

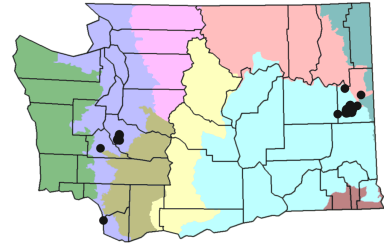
Howellia aquatilis A. Gray

water howellia

Campanulaceae - harebell family

status: State Threatened, Federal Listed Threatened

rank: G3 / S2S3



General Description: Rooted aquatic annual, hairless, green, 1-6 dm long, with branches spreading or floating. Leaves numerous, linear to threadlike, 1-4.5 cm x 1.5 mm, mostly alternate but sometimes subopposite or whorled.

Floral Characteristics: Flowers 3-10, very small (2-2.7 mm long), white, irregular, scattered in the leaf axils, on stout pedicels 1-4 (8) mm long. Only flowers that reach the surface of the water open, while those underwater remain closed; both develop mature fruits. Calyx lobes pointed, 1.5-7 mm long, persistent in fruit.

Fruits: Capsules 5-13 x 1-2 mm. Identifiable March through summer, depending on water level and turbidity.

Identification Tips: Superficially similar to a number of other aquatic and emergent plants, most notably water-starwort (*Callitriche* spp.). However, the persistent, spreading, pointed calyx lobes are distinctive.

Range: Scattered distribution in CA, MT, ID, and WA. Historically from OR.

Habitat/Ecology: In western WA it occurs in low-elevation wetlands, associated with Oregon ash (*Fraxinus latifolia*), water-parsley (*Oenanthe sarmentosa*), bladderwort (*Utricularia vulgaris*), water parsnip (*Sium suave*), inflated sedge (*Carex vesicaria*), and yellow pond lily (*Nuphar polysepalum*). In eastern WA it occurs in wetlands within forested channeled scablands. Associated species include quaking aspen (*Populus tremuloides*), water parsnip (*Sium suave*), bur-reed (*Sparganium* spp.), bladderwort (*Utricularia* sp.), and pondweed (*Potamogeton* spp.). It is found mostly in small vernal ponds, although some ponds may retain water throughout the year. It requires exposure to air for seed germination in the fall and inundation for growth in the spring. This restricts the species to a seasonally inundated zone that dries out in summer or early fall. Soils are rich in organic matter. Elevations in WA: 3-730 m (10-2400 ft).

Comments: This species is the only member of its genus. It is threatened by habitat loss, changes in wetland hydrology, livestock grazing, timber harvest activities, and competition from weedy species, including reed canarygrass (*Phalaris arundinacea*) and purple loosestrife (*Lythrum salicaria*). It is rare throughout its range.

References: Guard 1995.

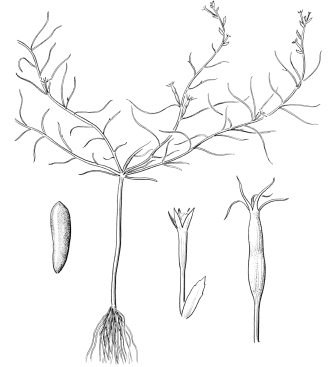


Illustration by John H. Rumely,
©1955 University of Washington
Press



photo by Joe Arnett



photo by Joe Arnett