

Species Listing PROPOSAL Form:
Listing Endangered, Threatened, and Special Concern Species in Massachusetts

Scientific name: _____ **Potamogeton ogdenii** _____

Current Listed Status (if any): __E__

Common name: __Ogden's Pondweed__

Proposed Action:

_____ Add the species, with the status of: _____

Remove the species

_____ Change the species' status to: _____

Change the scientific name to: _____

Change the common name to: _____

(Please justify proposed name change.)

Proponent's Name and Address:

Robert Wernerehl
 State Botanist of Massachusetts
 Natural Heritage & Endangered Species Program
 Division of Fisheries & Wildlife
 1 Rabbit Hill Road
 Westborough, MA 01581

Phone Number: 508.389.7818

E-mail: robert.wernerehl@mass.gov

Fax: 508.389.7890

Association, Institution or Business represented by proponent:
 Massachusetts Natural Heritage & Endangered Species Program

Proponent's Signature:

Date Submitted: 3/3/2023



Please submit to: Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife, 1 Rabbit Hill Road, Westborough, MA 01581

Justification

Justify the proposed change in legal status of the species by addressing each of the criteria below, as listed in the Massachusetts Endangered Species Act (MGL c. 131A) and its implementing regulations (321 CMR 10.00), and provide literature citations or other documentation wherever possible. Expand onto additional pages as needed but make sure you address all of the questions below. The burden of proof is on the proponent for a listing, delisting, or status change.

(1) Taxonomic status. Is the species a valid taxonomic entity? Please cite scientific literature.

No. The taxon is now considered a hybrid, a valid taxonomic entity but not a true species. The name *Potamogeton ogdenii* was first published in 1983 by Massachusetts own aquatic botanical expert, C. Barre Hellquist. The taxon is properly named as the hybrid, *Potamogeton x ogdenii* (Haines 2021, Kaplan et al. 2013, Kaplan and Reveal 2013, NatureServe 2023, POWO 2023).

- (2) **Recentness of records.** How recently has the species been conclusively documented within Massachusetts?
When recognized as a species, the most recent record was in 2009 in the town of Pittsfield.
- (3) **Native species status.** Is the species indigenous to Massachusetts?
The hybrid is indigenous to Massachusetts.
- (4) **Habitat in Massachusetts.** Is a population of the species supported by habitat within the state of Massachusetts?
The hybrid is found in calcareous, shallow ponds in the Berkshires.
- (5) **Federal Endangered Species Act status.** Is the species listed under the federal Endangered Species Act? If so, what is its federal status (Endangered or Threatened)
No, the hybrid has no federal status and is not recognized as a species at the federal level for protection.
- (6) **Rarity and geographic distribution.**
- (a) Does the species have a small number of occurrences (populations) and/or small size of populations in the state? Are there potentially undocumented occurrences in the state, and if so, is it possible to estimate the potential number of undocumented occurrences?
- There is currently only one extant population in the town of Hancock (Hellquist pers. com. 2023). Since the area has been surveyed frequently by the taxonomic expert, there are potentially very few undocumented occurrences in the state of this hybrid.
- (b) What is the extent of the species' entire geographic range, and where within this range are Massachusetts populations (center or edge of range, or peripherally isolated)? Is the species a state or regional endemic?
- This hybrid is known only from MA, NY, CT and Ontario. It is a regional but not a state endemic hybrid.
- (7) **Trends.**
- (c) Is the species decreasing (or increasing) in state distribution, number of occurrences, and/or population size? What is the reproductive status of populations? Is reproductive capacity naturally low? Has any long-term trend in these factors been documented?
- The taxon is now known to be a hybrid. It is not known to have any fertile seeds. The number of observations has decreased from four locations to one since it was named as a species in 1983.
- (8) **Threats and vulnerability.**
- (d) What factors are driving a decreasing trend, or threatening reproductive status in the state? Please identify and describe any of the following threats, if present: habitat loss or degradation; predators, parasites, or competitors; species-targeted taking of individual organisms or disruption of breeding activity.
- The factors at play would have to involve trends of parent species, *Potamogeton hillii* and *P. zosteriformis*. The former is a state special concern species which has held relatively steady over the last 30 years. *P. zosteriformis* is a common species throughout the state and region.
- (e) Does the species have highly specialized habitat, resource needs, or other ecological requirements? Is dispersal ability poor?
- The taxon is now known to be a hybrid. One of the parent species, *Potamogeton hillii*, requires water bodies of higher alkalinity and is only found in western towns of Berkshire county near the New York border.

Conservation goals.

What specific conservation goals should be met in order to change the conservation status or to remove the species from the state list? Please address goals for any or all of the following:

(a) State distribution, number of occurrences (populations), population levels, and/or reproductive rates
State status is required by MESA statues to follow federal listing status at the same level of listing or higher.

This proposal is for *Potamogeton ogdenii* to be removed from the MESA list due to its hybrid nature.

(b) Amount of protected habitat and/or number of protected occurrences

This proposal is for *Potamogeton ogdenii* to be removed from the MESA list due to its hybrid nature

(c) Management of protected habitat and/or occurrences

This proposal is for *Potamogeton ogdenii* to be removed from the MESA list due to its hybrid nature

Literature cited, additional documentation, and comments.

The aquatic botanical expert in Maine, Don Cameron, and his colleagues, have removed the species from a book of New England Aquatic Plants about to be published in 2023 by University of Maine Press (Cameron pers. com. Email dated 4/18/2023). This took place after the draft of the book was reviewed by experts.

References

Haines, Arthur 2021 (Tracheophyte Checklist 2021.xls, distributed privately to New England botanists).

Kaplan Z, Jarolímová V, Fehrer J (2013) Revision of chromosome numbers of Potamogetonaceae: a new basis for taxonomic and evolutionary implications. *Preslia* 85:421–482

Kaplan Z, L. Reveal J (2013) Taxonomic identity and typification of selected names of North American Potamogetonaceae

NatureServe 2023 NatureServe Network Biodiversity Location Data accessed 4/26/2023

https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.151664/Potamogeton_x_ogdenii

POWO (2023). Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet; accessed 4/26/2023 <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:208884-2>