

Wetlands

Name: _____

Date: _____

Vocabulary for this reading:

Biome (Life Zone): region with its own life forms and climates

Wetland: an area of land that is covered by a shallow body of water for most or all of the year (not oceans, lakes or rivers!).

Tropics: area of land around the middle of the Earth

Temperate: a climate with mild temperatures

Catchment/Watershed: a low-lying land area where water can collect

Delta: a triangular deposit of sand and soil at the mouth of a river

Evaporation: when water turns into vapor and is absorbed into the air

Location:

Unlike other **biomes**, **wetlands** are not restricted to certain climate zones of earth. They can be found on every continent except Antarctica, and they occupy 6% of the earth's surface. Arctic wetlands are different than tropical wetlands, and wetlands in Florida look quite different than the wetlands of Australia. Most of the earth's wetlands, however, can be found in the **tropics** and the **temperate** regions of the northern hemisphere. Wetlands occur wherever water can collect on land; they can be on the coast or inland. They mostly exist in **catchments**, flood plains or valleys.

For the purpose of this study, we will focus on the Okavango **Delta** (or Okavango Swamp), a tropical wetland in southern Africa. The Okavango Delta is located at 19°S and 22°E.

Climate:

The climate of the Okavango Swamp, in Botswana, Africa, is semiarid, which means it is mostly dry. However, there are two distinct seasons: the hot, wet season from November to April, and the warm, dry season from May to October. During the wet season, temperatures are as high as 105°F and there are heavy afternoon thunderstorms. Heavy rains in the highlands of Angola, a neighboring country, flow down the mountains and cause the Okavango River to flood. Over the next few months, the water continues to travel down the Okavango River, finally reaching the delta area during the dry season. So, even though there is little to no rainfall between June and August, the delta is flooded to three times its permanent size, and the water supports animal and plant life. Because of the high air temperature the water **evaporates** quickly, and the water cycle of this climate is fast.

The Okavango Delta, Namibia, Africa



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Plants:

The plants of wetlands are quite unique and have special ways of living in water. There are three ways plants can grow in the watery land: (1) they can be rooted in the mud and grow completely under water; (2) they can be rooted beneath the surface but spread shoots and leaves upward, out of the water; or (3) they can float and be submerged in water without any attachment to land. For example, mangrove trees have special roots that hold the tree in muddy water but also grow above ground in order to absorb oxygen. Some important wetland plants are: reeds, sedges, cattails, water lily, hyacinth, duckweed, orchids, and bulrushes. Here are some plants found specifically in the Okavango Delta:



Water Lily



Papyrus plant



Sedges from Okavango, but found in many swamps

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Animals:

Like the plants of wetlands, the animals have adapted to live in wet conditions. The Mudskipper fish is a fish that can actually walk, or skip, across mud! There's also the hippopotamus that can hold its breath for ten minutes and has special pink sweat to keep it cool in hot the wetlands of Africa! And let's not forget the Anaconda, the world's biggest snake. Here are some animals from the Okavango wetland area:



Mother and baby hippopotamus



Bee Eater Birds, sitting in a row on a reed



Buffalo Herd migrating through the delta



A hyena running through the swamp



Lechwe antelope gliding through the watery marsh



Malachite Kingfisher bird

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Mudskipper



Anaconda