

Nymphaea tetragona Georgi

pygmy water-lily
Nymphaeaceae (Water Lily Family)

Status: State Possibly Extirpated

Rank: G5SH

General Description: Adapted from Hitchcock et al. (1964):

Nymphaea tetragona is a perennial aquatic herb with leaves arising from unbranched, erect rhizomes and a slender stem. The floating leaf blades are elliptic-oval and hairless. The leaves are green and sometimes mottled red-brown to purple above (young leaves) and green to dull purple beneath, and they are 1-5 in. (3-13 cm) long by $\frac{3}{4}$ to $4\frac{1}{4}$ (2-11 cm) wide, with 7-13 palm-like veins. The white to pinkish, yellow-centered, non-odorous flowers open in the afternoon and close in the evening. The floating inflorescence is 1 to 3 in. (3-7.5 cm) in diameter. There are 7-15 petals that are equal in size to the green, leafy bracts and are $\frac{3}{4}$ to 1 in. (2-3 cm) long. The base of the flower is square where it attaches to the pedicel. The fruits are berry-like, leathery, many-seeded, capsules that rupture to release a jelly-like seed mass. The seeds are ovoid and less than $\frac{1}{8}$ in. (3 mm) by $\frac{1}{16}$ in. (2 mm)

Identification Tips: There are several other species of water lily in Washington, including *Nymphaea odorata* and *Nuphar lutea* ssp. *polysepala*. *N. odorata* is similar to *N. tetragona*, but the leaves are more round, and much larger (up to 10 in. (25 cm) broad). The flowers of *N. odorata* are also twice the size of *N. tetragona*, are very fragrant, and open in the morning and close in the afternoon. The flowers of *N. tetragona* open in the afternoon and close in the evening. *Nuphar luteum* ssp. *polysepala* is easily distinguishable from both species of *Nymphaea* by its elongated leaves and yellow flowers.

Phenology: *Nymphaea tetragona* blooms from June through August.

Range: This species was historically common from north Michigan, east through Manitoba, Canada, and north to Alaska and Eurasia. There are a few disjunct occurrences in Montana, British Columbia, Saskatchewan, Manitoba, and Alberta, Canada. *N. tetragona* is very rare in Washington and possibly extirpated. It was historically found around 1930 in Whatcom and Pend Oreille counties.

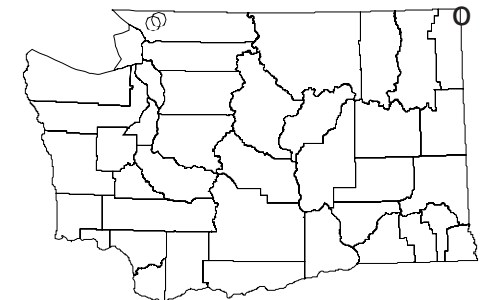
Nymphaea tetragona

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Known distribution
of *Nymphaea tetragona*
in Washington



● Current (1980+)
○ Historic (older than 1980)

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Habitat: *Nymphaea tetragona* is found in ponds, swamps, lakes, and quiet streams in the lowland and montane zones, at an elevation of 0 to 4000 feet (0-1200 m).

Ecology: This is an obligate open water species that prefers stagnant or slow-moving water.

State Status Comments: The species has been searched for but not found in its historic collection sites. The last time it was collected in Washington was in the 1930's.

Inventory Needs: Historic sites and adjacent habitat should be investigated.

Threats and Management Concerns: The primary threat to *Nymphaea tetragona* is a change in the water quality of its habitats. Changes in water quality may be due to nearby logging, siltation, nutrient loading, and eutrophication. Competition with exotic species may also be a factor.

References:

Douglas, G.W., G.B. Straley, D. Meidinger, and J. Pojar. 1999. *Illustrated Flora of British Columbia* vol. 3: *Dicotyledons (Diapensiaceae Through Onagraceae)*. Ministry of Environment, Lands and Parks, Victoria, British Columbia. 423 pp.

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