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WETLANDS

# WETLANDS IN GEORGIA

## ***What Are Wetlands?***

Wetlands are special ecosystems where land and water meet. In these places, the land and the plants have adapted to living in water or wet soil.

Wetlands do not have to be covered with water. They can be' continuously wet, periodically flooded, or exist where the soil is saturated, but where water is not on the surface. These "hydric" soils support plants that can grow in water-saturated earth.

## ***The Value of Wetlands***

- Help recharge water supply
- Improve water quality by filtering toxin
- Provide flood control
- Provide habitat for fish, wildlife, and rare and endangered species
- Provide natural resource products
- Provide recreation areas of natural beauty

## ***Georgia Wetlands***

Georgia is one of the leading states in total wetland acreage.

About 5.3 *million* acres, or 13% of Georgia's land area is covered with wetlands.

These wetlands are located throughout the entire state from the salt marshes on the-coast to the mountain seeps and bogs.

## ***Major Types of Wetlands in Georgia***

***Coastal Marshes*** - lie between the barrier islands and the high-tide line on the coastal mainland. Georgia has over 600,000 acres of coastal wetlands including the salt marsh, the marsh edge-zone and brackish swamps.

***Riverine Wetlands*** - are the river bottoms and flood plains along Georgia's freshwater rivers and streams. In the mountains, the steep-banked rivers are swift-flowing and have narrow wetland areas along their banks. Rivers in the Piedmont are broader and the flow is slower. Their banks are lower and flood during rainy periods. In the Coastal Plain rivers flow slowly and are wide with low, swampy banks.

***Inland Wetlands*** - are freshwater wetlands that are not connected to a river or stream. Some types of inland wetlands are cypress and gum ponds, bogs and seeps, limesinks, beaver ponds and Carolina bays.

***Okefenokee Swamp*** - covers 412,000 acres in South Georgia and has been a National Wildlife Refuge since 1937. Its waters are very slow-flowing, black and acidic. The swamp has many different natural areas' including prairies, open lakes and runs, bogs and hammocks and forested islands.

### **Wetland Names**

Wetlands such as swamps and marshes are obvious. But, some wetlands are not easily recognized because they are dry during part of the year or "just don't look very wet." Some common wetland names are bottomland forests, pocosins, bogs, fens, hammocks, we' prairies, sloughs, tundras, estuaries, floodplains, savannahs and potholes.

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In the past, wetlands have been viewed as either unnavigable waterways or unplowable fields. They were not seen as having enough value to exist on their own merits without alterations.

**Nature designed wetlands to:**

1. clean and filter water, provide habitat for plants and animals, especially many endangered species
2. assist with flood prevention and control, recharge our aquifer system, (Note: Not all wetlands recharge the aquifer.)
3. assist with the water cycle. They provide a wide variety of variation, which assists in the transpiration process and provide large areas of water for the evaporation process.

**Wetlands act as energy and nutrient traps.** Certain wetland plants are extremely efficient at capturing the sun's energy and storing it as a carbohydrate. This stored energy is the foundation of the food chain. Wetlands provide food, water, shelter and space for many different species of plants and animals. Birds, both migratory and year round residents; endangered species (black bear, panther, orchids, etc.); plants both big and small; and fish use wetlands for homes, grocery stores, and nurseries.

**Wetlands are very efficient at filtering and cleaning water that enters the system.** They remove unwanted pollutants and nutrients from the water and have been called nature's kidney. Wetlands moderate the land's ability to absorb and disperse the water falling on or flowing through it. They act as sponges to absorb excess water and hold it for absorption into the aquifer system.

**Water essentially drowns terrestrial plants by depriving the roots of vital oxygen needed to breathe.** Wetland and aquatic plants, called hydrophytes have developed special adaptations to deal with this problem. One adaptation is a distinctive oxygen-carrying, spongy tissue, that allows their roots to be anchored in the oxygen poor, submerged, or water logged soils of wetlands. In a sense, wetland plants "breathe through straws" located in their stems. Many wetland plants prefer different depths of water. Some like it wetter while some prefer drier conditions. Most can tolerate temporary differences in water levels.

**Historically, wetlands expand their areas during very rainy years.** Their expansion is curbed by the encroachment of upland plants during dry years. Nature controls the changeover to upland species by fire. Fire can encourage the growth of natural and native habitats. Wetlands are not stoic eco-systems. Their composition or make-up varies with the amount of available water.