

Naiads *Najas* spp.

Native to Chesapeake Bay except for *N. minor*; non-invasive

Family - Najadaceae

Distribution - Four naiad species occur in Chesapeake Bay. The first two are more common than the latter two.

- *Najas guadalupensis* (southern naiad or bushy pondweed)
- *Najas minor* (no common name)
- *Najas flexilis* (northern naiad)
- *Najas gracillima* (slender naiad).

Naiads are native except for *N. minor* which was introduced from Europe. Naiads grow in small freshwater streams, and freshwater portions of Bay tributaries. Bushy pondweed tolerates slightly brackish water. Naiads prefer sandy substrates and tolerate relatively low light.

Recognition - Naiads vary in size from inch-high tufts on sandy bottoms to highly branched plants two or three feet high on silty bottoms. In general the naiads have slender, branching stems with narrow leaves that broaden at the base and are opposite or in whorls. Naiads have small, fibrous roots without rhizomes or tubers. The four species in Chesapeake Bay resemble one another, however, their leaves provide distinguishing characteristics. Bushy pondweed and northern naiad have wider leaves than the other two species. Bushy pondweed leaves are flat and straight, whereas leaves of northern naiad curve out from the stem at maturity. Slender naiad and *N. minor* have slender leaves with a truncated (abruptly-ending) basal sheath. *N. minor* is distinguished from slender naiad by stiff, recurved leaves and lengthwise ribs on its seed coat. Slender naiad has minute leaf-margin teeth that are difficult to see, whereas leaf-margin teeth of *N. minor* are visible to the naked eye.

Ecological Significance - *N. guadelupensis* and *N. flexilis* are considered to be excellent food sources for waterfowl. All parts of the plants (stems, leaves and seeds) are eaten by a variety of waterfowl including lesser scaup, mallards and pintails. The other two species of Naiads are less important due to their scarcity (*N. gracillima*) and low nutritional value (*N. minor*).

Similar Species - Naiad species are similar in appearance. All are difficult to distinguish without the use of a handheld lens and some experience.

Najas minor



Najas guadalupensis



Najas spp.



Reproduction -Reproduction occurs primarily by seed formation in late summer. Male and female flowers are located on leaf axils. The seeds that develop after pollination have surface markings, and each species has its own characteristic seed surface markings. Finally, seed germination and plant growth occur in spring.