



Natural Heritage & Endangered Species Program

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Massachusetts Division of Fisheries & Wildlife

One-sided Wintergreen *Orthilia secunda* L.

State Status: **None**
Federal Status: **None**

SPECIES DESCRIPTION: One-sided Wintergreen is named for the row of small flowers along one side of its bent stem. This perennial wildflower has evergreen, shiny leaves in a basal whorl, sometimes smooth along their margins and sometimes with a few low teeth. It is a rhizomatous species; thus, several ramets (stems) can represent a single genet (genetically one individual plant, all interconnected). This species flowers from June to August, and can self-pollinate. However, the seed is reported to be difficult to grow.

DISTRIBUTION AND ABUNDANCE: One-sided Wintergreen has a circumboreal distribution, and is known throughout the northern hemisphere. The species has become extirpated in several southeastern US states where it previously occurred and its populations have decreased in other states substantially. In Massachusetts, data on its populations are just starting to be tracked by the Natural Heritage and Endangered Species Program, but recent floras indicate that it may be decreasing as it has not been relocated in historical locations (Weatherbee 1996, Bertin and Rawinski 2012).

HABITAT DESCRIPTION: One-sided Wintergreen is found in moist coniferous, mixed, and deciduous forests and in mossy bogs. It can be found both within wetland areas and the adjacent uplands. It is variously described as occurring in open, rich, dry woods to deep *Arborvitae* swamps on mossy knolls above the water.

THREATS: The primary threats to One-sided Wintergreen are not known but may include loss of habitat and climate change. As a species in the Ericaceae, it relies on a mycorrhizal association which may be disrupted by earthworms or invasive plant species.

REFERENCES:

- Bertin, R.I., and T.J. Rawinski. 2012. Vascular Flora of Worcester County, Massachusetts. Special Publication of the New England Botanical Club, Cambridge, MA.
- Freeman, C.C. 2009. 4. *Orthilia*. In Flora of North America Editorial Committee, editors. *Flora of North America, Volume 8*, Page 388. Oxford University Press, New York, New York.
- Haines, A. 2011. *Flora Novae Angliae*. The New England Wild Flower Society. Yale University Press, New Haven, CT.
- Gleason, H.A. and A. Cronquist. 1991. *Manual of Vascular Plants of Northeastern United States and Adjacent Canada, Second Edition*. The New York Botanical Garden, Bronx, New York.
- NatureServe. 2014. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://explorer.natureserve.org>. (Accessed: January 4, 2015).
- Weatherbee, P.B. 1996. *Flora of Berkshire County, Massachusetts*. The Studley Press, Inc. Dalton, Massachusetts.

Updated 2015

A Species of Greatest Conservation Need in the Massachusetts State Wildlife Action Plan

Massachusetts Division of Fisheries & Wildlife

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