

# Sago pondweed *Stuckenia pectinata*\*

Native to the Chesapeake Bay

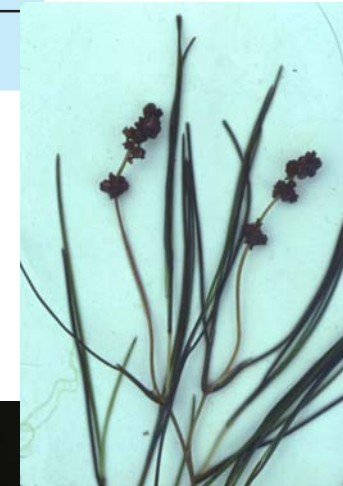
**Family** - Potamogetonaceae

**Distribution** - Sago pondweed is widely distributed in the United States, South America, Europe, Africa and Japan. In Chesapeake Bay, sago pondweed is widespread growing in fresh non-tidal to moderately brackish waters. It can tolerate high alkalinity and grows on silty-muddy sediments. It tolerates strong currents and wave action better than most SAV because of its long rhizomes and runners.

**Recognition** - Thread-like leaves are 3 to 10 cm (1 ¼ in to 4 in) long, and 0.5 to 2 mm (1/32 in to 1/16 in) wide, and taper to a point. The basal sheath of leaves sometimes has a pointed tip or bayonet that aids in identification when plants are not in flower. Seeds form in terminal clusters. Stems are slender, and abundantly branched so that bushy leaf clusters fan out at the water surface. Roots have slender rhizomes, and are long and straight.

**Ecological Significance** - Sago pondweed is widespread throughout the United States and is considered one of the most valuable food sources for waterfowl in North America. Its highly nutrient seeds and tubers, as well as leaves, stems and roots, are consumed by numerous species of ducks, geese, swans and marsh and shorebirds.

**Similar Species** - Horned pondweed (*Zanichellia palustris*) and widgeon grass (*Ruppia maritima*) have a very similar appearance to sago pondweed and are difficult to identify without fruits. Sago pondweed has alternately arranged leaves, but horned pondweed has oppositely arranged or whorled leaves. The leaves of widgeon grass are also alternately arranged but are not in bushy clusters like those of sago pondweed. The seeds are also distinctly different among the three species. Sago pondweed seeds are in terminal clusters. Widgeon grass has single seed pods that form at the base of fan-shaped clusters of short stalks, and horned pondweed seeds occur in groups of 2-4, are horn-shaped pairs and form in the leaf axils.



**Reproduction** - Reproduction is by seed formation and asexual reproduction. Sexual reproduction occurs during early summer by formation of a spike of perfect flowers that appear like beads on the slender stalk. Flowers release pollen that floats on the water surface, resulting in fertilization. Developing seeds remain on the rachis of the spike until autumn when they are dispersed into the water. The germination rate is low, however, and asexual reproduction is more significant. Asexual reproduction is by two kinds of starchy tubers: 1) tubers produced at ends of underground rhizomes and runners, or 2) another tuber that forms in leaf axils and at end of leaf shoots; these later sink to the substrate. Both kinds of tubers grow singularly or in pairs, and can form plants later in spring.

\* formerly *Potamogeton pectinatus*