**Marshes**

A marsh is a type of wetland that is dominated by herbaceous rather than woody plant species. Marshes can often be found at the edges of lakes and streams, where they form a transition between the aquatic and terrestrial ecosystems. They are often dominated by grasses, rushes or reeds. If woody plants are present they tend to be low-growing shrubs. This form of vegetation is what differentiates marshes from other types of wetland such as swamps, which are dominated by trees, and mires, which are wetlands that have accumulated deposits of acidic peat.

Marshes provide habitat for many types of plants and animals that have adapted to living in flooded conditions. The plants must be able to survive in wet mud with low oxygen levels. Many of these plants therefore have aerenchyma, channels within the stem that allow air to move from the leaves into the rooting zone. Marsh plants also tend to have rhizomes for underground storage and reproduction. Familiar examples include cattails, sedges, papyrus and sawgrass. Aquatic animals, from fish to salamanders, are generally able to live with a low amount of oxygen in the water. Some can obtain oxygen from the air instead, while others can live indefinitely in conditions of low oxygen. Marshes provide habitats for many kinds of invertebrates, fish, amphibians, waterfowl and aquatic mammals. Marshes have extremely high levels of biological production, some of the highest in the world, and therefore are important in supporting fisheries. Marshes also improve water quality by acting as a sink to filter pollutants and sediment from the water that flows through them. Marshes (and other wetlands) are able to absorb water during periods of heavy rainfall and slowly release it into waterways and therefore reduce the magnitude of flooding.

Marshes differ depending mainly on their location and salinity. Both of these factors greatly influence the range and scope of animal and plant life that can survive and reproduce in these environments. The three main types of marsh are salt marshes, freshwater tidal marshes, and freshwater marshes. These three can be found worldwide and each contains a different set of organisms.

Salt marshes. Saltwater marshes are found around the world in mid to high latitudes, wherever there are sections of protected coastline. They are located close enough to the shoreline that the motion of the tides affects them, and, sporadically, they are covered with water. They flourish where the rate of sediment buildup is greater than the rate at which the land level is sinking. These locations allow the marshes to absorb the excess nutrients from the water running through them before they reach the oceans and estuaries. These marshes are slowly declining. Coastal development and urban sprawl has caused significant loss of these essential habitats.

Freshwater tidal marshes. Although considered a freshwater marsh, this form of marsh is affected by the ocean tides. The diversity of the plants and animals that live in and use freshwater tidal marshes is much higher than in salt marshes. The most serious threats to this form of marsh are the increasing size and pollution of the cities surrounding them.

Freshwater marshes. Ranging greatly in both size and geographic location, freshwater marshes make up the most common form of wetland. They are also the most diverse of the three types of marsh. Freshwater marshes are often found in open areas near rivers and lakes. They are very common at the mouths of rivers and form in areas with mineral soil that drains very slowly. The water in freshwater marshes is usually one to six feet deep and is rich in minerals. Water flows into marshes from rain or from a water source like creeks, streams, or rivers.

Low-growing plants like grasses and sedges are common in freshwater marshes. Bulrushes and cattails are often found at the edges of a marsh. There are very few trees in freshwater marshes. Animals like mink, raccoons, opossums, muskrats, beavers, frogs, turtles and lots of species of birds and insects are common in marsh lands. Freshwater marshes can vary in size from very small to very large. The largest freshwater marsh in the United States is the Florida Everglades.