplar being the most prominent species

• **Resources:**
  - Extensively used for farming wheat and cattle
  - Known as Canada’s “Bread Basket”
  - Sedimentary rock contains rich mineral, coal, oil and gas deposits
Arctic-Hudson Bay Lowlands

Location:
- A series of islands located in Canada’s far north and north of Canadian Shield but south of Hudson Bay.

Physical Description:
- Low-lying, barren islands with coastlines ranging from extensive lowlands to spectacular cliffs
- Summer is brief, but sunny, it is cold and frozen in the winter
- It is dark all day in the winter and light all day in the summer

Biological Features:
- Sparsely vegetated, with vast seemingly lifeless areas

Resources:
- The ground is mostly composed of permafrost, making construction difficult and often hazardous, and agriculture virtually impossible
Hudson Bay Lowlands

- **Location:**
  - Around the southwestern shore of the Hudson Bay and James Bay in Ontario and Quebec

- **Physical Features:**
  - This is a layer of sedimentary rock rests on top of the underlying Shield
  - Flat low area covered by bogs and fens, and dotted with ponds, lakes and streams

- **Biological Features:**
  - Mostly muskeg or peat-forming wetlands
  - The region is famous for its polar bears
  - Caribou migrate to the area in summer
  - In summer the coast of this region is alive with birds, such as lesser snow geese, Canada geese, brant, tundra swans, oldsquaw, king eider, and northern phalarope and many shore-birds
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