

A global environmental type, usually referred to as a **biome**, is a large geographical area characterized by specific plant and animal communities. Biomes are usually named after their dominant vegetation type and are determined primarily by climate and geography of a region. The life forms in a biome are intricately linked to the specific environment, and depend in some way on other living and non-living things in their surroundings. So delicate is this interrelationship that any change in one component causes a ripple effect that will alter other components of the biome.

Global environmental types, or biomes, can be classified in a number of different ways, depending on the specific criteria being used. This may result in some confusion for the student as different sources may use different names and list a different number of biomes. If you are using a textbook that includes a chapter on biomes, it is best to follow the classification system and terminology it uses.

Biomes can be both **terrestrial** (land) and **aquatic** (marine). Major biomes include **forest**, **grassland**, **desert**, **tundra**, and **aquatic** environments. Some sources identify savanna and chaparral (Mediterranean scrubland) as distinct from grassland and forest biomes. The following outline represents a common classification of major terrestrial biomes and their respective subcategories:

Forest Biomes

Boreal (Taiga)
Temperate
Tropical

Desert Biomes

Arid
Semi-arid
Coastal
Cold

Grassland Biomes

Prairie (Temperate)
Steppe
Savanna

Tundra Biomes

Arctic
Alpine

Ecozones

A number of recently published Canadian high school geography textbooks include sections dealing with small subdivisions of biomes called ecozones or bioregions. There are 15 terrestrial (land) and 5 aquatic (marine) ecozones in Canada. For example, much of southern Manitoba is in the Prairie Ecozone which is part of the Prairie Temperate Grasslands Biome.

The ArcCanada data set that accompanies the *ArcView* GIS software available from Manitoba Education, Citizenship and Youth, includes ecozone data and shapefiles. The Natural Resources Canada online **Atlas of Canada** at <www.atlas.gc.ca> as well as the Canadian Geographic **Canadian Atlas Online** at <www.canadiangeographic.ca/atlas> also describe and map Canadian ecozones. Parks Canada's system plan at <www.pc.gc.ca> is based on developing national parks in each of Canada's **natural regions**, which are similar to ecozones.