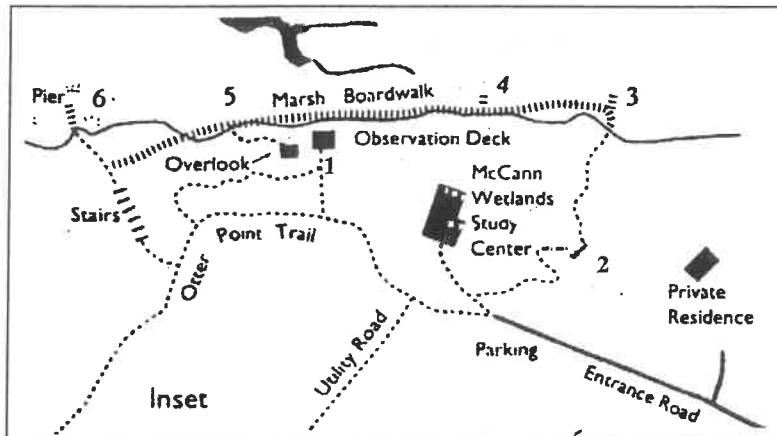


5 A Crucial Connection

The Chesapeake Bay and its people need wetlands because:

- Wetlands act like **GIANT SPONGES**, holding stormwater and stream overflow waters during floods.
- Water rushing off the land brings soil, excess nutrients, and other chemicals down toward the Bay. The plants in the wetland trap the pollution and **PURIFY** the water.
- An acre of wetland produces more **FOOD** than an acre of good farmland. Animals find plenty to eat in wetlands. Wetlands also feed people. Have you ever eaten crabs, fish, duck, or wild rice?

Boardwalk Trail Map



6 The Swamp

(At end of Boardwalk)

You have just walked through a wetland beneath a canopy of trees. Such a wetland with trees is called a swamp.

Red Maple, Tupelo, and Pumpkin Ash Trees growing here are a select group that can tolerate wet roots. Be sure to watch for turtles and frogs sitting on logs, or small birds flitting among the branches.

Now walk down the narrow path to a small pier.

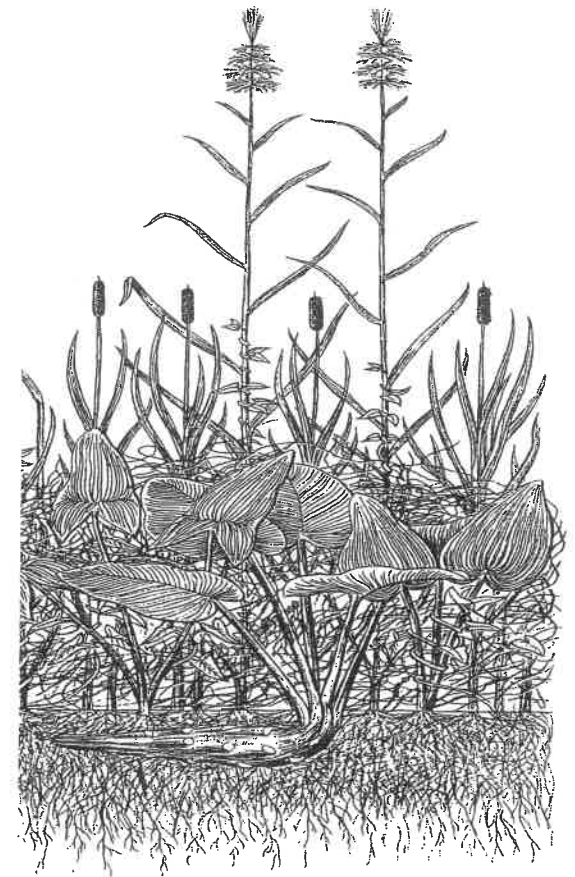


More than 50 species of waterbirds use the waters of Jug Bay. Common birds living here are Great Blue Herons, Black Ducks, Greater Yellowlegs, and Swamp Sparrows.

To your right, you can see an Osprey nest on a platform. Ospreys, also known as Fish Hawks, eat fish that they catch from the river. Ospreys fly as far south as South America in late August and return around the middle of March to raise their families in this area. Jug Bay is home to over 30 pairs of nesting Ospreys.

Marsh Boardwalk Trail Guide

Jug Bay Wetlands Sanctuary



1 River Watch

Take in the view of Jug Bay from the Observation Deck. The Patuxent River flows past (from right to left) on its way to meet the Chesapeake Bay 50 miles downstream at Solomons Island. The wetland here is called a **tidal freshwater marsh**. The tide floods and drains the river and wetlands twice each day, changing the water elevation by about 2 1/2 feet.

How deep is the river? The river channel is about six to 10 feet deep. When Captain John Smith explored river in 1608, his ocean-going sailing ship easily navigated the forty-foot depths of the Patuxent River channel! Sediment slowly filled in the river as colonists cut down forests to plant tobacco and other crops. Eroded soil continues to clog the Patuxent and cloud its waters.

What are those houses across the river? On the left is Mount Calvert, the only remaining structure of the 17th-century settlement of Charlestown, a port of entry to foreign ships. Billingsley Mansion, the large brick house on the hill in the distance, was the home of Charlestown's chief justice, Colonel Thomas Hollyday.

2 Where Does the Water Go?

(Retrace your steps past the sidewalk to the Wetland Center; follow the Marsh Boardwalk trail)

You are standing over an *intermittent* creek. Although this creek often appears to be dry, water seeps from underground into its channel. During storms, rainwater flows down the channel to the wetland below. Hundreds of tiny creeks like this are part of the Patuxent River watershed.

What is a watershed? It's the area of land that *sheds* water into a stream, lake, or river.

3 Wonderful Wetlands: High Marsh

What a change takes place as you leave the shelter of the forest and enter the marsh! The trees give way to a profusion of grass-like plants in the wetland.

A wetland:

- Is covered with water--at least some of the time
- Has special plants that grow in wet areas
- Has special soils

You are standing in the **High Marsh**, which is covered by water for four hours during each tidal cycle.

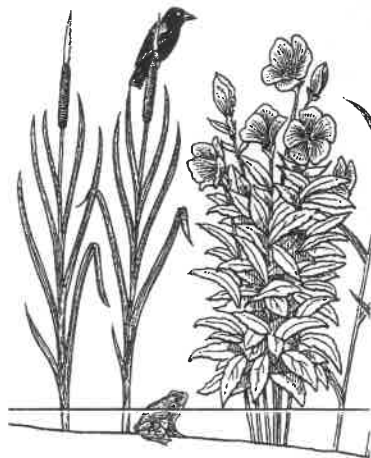


Cattails are abundant in the shallow water of the High Marsh.

The High Marsh has many species of wetland plants. **How many different types of plants you can find?**

Lush plant growth in this area of the marsh provides an important habitat for many animals.

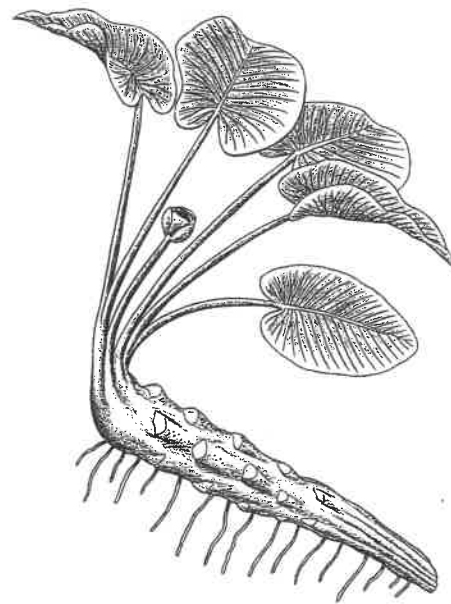
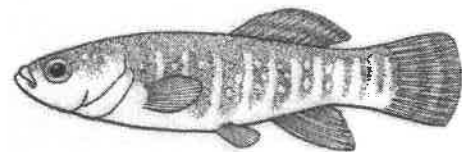
Look for interesting insects on the stems of cattails and iridescent dragonflies perching on the boardwalk. Watch for frogs or turtles. Listen for the raucous cry of Red-winged Blackbirds.



4 Wonderful Wetlands: Low Marsh

As you continue, notice how the water becomes deeper. Here, the High Marsh gives way to the **Low Marsh**. Fewer types of plants are able to grow in deeper water. Beyond the Low Marsh is **Open Water**--an excellent habitat for underwater plants, fish, turtles, and water snakes.

Look for schools of **Mummichogs** (small, minnow-like fish) breaking the surface of the water. The name comes from an Algonquin word that means "going in crowds."



You may see a turtle or carp swimming among the large, round leaves of **Spatterdock**, also known as the yellow pond lily.

At low tide, look for animal footprints in the mud.

Spatterdock
(*Nuphar advena*)