

BIOMES

As one moves from the equator toward the poles of the Earth, the conditions of climate gradually change and therefore the composition of the land and water. This change is primarily a result of the change in the amount of solar energy that is able to penetrate to the Earth's surface due to the change in latitude and the angle at which light strikes the spherical Earth.

A **biome** is defined as a large geographical region that has a particular type of climax community. A biome is therefore a distinct ecological community of plants and animals living together in a particular climate. There are many different kinds of plants and animals on the earth, but only certain kinds are naturally found at any particular place. There are many different climates on the earth, and different plants and animals have adapted to living in certain conditions. These conditions, such as the range of temperature and rainfall that occur on average in a particular place, are called the climate. Some places are hot, some are cold, some are wet and some are dry.

The biomes are generally distributed over the earth in horizontal bands that are linked to climatic conditions associated with latitude and other geographical features such as the proximity to large bodies of water or mountain ranges. The main factors that determine biome distribution include **latitude, altitude, soil, temperature, precipitation, and light.**

Terrestrial (land) biomes are defined by the dominant type of plant life (climax community). The terrestrial biomes include the:

- Tropical Rain Forest,
- Temperate Deciduous Forest,
- Deserts,
- Grasslands,
- Taiga,
- and Tundra.

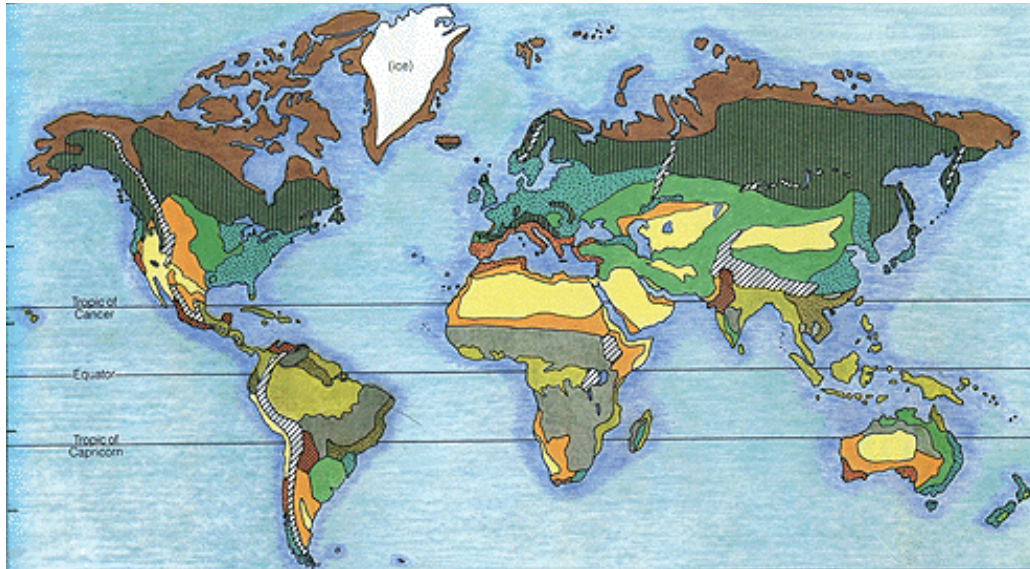
There are also two types of aquatic biomes:

- the marine (saltwater or ocean) biome,
- and the freshwater biomes (rivers, lakes, ponds, swamps, bogs, etc.).

Biomes of Canada:

Due to its latitude, Canada has four main terrestrial biomes which include the **tundra, taiga, temperate deciduous forest, and grassland biomes.** These

biomes also exist in other parts of the Earth where environmental conditions are similar. The following map indicates the distribution of the various biomes.



Biome map of the world

Assignment: In your group, choose a biome and do a poster showing animals, dominant vegetation, climate, soils, where your Canadian Biome is located, and special attributes of the biome you chose. Make it colourful and neat. You will be given some time to work on this in class but may have to finish outside of school. When you choose your group members, keep this in mind!