

# DELTA JOURNAL

## *Types of coastal wetlands*

America's wetland, Louisiana's coastal wetlands, are vast and diverse. They are obviously not homogeneous assemblages of plants, but they are easily separated into five biological and physical communities.

They may first be subdivided into two broad categories. Swamps usually have standing water and contain woody vegetation. Marshes also are usually inundated with water, but contain non-woody standing vegetation.

Closest to the Gulf waters are salt marshes. They grow in water that is very salty — greater than 20 parts per thousand. Open sea water hovers around 35 ppt. Salt marshes are flushed with the salty water with each tidal movement. Because few plants can tolerate salt water, salt marshes are inhabited by relatively few species, and are dominated by two large species — oyster grass (*Spartina alterniflora*) and black rush (*Juncus roemerianus*).

Next inland is brackish marsh, which grows in water with a high salt content — 10-20 ppt. It has higher diversity of



STAFF PHOTO BY CHRIS GRANGER

The marshes near the Gulf of Mexico have higher salinity levels than inland marshes.

plants, but is dominated by wire grass (*Spartina patens*).

The next marsh habitat is unique to Louisiana and is called intermediate marsh. Its salt content is 2-10 ppt, and is easily identified by the mixture of wire grass and freshwater species such as water lilies (*Nymphaea*), cattails (*Typha*), and bulltongue (*Sagittaria*).

The most diverse type of wetland, freshwater marsh, is found between intermediate marsh and swamps. By its name, it has freshwater — 0-2 ppt salinity — and is incredibly diverse, having many species of plants that are familiar to Louisianians as those we speed by in roadside ditches, canals, and the like.

Swamps have fresh water, and host a wide variety of water-associated plants. In Louisiana, the characteristic woody plants of swamps are bald cypress (*Taxodium disticum*) and tupelo gum (*Nyssa aquatica*).

All wetlands are important ecosystems. The fact that America's wetland is so extensive makes coastal Louisiana extremely important to the ecological and related economic values of America.

— **Bob Thomas**