FRESHWATER BIOME

There are two major types of aquatic biomes, the marine and the freshwater. The freshwater biome is defined as having a low salt content versus the marine biome which is saltwater like the ocean. Go here if you want to learn more about the [marine biome](https://www.ducksters.com/science/ecosystems/marine_biome.php).  
  
**Types of Freshwater Biomes**  
  
There are three main types of freshwater biomes: ponds and lakes, streams and rivers, and wetlands. We'll go into the details of each below.  
  
**Ponds and Lakes**  
  
Ponds and lakes are often called lentic ecosystems. This means that they have still or standing waters, not moving like rivers or streams. Go here to learn about the [major lakes of the world](https://www.ducksters.com/geography/lakes.php).  
  
Lakes are often divided up into four zones of biotic communities:

* Littoral zone - This is the area closest to the shore where aquatic plants grow.
* Limnetic zone - This is the open surface waters of the lake, away from the shore.
* Euphotic zone - This is the area below the surface of the water where there is still enough sunlight for photosynthesis.
* Benthic zone - This is the floor, or bottom, of the lake.

The temperature of lakes can change over time. In tropical areas the lakes will stay the same relative temperature with the water getting colder the deeper you go. In northern lakes, the change in temperature due to the seasons will move the water in the lake as shown below.

Lake animals - Animals include plankton, crayfish, snails, worms, [frogs](https://www.ducksters.com/animals/american_bullfrog.php), turtles, [insects](https://www.ducksters.com/animals/bugs.php), and [fishes](https://www.ducksters.com/animals/fish.php).  
  
Lake plants - Plants include water lilies, duckweed, cattail, bulrush, stonewort, and bladderwort.

**Streams and Rivers**  
  
Rivers and streams are often called lotic ecosystems. This means that they have flowing waters, unlike the still waters of ponds and lakes. This biome can vary in size dramatically from small trickling streams to mile wide rivers that travel for thousands of miles. Go here to learn about the [major rivers of the world](https://www.ducksters.com/geography/worldrivers.php).  
  
Key factors influencing the ecology of streams and rivers include:

* Flow - the amount of water and the strength at which it flows will impact the types of plants and animals that can live in a river.
* Light - light has an impact because it provides energy to plants through photosynthesis. The amount of light due to seasons or other factors will impact the river's ecosystem.
* Temperature - The climate of the land the river is flowing through will have an impact on the local plant and animal life.
* Chemistry - this has to do with the type of geology that the river is flowing through. It impacts what type of soil, rocks, and nutrients are in the river.

River animals - Animals that live in or around the river include insects, snails, crabs, [fishes](https://www.ducksters.com/animals/fish.php) such as salmon and catfish, salamanders, snakes, [crocodiles](https://www.ducksters.com/animals/alligatorcrocodile.php), otters, and beavers.  
  
River plants - Plants that grow around rivers vary greatly depending on the location of the river in the world. The plants typically live along the edge of the river where the water is moving slower. Plants include tapegrass, water stargrass, willow trees, and river birch.  
  
**Wetlands Biome**  
  
The wetlands biome is a combination of land and water. It can be thought of as land that is saturated with water. The land may be mostly underwater for part of the year or just flooded at certain times. One of the key characteristics of a wetland is that it supports aquatic plants.  
  
Wetlands include bogs, swamps, and marshes. They are often located near large bodies of water like lakes and rivers and can be found throughout the world.  
  
Wetlands can play an important role in nature. When located near rivers, wetlands can help to prevent flooding. They also help to purify and filter water. They are the home to many species of plants and animals.  
  
Wetland animals - Wetlands have a huge diversity in animal life. Amphibians, birds, and reptiles all do well in the wetlands. The largest predators are alligators and crocodiles. Other animals include beavers, minks, raccoons, and deer.  
  
Wetland plants - Wetland plants may grow entirely underwater or float on top of the water. Other plants grow mostly out of the water, like large trees. Plants include milkweed, water lilies, duckweed, cattail, cypress trees, and mangroves.

**Facts about the Freshwater Biome**

* Scientists that study freshwater bodies of water like ponds, lakes, and rivers are called limnologists.
* The amount of rainfall varies widely depending on where a wetland is located. It could be as little as seven inches per year to over a hundred inches per year.
* Marshes are wetlands without trees.
* Swamps are wetlands that grow trees and have seasonal flooding.
* Tidal swamps are sometimes called mangrove swamps because the mangroves can grow in the mix of freshwater and saltwater.
* The largest lake in the world is the Caspian Sea.
* The longest river in the world is the [Nile River](https://www.ducksters.com/history/ancient_egypt/geography_nile_river.php).
* The largest wetland in the world is the Pantanal in South America.