

The Florida Everglades

Version A

The Everglades is a unique wilderness at the southern tip of Florida. This area supports an amazing assortment of plants and animals. Where else in the world could you see a tree snail, a manatee, a wood stork, and a panther in a single day? Overall, more than 40 mammal species, 50 reptile species, 350 bird species, and 1,000 plant species live in the Everglades.

A Healthy Ecosystem

So what makes the Everglades such a unique place? The Everglades biome is made up of a number of distinct yet related ecosystems. Ecosystems (short for ecological systems) contain living organisms that interact with each other and with the nonliving parts of their environment. How these living organisms and nonliving parts interact determines how healthy the ecosystem will be. The health of the different ecosystems will then determine the well-being of the biome.

Animals rely on air to breathe, and plants need sunlight for photosynthesis. All living things also require water to keep them alive. If all these conditions are met, they will typically create healthy ecosystems that sustain life for thousands of years or more. As a matter of fact, the Everglades formed out of a shallow sea nearly *6 million* years ago!

Threats to the Everglades Ecosystems

If any one or more of the conditions needed for a healthy ecosystem isn't met, it can cause a chain reaction. For example, during long periods of drought, water plants



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and insects may die. As these die, the fish and frogs that rely on them will decrease in numbers. With fewer fish and frogs, predators that feed on them—like the American alligator—may starve. In this way, the impact is felt throughout the food web.

Natural events, like drought, are causing some of the changes being experienced in the Everglades today. However, human activities are also increasing the vulnerability of the area. Changes brought about by people have caused habitat destruction, more droughts, and increased flooding from coastal and inland storms.

Another current threat is global warming. If polar ice continues to melt, sea level will rise. This could submerge the Everglades in seawater, which would damage the landscape, the ecosystems, and the biome.

Glossary

biome: a relatively large area characterized by similar climate and land surface features

food web: a food chain describes one possible path along which energy, which is consumed as food, moves through an ecosystem; a food web is a diagram that shows how the various food chains in an ecosystem are connected

predators: organisms that feed on one or more other organisms at lower levels of a food chain

vulnerability: with respect to ecosystems and biodiversity, how easily damaged or harmed something is by the negative impacts of changing environmental factors; this can apply to living things, habitats, or even entire ecosystems

Writing Assignment

Using your notes from the lesson and updated activity chart, write a one- to two-page paper on one of the following topics:

1. Compare the Everglades biome with your own biome that you described at the beginning of the lesson. Be sure to address which environmental factors determine the living conditions of each biome, and how the living conditions determine what plants and animals inhabit it.
2. Choose an Everglades plant or animal and describe its living conditions. Why do you think it thrives in its environment? What are the main threats that make it vulnerable? In what ways might it affect the rest of the ecosystem if it were to disappear?

If you would like more information about the Everglades to complete your paper, check out the following Web sites:

National Park Service: Everglades National Park

<http://www.nps.gov/ever/>

Florida Department of Environmental Protection: Everglades Restoration

<http://www.dep.state.fl.us/secretary/everglades/>