

# Widgeon Grass Ditch Grass *Ruppia maritima*

Native to Chesapeake Bay

**Family** - Ruppiaceae

**Distribution** - Widgeon grass tolerates a wide range of salinity, from the slightly brackish upper and mid-Bay tributaries to near seawater salinity in the lower Bay, and in hypersaline salt pannes. Widgeon grass has also been reported to grow in the freshwater parts of some estuaries and in nontidal waters. In more saline lower Bay areas, widgeon grass and eelgrass are the dominant SAV species. Widgeon grass is most common in shallow areas with sandy substrates, although it occasionally grows on soft, muddy sediments. High wave action can damage the slender stems and leaves of widgeon grass.

**Recognition** - Linear, thread-like leaves are 3 to 10 cm (1 ¼ in to 4 in) long and 0.5 mm (<1/32 in) wide; these are arranged alternately along slender, branching stems. Leaves have a basal sheath and a rounded tip. Widgeon grass has an extensive root system of branched, creeping rhizomes that lack tubers. There are two growth forms of widgeon grass in Chesapeake Bay: An upright, highly branched form during flowering (summer); and a creeping growth form with the leaves appearing basal.

**Ecological Significance** - Widgeon grass is one of the more valuable waterfowl food sources and all parts of the plant have excellent nutritional value. Widgeon grass is also important for its ability to tolerate a wide range of salinity and is found in brackish to high salinity waters. In higher salinity water, widgeon grass is often found growing together with eelgrass, with the widgeon grass more common in shallow areas and the eelgrass more common in deeper water. Widgeon grass can also be found growing in ditches alongside roads and agricultural fields where it derives its other common name, ditch grass.

**Similar Species** - When not in flower or with seeds, widgeon grass closely resembles horned pondweed (*Zanichellia palustris*) and sago pondweed (*Stuckenia pectinata*). Unlike widgeon grass, however, horned pondweed has opposite to whorled leaves, and the leaves of sago pondweed are in bushy clusters. When in seed, the single seed pods that form at the base of fan-shaped clusters of short stalks distinguish widgeon grass. Sago pondweed seeds are in terminal clusters, and horned pondweed seeds occur in groups of 2-4, are horn-shaped and form in the leaf axils.



**Reproduction** - Widgeon grass reproduces asexually and sexually. Asexual reproduction occurs by emergence of new stems from the root-rhizome system. Sexual reproduction in late-summer produces two perfect flowers enclosed in a basal sheath of leaves. The flowers extend towards the water surface on a peduncle or flower-stalk. Pollen released from stamen float on the water surface until contacting one of the extended pistils. Fertilized flowers produce four black, oval-shaped fruits with pointed tips. Individual fruits extend on stalks, which occur in clusters of eight stalks.