

Terrestrial Biomes

Tropical forests

These are found in equatorial and subequatorial regions of the planet that see constant rainfall. Those that see the most rainfall (200-400cm/yr) are referred to as tropical rainforests, whereas those that see less rainfall (150-200cm/yr) are named tropically dry forests. They have year-round warmth (25-29°C). These forests are very stratified and there is intense competition for sunlight.

Savannah

The savannah is an equatorial and subequatorial biome with year-round warmth (24-29°C) that doesn't see much rainfall (30-50cm/yr) and experiences long periods of dryness. Many grasses and scattered trees make up the landscape, and large herbivorous animals populate the landscape along with their predators. Many insects are also found here.

Chaparral

These occur in the midlatitude coastal regions on several continents.

Precipitation is seasonal with wet winters and long, dry summers. Fall, winter, and spring are cool, summers are very hot.

Shrubs and small trees dominate the landscape along with a diverse group of grasses and herbs. The plants are well adapted to drought and fire (seeds only germinate after a hot fire). The animals that dominate the landscape are browsers (deer and goats), amphibians, birds, reptiles and insects.

Conversion for urbanization and agriculture by humans has reduced the range of the chaparral. Additionally, humans have also contributed to fires that have plagued this biome.

Desert

Desert biomes are found in regions about 30° N and S latitude. They are characterized by highly variable seasonal and daily temperature swings. Many of the plants include the succulents such as cacti, and deeply rooted shrubs and herbs. Snakes, lizards, spiders, etc. populate this biome.

Temperate Grasslands

Temperate grasslands are found globally. Seasonal precipitation brings wet summers and dry winters with periodic drought common. Average rainfall is between 30-100cm. Grasses and forbs (a herbaceous flowering plant other than a grass) are the dominant plants, and large animals such as bison, along with small burrowing mammals such as prairie dogs are common.

Temperate Broadleaf Forests

Temperate broadleaf forests are generally found at mid-latitudes of the northern hemisphere. Precipitation is generally evenly distributed throughout the year and averages between 70-200cm/yr. Winters are generally cold, and summers are hot. The most dominant plants are temperate, deciduous broadleaves are the common plants that dominate these forests.

Coniferous Forests

Coniferous forest biomes are found in the northern regions of North America and Eurasia. The northern coniferous forest is called the taiga and comprises the largest terrestrial biome on Earth. Most of these biomes receive 30-70cm of rainfall/yr with periodic droughts, however some coniferous forests of the Pacific Northwest receive more than 300cm of rainfall/yr. Winters in these forest are cold and long, with drastic temperature

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fluctuations of -70°C to 30°C in some regions. The most dominant plant is the cone bearing plant with conical shaped evergreens. The animal fauna include bears, Siberian tigers, moose, and nesting migratory birds.

Tundra

The tundra comprises 20% of the Earth's surface, and makes up expansive arctic regions. High winds and cold temperatures on mountain tops constitute the alpine tundra. The precipitation generally averages 20-60cm/yr and is around 100cm/yr in the alpine tundra. In general, the tundra sees long, cold winters with temperatures as cold as -30°C , and cool summers with temperatures around 10°C . Most plants are herbaceous and very short, and any woody tree or shrub is generally very short. A layer of permafrost is found in the ground and generally prevents water infiltration. Animals such as oxen, bears, wolves, and foxes, along with migratory birds commonly populate the tundra.