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Investigating the Ecological and Economic Significance of Cypress in South Florida

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Problem Statement:
What is the ecological and economic significance of Cypress in South Florida?

Background

When exploring the natural ecosystems of South Florida, including the Florida Everglades, Big Cypress, and Collier-Seminole State Park, the dominance of Cypress trees is overwhelming. Florida is home to two species of Cypress, the bald cypress (*Taxodium distichum*) and the pond cypress (*Taxodium distichum*). It is believed that Cypress forests have been present in Florida for more than 6000 years, and have significant value ecologically and economically.

Cypress swamps provide habitats to a variety of wildlife species. In South Florida, these species include rare and endangered animals. Endangered birds, including the ivory-billed wood-

pecker (*Campephilus principalis*) and the wood stork (*Mycteria americana*), may be at risk of extinction if these habitats are lost. We were able to observe several birds living in the cypress trees, and saw wood ducks (*Aix sponsa*) feeding on cypress seeds.

As with all wetland ecosystems, cypress ponds act as natural filters of the water that flows through them. This helps maintain water quality and can enhance water quality through the removal of excess nitrogen and phosphates (that can enter from sewage or agricultural runoff) as these nutrients are taken up by the cypress and other vegetation. Cypress ponds are also reservoirs for water, capable of holding larger quantities than traditional soil. This is important for two major reasons. First, they provide excellent flood control by absorbing runoff, especially during the rainy season or during storms that commonly



occur during South Florida summer. Secondly, the water absorbed during the rainy season can replenish the depleted water table during the dry season. Economically, bald cypress wood has been prized for its durability, decay resistance, and appearance. Some of its original uses were as railroad ties, fence boards, and shingles. By the 1930s, Florida led the United States in cypress lumber production. Today's trees do not have the same decay-resistance that old growth trees offered, but cypress continues to be considered a very durable wood. Currently, cypress is primarily harvested for use as timber and landscaping mulch. Mulch was once produced from sawmill waste, but increased demand has led to harvest of trees specifically for mulch production.

Implications and Conclusions

Our direct experience in the Everglades is an example of yet another valuable aspect of the cypress forest- recreation. Boardwalks enabled us to move through the forest and be able to appreciate the aesthetic value and learn about the importance of wetland ecosystems. In this way, cypress forests are a major part of the ecotourism in South Florida.



Taxodium distichum

