

## ***Utricularia resupinata***

Northeastern bladderwort

### Status

Federal status: G4 N?, Not listed

NH state status: SR, Candidate

ME state status: S1, Endangered

Flora Conservanda Division 2. There is insufficient information to determine a trend for this species across its range or in northern New England.

The current outcome for this species is C locally and range-wide. In the Northeast, the range is not reduced but habitat is lower in quality. In the WMNF, *Utricularia resupinata* rarely flowers. The future range-wide outcome range for this species is C to D due to lakeshore development. In the WMNF the outcome remains C in the foreseeable future.

### Distribution

Range extends from Nova Scotia south to Florida, west to Alabama, and north to Ontario. New England is at the northern end of the range of *U. resupinata*. This is a coastal plain species, which reaches into the Great Lakes region.

In Maine, there are 12 historical and five extant occurrences documented in Franklin, Oxford, Hancock, Androscoggin, Kennebec, York, and Washington Counties. There are historic occurrences in Albany Township, Waterford, and Canton in Oxford County, and an extant occurrence in Fryeburg. Albany Township occurrence would be in or near the WMNF.

This species is reported from Coos, Carroll, and Grafton counties in New Hampshire, but information available does not indicate if occurrences fall in the WMNF. Another source indicates it is known to occur within the WMNF proclamation boundary and nearby in Kimball Pond.

### Habitat

*Utricularia resupinata* occurs along pond, lake, and bog shores and margins, as well as in some wet ditches. It prefers clear, acidic waters with sandy, muddy, or peaty shores. It appears to need low water levels to bloom, and prefers a slightly higher than average water temperature. It grows on sandy lakeshores in water up to 15 cm deep.

This species tends to be mat-forming and stays well-established in its habitat, but is not easily found because it rarely flowers. It needs enough water level fluctuation in the middle of the season for it to flower.

### Limiting Factors

The most significant factor limiting this species is the effect that water levels have on flowering. Otherwise suitable habitat that does not experience a mid-season reduction in water levels or have year-round low water levels may not support a reproductive population. The effect of human and beaver-created dams may depend on water levels and level fluctuations in the reservoir.

Preference for pond edge and lakeshore habitat may make this species vulnerable to disturbance and habitat loss.

#### Viability concern

The expert panel indicated that *Utricularia resupinata* is likely on the Forest and gave current and future outcomes that are viable, but near the threshold. The Forest Service has potential to impact this species through alteration of beaver and human-created dams. Need for water level fluctuations means this species cannot be addressed by a surrogate species.

#### Management activities that might affect viability

Activities that alter water levels in suitable habitat could impact habitat suitability, depending on the timing, regularity, and intensity of changes in water levels. Such activities might include construction, modification, or removal of dams, including removal of beaver-created dams. Road construction or other activities that alter the hydrology of a pond or bog also could affect this species if it is present.

Recreational use and facility construction along pond, lake, and bog shores could reduce habitat suitability and increase the risk of direct impact to populations.

#### References

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