
ECOLOGICAL SYSTEM: NORTHERN ATLANTIC COASTAL PLAIN SUBTIDAL AQUATIC BED

Summary: This system represents submerged aquatic beds of brackish - freshwater tidal upper bays, rivers, and tributaries, ranging from Chesapeake Bay northward to the Massachusetts coast. Typical species include *Stuckenia pectinata* (sago pondweed), *Potamogeton perfoliatus* (clasping-leaf pondweed), *Zannichellia palustris* (horned pondweed), and others.

Range: Ranges from Chesapeake Bay northward to the Massachusetts coast. United States: VA

Delaware Estuary Associations:

- Central Atlantic Freshwater Subtidal River Bed

CLASSIFIERS FOR NORTHERN ATLANTIC COASTAL PLAIN SUBTIDAL AQUATIC BED

Primary Division: 203

Land Cover Class: Herbaceous Wetland

Spatial Scale & Pattern: Large patch

Required Classifiers: Natural/Semi-natural; Vegetated (>10% vasc.); Wetland

Diagnostic Classifiers: Tidal / Estuarine; Aquatic Herb

Non-diagnostic Classifiers: Herbaceous

CENTRAL ATLANTIC FRESHWATER SUBTIDAL RIVER BED

Stuckenia pectinata - *Potamogeton perfoliatus* - (*Zannichellia palustris*) Tidal Herbaceous Vegetation

Range: This association occurs along the mid- and north Atlantic coast from Massachusetts to Virginia. It occurs in New Jersey and possibly Delaware in the Delaware Estuary.

Environmental Description: This association occurs on fresh to slightly brackish flats that are continuously flooded, although certain areas can be exposed briefly during very low tides.

Vegetation Description: This association includes beds of aquatic vegetation in fresh to slightly brackish waters. Common and dominant species include *Stuckenia pectinata* (sago pondweed), *Potamogeton perfoliatus* (clasping-leaf pondweed), *Zannichellia palustris* (horned pondweed), *Vallisneria americana* (tape-grass), *Najas guadalupensis* (common water nymph), *Elodea nuttallii* (western waterweed), and *Ceratophyllum demersum* (coontail). *Ruppia maritima* (beaked ditch-grass) may occur sporadically, but it is more prevalent in brackish and saline habitats. This community occurs in Delaware without *Potamogeton perfoliatus* (clasping-leaf pondweed).

Characteristic Species: *Potamogeton pectinatus* (sago pondweed)

Dynamics/Successional Trajectory: This association grades almost imperceptibly into brackish/saline aquatic bed vegetation.

Management Concerns: Invasive exotics often occur in this habitat, including *Myriophyllum spicatum* (Eurasian water-milfoil) and *Trapa natans* (water chestnut).

Reference Sites: This community needs further investigation (one known site is privately owned on the Salem River, NJ).

Global and State Conservation Ranks and Reasons: G3G5 (1-Dec-1997). DE: S1, NJ: S2S3.

VegBank Link for Plot Data: http://vegbank.org/natureserve/element_global.2.686704

References: Bartgis 1986, Berdine 1998, Bowman 2000, Breden 1989, Breden et al. 2001, Clancy 1996, Eastern Ecology Working Group n.d., Edinger et al. 2002, Enser 1999, Fleming 2001, Fleming et al. 2001, Harrison 2004, Metzler and Barrett 2001, Moore et al. 2000, Rawinski 1984, Reschke 1990, Swain and Kearsley 2001

MOST ABUNDANT SPECIES		
STRATUM	LIFEFORM	SPECIES
Submerged aquatic	Aquatic herb (floating & submergent)	<i>Potamogeton pectinatus</i> (sago pondweed)