

Eelgrass *Zostera marina*

Native to Chesapeake Bay

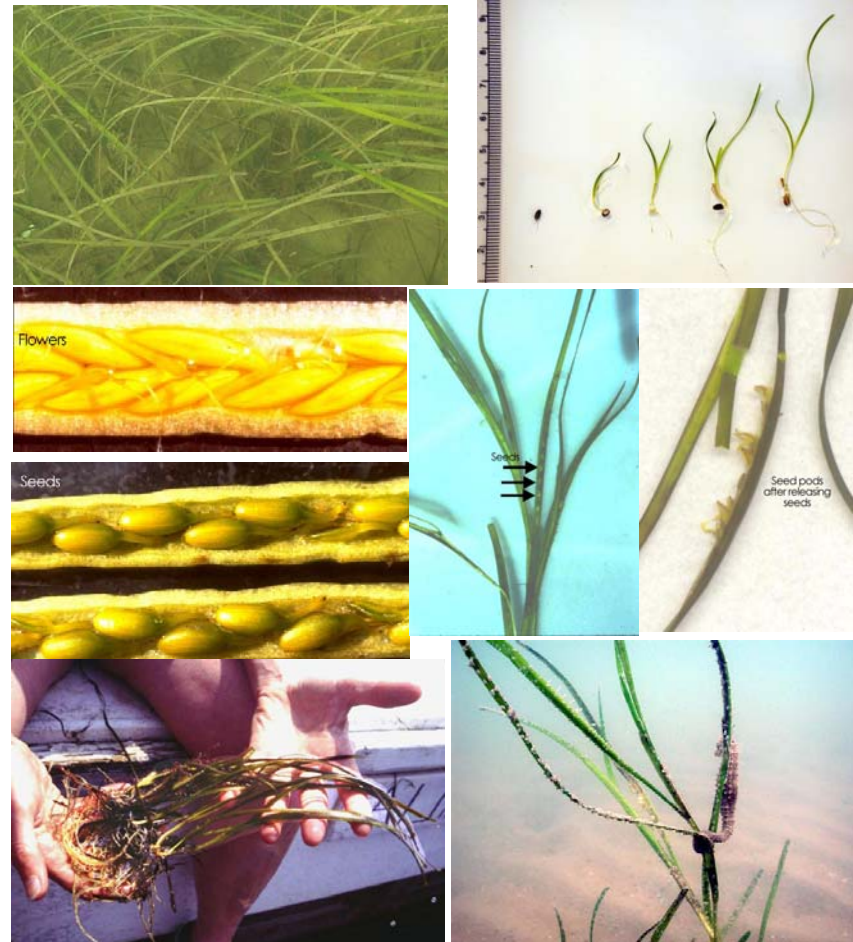
Family - Zosteraceae

Distribution - Eelgrass is one of the most abundant and most persistent SAV species in the high-salinity portions of Chesapeake Bay and the lower tributaries. Most eelgrass is found from the Choptank River south to the mouth of the Bay. Small isolated populations have also been found in Eastern Bay, Maryland.

Recognition - Eelgrass has a thick creeping rhizome 2 to 5 mm (1/16 in to 1/8 in) with numerous roots and a leaf at nodes spaced 1 to 3.5 cm (1/3 in to 1 1/2 in) apart. Alternate, ribbon-like leaves with rounded tips arise from these nodes and grow to 1.2 m (4 ft) in length and 2 to 12 mm (1/16 in to 1/3 in) width. Each leaf has a tubular, membranous basal sheath 5 to 20 cm (2 in to 8 in) long and with a width greater than that of the leaf itself. The leaves are relatively small and narrow where the plants grow on shallow, sandy, physically exposed substrates. Longer, wider leaves occur on plants growing on deep, muddy, and exposed areas.

Ecological Significance - Eelgrass is the only true "seagrass" found in the Chesapeake Bay. Eelgrass occurs along both coasts of the United States, and the Chesapeake Bay is near the southern limit of its distribution on the east coast. Unlike, other SAV in the Bay, eelgrass dies back during the warm summer months and grows best in the cooler waters of spring and fall. Eelgrass is important habitat for blue crabs that use the beds for protective cover during mating and as juveniles. It is also the important habitat for the seahorse, pipefish and speckled sea trout, and important food source for brant geese (which almost disappeared when the eelgrass declined significantly in the 1930's due to the "wasting disease"), Canada geese, widgeon, redhead and black ducks and green sea turtles.

Similar Species - Wild celery (*Vallisneria americana*) has an appearance similar to that of eelgrass but is distinguished on the basis of its leaves, which have a light green strip down the middle and are broader than those of eelgrass. Because wild celery prefers lower salinity and eelgrass higher salinity, the two species are not known to occur in the same location although their salinity ranges overlap slightly.



Reproduction - Eelgrass reproduces asexually and sexually. Asexual reproduction occurs through growth and elongation of the rhizome and by formation of turions. Sexual reproduction occurs through seed formation, and begins with flowering in May and June. Eelgrass is monoecious and fertilization occurs by drifting pollen. Male and female flowers mature at different times on the same plant to prevent self-fertilization. Once fertilized the flowers develop into seed-bearing generative shoots that eventually break off and float to the surface. The shoots then release their seeds as they drift.

Eelgrass