

State Distribution

Best Survey Period

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Status: State threatened

Global and state rank: G4/SH

Other common names: Water-plantain spearwort

Synonyms: Ranunculus obtusiusculus Raf.,

Ranunculus alismaefolius A. Gray

Family: Ranunculaceae (buttercup family)

Total range: This member of the buttercup family occurs from Maine to southern Ontario and Minnesota, ranging south to Georgia, Alabama, and northern Louisiana. Spearwort is considered rare in Connecticut, Delaware, Kentucky, New Hampshire, New Jersey, and Virginia, and is known only from historical records in District of Columbia, Maine, Maryland, Massachusetts, and North Carolina (NatureServe 2003).

State distribution: *R. ambigens* has been collected twice in Michigan, once from St. Clair County in 1904, where it was noted as abundant, and once from Ottawa County in 1940.

Recognition: Spearwort is a somewhat coarse, stout plant, the thickish stem (hollow and .5-2.0 cm wide at the bottom) reclining toward the base and developing

roots at the leaf nodes, the erect portion ascending to about 3-8 dm in height. The unlobed, alternate leaves are oblong-lanceolate to narrowly lance-elliptic in shape, at least 7 mm wide and 7 mm long, including the short petioles (the upper ones becoming somewhat narrower and more long-tapering), and have tiny, well-spaced teeth along their margins. Along the stem, the leaves are clearly stalked, with the bases of the petioles expanded and sheathing. Stems are terminated by an inflorescence of a few to 15 or 20 yellow flowers, each with 5 petals at least 5 mm long that distinctly exceed the sepals. The globose fruiting heads are an aggregate of achenes with awl-like, slightly curved beaks at least 0.5 mm long.

R. reptans (creeping spearwort) is a wide-ranging and somewhat similar buttercup that may occur with spearwort, but it is a more delicate plant with leaves that are smaller and much narrower (<4 mm wide and often thread-like), and it bears achenes with beaks less than 0.3 mm long and petals 2-4 mm long. Other buttercups with unlobed leaves (the rare *R. cymbalaria* or the introduced *R. ficaria*) have petioles that exceed the leaf blade in length, the latter abruptly narrowing at the base.

Best survey time/phenology: The limited data for Michigan's occurrences indicate that spearwort was collected in flower in mid-July in Ottawa County and



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early August and late August in the St. Clair County site. The best survey period is presumed to be July and August, though this may be conservative. Elsewhere, this species is reported to flower from June to September.

Habitat: Since this plant has only been collected twice in Michigan, little is known of its specific habitat requirements here. In St. Clair County, it was reported to be abundant in ditches and streams and in Ottawa County it occurred in a spring on a hillside. In other portions of its range there appears to be little habitat specificity, as this species is reported from a wide diversity of wetland types, including marshes, shores, sloughs, and swamps (Godfrey and Wooten 1981).

Biology: Michigan specimens have been collected in flower from mid-July through August and in fruit during August. Spearwort is a perennial species (Benson 1948) that can spread vegetatively via stolons.

Conservation/management: The status of this species in Michigan is unknown. The locality from which it was collected in Ottawa County—although apparently intact—was searched unsuccessfully in 1986. It should continue to be sought in southern Michigan, especially in St. Clair County where it was reported to be abundant at one time.

Research needs: The primary need for this species is to continue inventories within and near the two localities of its collection. The apparent lack of habitat specificity indicates that this species may potentially occur in southern Lower Michigan and possibly elsewhere within the state.

Related abstracts: Great Lakes marsh, wild rice, American bittern, least bittern, black tern, eastern fox snake, Forster's tern, king rail

Selected references:

Benson, L. 1948. A treatise on the North American *Ranunculi*. Amer. Midl. Nat. 40: 1-261.

Godfrey, R. K. and J. W. Wooten. 1981. Aquatic and wetland plants of southeastern United States. University of Georgia Press, Athens. 933 pp.

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Ranunculaceae (Crowfoot Family) of New York State. Contrib. Flora of N.Y. State IV, Bull. No. 446. N.Y. State Museum, Albany. 100 pp.

NatureServe. 2003. NatureServe Explorer: An Online encyclopedia of life [web application]. Version 1.8. NatureServe, Arlington, Virginia. Available http://www.natureserve.org/explorer. (Accessed: November 11, 2003).

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