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.
- Over 75% of the commercially important species in the Southeast use the salt marsh during their life cycle.
- A number of animals such as shrimp, crabs, fish, and birds use the marsh as nursery habitat, feeding grounds, and resting areas.

**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 roads.
- *Spartina* helps remove pollutants from the water, such as pesticides, heavy metals, and nutrients.
- Marsh sediments can act as a sponge, burying and absorbing pollutants, thus minimizing the toxic effects.

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**Salt marsh distribution**
*Spartina alterniflora* is found throughout the Atlantic and Gulf of Mexico coasts. It is a dominant coastal habitat with about 1,000,000 acres in North Carolina, South Carolina, and Georgia.

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**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.

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**Leaf surface**
*Spartina* can excrete salt from glands on its leaves which allows it to survive in salt water. Algae on the leaf’s surface provides food for grazers, such as the periwinkle snail.

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**Seasons in the salt marsh**
- **Spring**: Being a perennial 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**: 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 disperse. By mid-winter, dead *Spartina* breaks off and accumulates as mats of detritus (“wrack”) on the surface of the mud.
- **Fall**: Leaves turn a golden brown color and the seeds disperse. By mid-winter, dead *Spartina* breaks off and accumulates as mats of detritus (“wrack”) on the surface of the mud.
- **Winter**: Dead *Spartina* breaks off and accumulates as mats of detritus (“wrack”) on the surface of the mud.