

2011 Preventing Extinction Funding Request

Lead Region Priority: 1

Region: 3

Species Name: Michigan monkey-flower

Species Recovery Priority #: 9C

State: Michigan

Spotlight Species: No

Recovery Action:

Action #(s) in RP Impl. Schedule:

Landowner notification

11

Preparation of specific guidelines for management of MI monkey-flower

123

Field surveys for new occurrences and at known and historical sites

21, 22, 23

Long-term monitoring

45

Is action recommended as a high priority for prevention extinction in a 5-year review: Yes
(Review is in draft). Prior Preventing Extinction Funding: No

I. **What is the risk of extinction? Very High** (choices: **Very High, High, Moderate, Low**) – Based on likelihood that the species will go extinct if this recovery action is not undertaken.

In one paragraph, please explain how quickly this species if predicted to go extinct in the wild if this recovery action is not undertaken (i.e., the magnitude and imminence of threats.)

Recovery actions that will benefit a species most likely to immediately go extinct if the action is not funded will rank highest.

Michigan monkey-flower (MMF) is a rare Michigan endemic with only 19 element occurrence records (EORs). Eighty percent of the EORs are located on private lands and extirpations as well as decline of some colonies have been noted. Furthermore, current habitat and colony conditions are not known for most occurrences due to a lack of comprehensive surveys. Upon issuance of the recovery plan (USFWS 1997) landowners with MMF were notified of its presence and significance, yet only a few are engaged in protecting the species or if there are new stakeholders, they may not be aware of this species presence. In addition, a new, highly aggressive invasive plant species has been reported in the vicinity of one of our high ranking sites. This invasive plant is known to spread rapidly and “take-over and choke-out” native plant habitats. Over the last several years, significant efforts have been made to restore or enhance the seeps and streams in a few locations where the MMF occurs. With so few occurrences of this species, successful range wide recovery will depend on working with various stakeholders to manage and restore the species on their respective properties; and because the majority of sites are privately owned, assisting landowners in developing and designing site specific management and monitoring plans. However, prior to developing management and monitoring plans, a range wide inventory and comprehensive survey is needed to assess habitat and colony conditions.

II. **What is the feasibility of completing this recovery action within a single year of funding?**

Very High (choices: **Very High, High, Moderate, Low**) Based on an assessment of the complexity of the proposed action (i.e., little difficulty completing because arrangements are in place to execute the action immediately = Very High; very difficult or time consuming to complete since arrangements are not established to execute the action = Low).

In one paragraph, please explain how complex, difficult or easy this recovery action will be to complete within in-house resources or through contracts with one year funding (i.e., are the mechanisms or agreements in place to complete this requested action quickly if funded?)

Recovery actions most capable of being carried out with a minimal amount of difficulty will rank highest.

Michigan monkey-flower ranges from Benzie and Leelanau counties in northwestern Lower Michigan, to Mackinac County in the eastern Upper Peninsula. The majority of MMF occurrences are clustered in the Mackinac Straits region. Because of the low number and clustering of occurrences, a comprehensive range wide survey could be completed in one year. Additionally, three EORs are present on properties owned by the Michigan Nature Association (MNA) and the Glen Lake Association (GLA). Both organizations are actively participating in protection of this species on their properties and have expressed interest in involving neighboring landowners to extend species' protection, management, and restoration to their respective properties. Once a comprehensive range wide survey is completed, the GLA plans to develop a management plan, which will include designs for long-term monitoring, for its property owners. The MNA has observed that their colonies have declined and plans to implement activities to restore their populations. All of these activities can be completed with a single year of funding.

III. What is the likelihood of success with a single year of funding in preventing the extinction of the species: Very High (choices: Very High, High, Moderate, Low) Based on expectation that the recovery action will change the situation for the species with only one year's funding.

In one paragraph, please explain how a single year of funding will reduce/eliminate the threat to this species so that extinction is no longer imminent, and how this type of recovery action has been successful in similar situations so that it is highly likely to be successful in removing/minimizing a threat or halt the extinction of the species in this situation. Recovery actions most likely to be successful in averting extinction with a single year of funding will rank higher.

A single year of funding will allow us to establish an accurate range wide baseline distribution for this species, remove invasive species and restore appropriate hydrological functions on some properties, as well as develop a management and monitoring plan for private landowners. A comprehensive survey and inventory of Michigan monkey-flower occurrences will provide us with a greater understanding of their habitat conditions, where they may potentially occur, as well as supplying land managers and property owners the information needed to guide them in their management planning and recovery efforts.

IV. Does this recovery action have potential to benefit more than one species? Yes If so, how many? At least five species (Please list them).

Several rare plants and animals that use Michigan's rich conifer swamps as habitat may benefit from this funding. These species are state protected and they include: round-leaved orchid (*Amerorchis rotundifolia*), rayless mountain ragwort (*Senecio indecorus*), red-shouldered hawk (*Buteo lineatus*), wood turtle (*Clemmys insculpta*), and Canada lynx (*Lynx canadensis*; federally threatened).

V. Does this recovery action involve multiple partners? Yes If so, how many? 4 Please list them.

Michigan Natural Features Inventory (MNFI); Mama Bear Restorations, Inc.; Michigan Nature Association; and Glen Lake Association (GLA)

VI. Briefly describe the potential for leveraging these funds through partners or donations this year or into the future.

The potential for leveraging funds this year or into the future is high. Once the proposed activities have been conducted and completed using Preventing Extinction funding, long-term monitoring by our partners can begin. These leveraged funds could be used to implement long-term monitoring, whose design would be developed using Preventing Extinction funding, and continue restoration work. For example, the Glen Lake Association has already implemented restoration activities on some privately owned sites and will like to continue it work and include more landowners, including neighboring county properties. Therefore, it is likely that other interested entities with Michigan monkey-flower on their properties will partner with our existing partners and contribute monetarily as well as in-kind for management, monitoring, and restoration activities on their properties.

Cost Estimate:

<u>Item Description</u>	<u>Funding Request</u>
Materials:	\$3,500
Labor:	
Invasive species removal & restoration	\$17,500
Travel	\$3,000
Other:	
Technical assistance: prepare management plan for GLA	\$5,000
Technical assistance: surveys, monitoring plan, GIS mapping (MNFI)	\$17,000
Overhead at 17.5% (MNFI/Michigan State Univ.)	\$3,700
TOTAL:	\$49,700

Reference:

U.S. Fish and Wildlife Service. 1997. Recovery Plan for Michigan monkey-flower (*Mimulus glabratus* var. *michiganensis*). Ft. Snelling, Minnesota. vii+ 37 pp.