

-Differences in climate

Learning Objectives

- Explain how we define terrestrial biomes
geographic regions categorized by a particular combination of average annual temperature, annual precipitation, and distinctive plant growth forms on land.
- Interpret climate diagrams
- Identify the nine terrestrial biomes
tundra, boreal forest, temperate rainforest, temperate seasonal forest, woodland, temperate grassland, tropical rainforests, tropical seasonal forest, subtropical desert.

Terrestrial biome: a geographic region categorized by a particular combination of average annual temperature, annual precipitation, and distinctive plant growth forms on land.

Aquatic biome: an aquatic region characterized by a particular combination of salinity, depth, and water flow.

Tundra: a cold and treeless biome with low-growing vegetation

Permafrost: an impermeable, permanently frozen layer of soil.

Boreal Forest: a forest biome made up primarily of coniferous evergreen trees that can tolerate cold winters and short growing seasons.

Temperate rainforest: a coastal biome typified by moderate temperatures and high precipitation

Temperate seasonal forest: a biome with warm summers and cold winters with over 1 m of precipitation annually.

Woodland/shrubland: a biome characterized by hot, dry summers and mild, rainy winters.

Temperate grassland/cold desert: a biome characterized by cold, harsh winters, and hot, dry summers.

Tropical rainforests: a warm and wet biome found between 20 degrees N and 20 degrees S of the equator, with little seasonal temperature variation and high precipitation.

Tropical seasonal forest/savanna: a biome marked by warm temperatures and distinct wet and dry seasons.

Subtropical desert: a biome prevailing at approximately 30 degrees N and 30 degrees S, with hot temperatures, extremely dry conditions and sparse vegetation.

1. In addition to temperature, a terrestrial biome is defined by
(c) I and III
2. The precipitation line below the temperature line in a climate diagram shows
(b) when plants will grow the least
3. Permafrost is an important factor in which of the following biomes?
(a) I : tundra
4. Plant growth in which of the following biomes is primary constrained by precipitation?
(e) tundra
5. Which of the following biomes has the highest soil nutrient levels?
(e) temperate seasonal forest