National Park Service U.S. Department of the Interior

**Assateague Island National Seashore** 

# The Life of the Marsh Nature Trail



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## The Life of the Marsh

The salt marsh is perhaps the most misunderstood of all coastal lands and wetlands. Mud, biting insects and the odor of decomposing marsh grasses tend to overshadow the salt marsh's beauty, complexity and ecological value. Enjoy discovering the subtle variations in elevation that determine the bayside salt marsh community.



1 Brushy edge zone

The edge zone of the coastal marsh community offers enough elevation for a wide variety of plants and animals to live here. Young black cherry trees, most often associated with loblolly pine in eastern maritime forests, are a dominant plant. Notice how the mature cherry trees are riddled with small holes. The holes are bored by the yellow - bellied sapsucker, a woodpecker that winters on Assateague.

Linger a few moments (especially in spring) and look and listen for red-winged blackbirds, yellow warblers, boat-tailed grackles, catbirds, kingbirds and may be even indigo buntings.

### 2 Spoil bank vegetation

This boardwalk is placed on an old spoil bank. Material was dredged from each side to form a dike. Long ago a marina was planned to shelter boats on Assateague before the establishment of the National Seashore.

Winged sumac grows on this spoil bank along with typical high marsh shrubs like groundsel-tree and marsh elder. Dog-fennel, a perennial in the thistle family, grows in this previously disturbed area. In summer, dog-fennel has graceful, feathery, lustrous-green foliage and in winter clumps of dead stems remain standing.

**3 Men, machines & marshes** Alteration of this marshland ecosystem was part of an ambitious project initiated in the 1950s to develop all the Maryland portion of Assateague Island. The channel on either side of the board walk is manmade. The scalloped edge of the marsh was created by the treads of a bulldozer as it backed up while building this dike.

Notice the straight, narrow ditches across the marsh on the right as you cross the bridge. These ditches were dug as an intended control measure of the saltmarsh mosquito. Ironically, such actions may have enhanced mosquito breeding. It is important to mention the larvae, pupae, and adults of mosquitos are food for many fishes and



birds and thus are a vital link in island food chains. The National Seashore does not attempt to control mosquito populations.

What do the bulldozer tracks, manmade channels, berms and mosquito ditches tell you about the capacity of salt marshes to recover from the alterations of man?

### 4 Marsh grasses



### Marsh grasses are among the most important of all wild plants. They support a vast array of seashore animals and furnish much of the nutrient material that is the food base for coastal bay communities and shallow seas along the coastline.

Saltmarsh cordgrass (*Spartina alterniflora*) is the predominate grass of east coast salt marshes. Growing in the lowest areas of the marsh, it often forms vast grassy expanses and borders along the edges of tidal channels and guts. In higher areas of the marsh, areas that are inundated only by the highest tides, saltmeadow cordgrass (*Spartina patens*) dominates. Seashore saltgrass (*Distichlis spicata*) is commonly found with saltmeadow cordgrass growing in higher areas of the marsh that are irregularly flooded.

# Growing amongst the marsh grasses is slender glasswort (sometimes called saltwort—a name that more properly belongs to a plant of the sea beach, Salsola kalli). Glassworts (Salicornia species) are members of the spinach family, which includes such edibles as beets and chard. They produce tiny brown flowers; the leaves are mere fleshy sheaths on the translucent stems. In autumn they turn the marsh into a rich red carpet sprinkled with the violet of the delicate sea lavenders.

### 6 Salt pannes

5 Glassworts

Depressions in the high marsh may become inundated by the highest tides and after evaporation, become hypersaline - - -with soil too salty for most marsh plants. Eventually these salt pannes may be colonized by such salt - tolerant plants as glassworts; these can actually help remove excess salt from the soil, eventually allowing normal succession cycles to proceed.

### 7 Marsh birds



8 Are wetlands wastelands?



Wading birds, shore birds, gulls, songbirds, and even hawks and owls utilize the rich food resource of the salt marsh. The snowy egret, a common egret at Assateague, wades in the shallows, stirring up the sediments with its yellow feet and snatching invertebrates and small fishes with its bill. The greater yellowlegs, a shore bird, wades in water up to its belly and probes the sediments with its long bill to feed on crustaceans and fishes. The northern harrier ("marsh hawk") can be seen flying low over the marsh hunting rodents and other small animals. The willet is one of the shore birds that commonly use the marshland as a nesting site. This large member of the sandpiper family appears as a drab, gray - brown bird when resting, but in flight it displays a striking black - and - white wing pattern.

Wetlands may be freshwater, saltwater or brackish. Owing to their great productivity and importance as wildlife habitat, salt marshes are the most valuable of all wetlands. They support a great diversity of birds, mammals, crustaceans, mollusks, and other wildlife. They are nurseries for many game and market fishes harvested from brackish and salt waters. Decaying plant fragments (detritus) from marshes are a major component of the nutrients flowing through the estuaries and coastal seas.

Sadly, these habitats, so essential to the welfare of humans and wildlife, have been destroyed at a fearsome rate. Wetland preservation laws now provide a measure of protection, but the attrition continues. National parks and other public preserves along the coasts are thus of immeasurable importance.

This tall grass (Phragmites australis) is a widespread species that grows in both fresh and brackish marshes, on bayshores and stream banks, and on spoil areas. It is considered a pest in many natural preserves, where its dense growth rapidly crowds out species more valuable to wildlife. Red-winged blackbirds often perch on its swaying stalks; and colony nesters such as cattle egrets, glossy ibises, and black - crowned night herons sometimes nest on or near the ground in dense Phragmites stands on dredge deposition sites.

Thank you for visiting Assateagues's salt marsh. Alterations by man and invasive species may remain in these marshes for years to come. But Assateague's marshes will remain protected always for coastal plant and animal life and visitors to learn from and enjoy.