

The most common salt marsh plant species in the Southeast provides us with a wealth of benefits!



Habitat

- Salt marsh is the second-most productive ecosystem on the planet. Its productivity is fueled by the recycling of nutrients, largely from *Spartina alterniflora*. The plant dies in the fall, forms wrack, and breaks down (decomposes) to release its nutrients back into the system.
- 75% of the commercially important species in the Southeast use the salt marsh as nursery grounds, such as the blue crab and shrimp.
- A number of animals such as shrimp, snails, fish, and birds also use the marsh for feeding grounds and protection.

Erosion control

- *Spartina* rhizomes (underground stems) and root mats stabilize the marsh mud, protecting against erosion.
- *Spartina* stalks break up wave energy before it reaches the land, lessening the impacts of storms.
- *Spartina* stalks also trap sediment which helps protect against sea level rise.

Clean water

- Salt marshes filter pollutants from the water column that enter our estuaries from non-point sources such as houses and lawns.
- *Spartina* helps remove pollutants — pesticides, heavy metals, and nutrients — into less harmful forms.
- Marsh sediment can act as a sponge, burying and absorbing pollutants, thus minimizing the toxic effects.

SMOOTH CORDGRASS

Spartina alterniflora

A salt marsh is a coastal wetland that serves as the transition zone between land and salt water. The dominant salt marsh plant in southeastern estuaries is *Spartina alterniflora*. This amazing plant can tolerate being covered by salt water twice a day.



Seasons in the salt marsh



Spring

Being an annual plant, *Spartina* in the salt marsh is an excellent indicator of the changing seasons. In the spring, new *Spartina* plants grow from seeds and rhizomes. In the summer, the marsh takes on its distinct bright green color.



Summer



Fall

By fall, small white flowers will have developed along the upper stalk, becoming a seed head. Leaves then turn a golden brown color and the seeds are dispersed between the fall and winter months. By mid-winter, dead *Spartina* breaks off and accumulates as mats of detritus ("wrack") on the surface of the mud.



Winter



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