

What is a Biome?

A biome is a major terrestrial or aquatic life zone that is characterized either by vegetation type, as is the case for terrestrial biomes, or physical environments, as is the case for aquatic biomes. There are five major types on earth: aquatic, forest, desert, grassland, and tundra. However, these five groupings can be broken down into more specific categories.

What is an Aquatic Biome?

Aquatic biomes cover roughly 75% of the earth's surface. There are two types of aquatic biomes: freshwater and marine. They are determined by their saline concentration among other factors.

Freshwater biomes typically have a saline concentration of less than 1%. People depend on them for drinking water, crop irrigation, sanitation, and industry. These biomes can be organized into two categories: standing water, like lakes and ponds, or flowing, like rivers and streams. These biomes can house various organisms.

Marine biomes typically have a 3% saline concentration. Oceans, intertidal zones, and coral reefs are a part of this category. The marine biome is the largest biomes on Earth. It occupies 71% of our planet, however, only 5% have been explored by humans. Scientists estimate that since the ocean is so gigantic more than half of all species on Earth live there.

What is a Tundra Biome?

Twenty percent of earth's land surface is tundra. It is the coldest of all the biomes with an average temperature of approximately -18 degrees Fahrenheit (-28 Celsius). Even with its subzero temperatures, plants and animals manage to survive. Lichens and small shrubs can be found there. Animals like the arctic fox and yaks also thrive in this harsh environment.

What is a Forest Biome?

Forest biomes are made up of trees and other woody plants. There are three main types of forest biomes: rainforests, temperate forests, and taiga forests.

Rainforests typically stay warm and wet year-round. They house more than half of the world's species and plants. Some common animals that live here are jaguars, parrots, tapirs, monkeys, and tigers.

Temperate forests have four distinct seasons (winter, spring, summer, and autumn). Various deciduous trees live there. Deciduous trees lose their leaves in the winter and bud new ones in the spring. Some common animals that live in these forests are foxes, deer, rabbits, and raccoons.

Taiga forests dwell in cold and subarctic regions, where there are long and severe winters that can last up to six months. The average temperatures in taiga forests are below freezing. Common animals found here are bears, lynxes, squirrels, moose, caribou, and minks.

What are Desert Biomes?

Deserts are the driest places on Earth. Because of these harsh conditions it is difficult for many types of animals to live here. There are two types of deserts: hot and cold. Hot deserts, like the Sahara Desert, are full of sand and contain plants like cacti. Common animals that live in these environments are camels, lizards, jackrabbits, spiders, and meerkats. Cold deserts, like the Gobi Desert, can have snow and frost in the wintertime. Plants like bitterbrush, sage brush, and

various types of grasses can be found there. Common animals that live in cold deserts include bison, antelope, mule deer, snow leopards, and camels.

What are Grassland Biomes?

Grassland biomes receive more precipitation than deserts, but less rain than forest biomes. They are home to various species of grass, wildflowers, and animals. The grasslands found in Africa are called Savannahs. Animals like zebras, elephants, lions, and hyenas live there. While grasslands found in South America are called pampas. They are home to various animals like skunks, foxes, guanaco, and viscachas.

How can Climate Change Impact Biomes?

Biomes are affected by many things including temperature, weather, and the amount of precipitation they receive. Climate change can alter those factors and cause biomes to shift, shrink, and even disappear. Through extreme weather and natural disasters caused by climate change food chains can be disturbed and ecosystems can collapse leading to the extinction of certain species.

What can I do to Help Protect Biomes?

While stopping climate change and saving endangered species can seem like a large task for one person, there are some things you can do to help preserve biomes. Actions you can take are: do not litter, recycle, grow and plant native species of flora where you live, donate money or service hours to habitat conservation, and contact your local or state politicians about ways your community can work together to preserve biomes.