

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

Scientific name: _____ *Schwalbea americana* _____

Current Listed Status (if any): ____state historic__

Common name: ____American chaffseed____

Proposed Action:

____Add the species, with the status of: _____

Change the scientific name to: _____

____Remove the species

Change the common name to: _____

☒ Change the species' status to: E_____

(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

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Association, Institution or Business represented by proponent:

Proponent's Signature:

Date Submitted:

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.

The name: *Schwalbea americana* L. shows that it was named by Linneaus and it is the accepted name in ITIS

https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=34027#null

And is the name published in the Federal Register, vol. 57, no. 189

Endangered and Threatened Wildlife and Plants; Endangered Status for *Schwalbea americana* (American Chaffseed)

(2) Recentness of records. How recently has the species been conclusively documented within Massachusetts?
July of 2018

(3) Native species status. Is the species indigenous to Massachusetts?

Yes

(4) **Habitat in Massachusetts.** Is a population of the species supported by habitat within the state of Massachusetts?

Yes. It is a sandplain grassland species and there are many acres of such habitat especially on Cape Cod and the Islands.

(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)

Endangered: Federal Register, vol. 57, no. 189

Endangered and Threatened Wildlife and Plants; Endangered Status for *Schwalbea americana* (American Chaffseed)

(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 one population, with five other state historic populations on record. The extant population has over 2600 plant stems with an estimated 500 genets. Yes there are potentially undocumented occurrences in the state. The potential number of undocumented occurrences are likely to be only one or two. This plant has been highly sought after for decades.

(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?

Lousiana north along the east coast states to Massachusetts. It is federally endangered. It is not a regional or state endemic.

(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?

It is federally endangered and a highly researched plant in the Orobanchaceae, a family which is noted for its consistent hemiparasitic mechanisms, which in turns often leads to variable populations. Our most recent population was last noted in 1965, so a trend cannot be determined.

(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.

Fire suppression is most likely a strong factor in the decline. Changes in mowing practices and brush clearing can also play a role.

(e) Does the species have highly specialized habitat, resource needs, or other ecological requirements? Is dispersal ability poor?

Populations have struggled all across the eastern seaboard with reasons for the decline unclear. The habitat is not considered to be highly specialized. The seeds are very light and should be well dispersed in strong wind events. However it is likely that seeds are often not fertile.

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.

(b) Amount of protected habitat and/or number of protected occurrences
More research is needed to determine this.

(c) Management of protected habitat and/or occurrences

More research is needed to determine this.

Literature cited, additional documentation, and comments.

<https://saveplants.org/national-collection/plant-search/plant-profile/?CPCNum=3877>

Graves FM (1903) *Schwalbea Americana* in Connecticut. *Rhodora* 5:40–40

Glitzenstein JS, Gustafson DJ, Stowe JP, et al (2016) Starting a New Population of *Schwalbea americana* on a Loblolly Pine Restoration Site in South Carolina. *Castanea* 81:302–313. doi: 10.2179/16-089