

Survey of Michigan Monkey-Flower (*Mimulus michiganensis*)
Populations at the North Branch of the Platte River, Diamond and
Skinner Roads, Benzie County, Michigan



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Cover photograph:

Michigan monkey-flower (*Mimulus michiganensis*) at the North Branch of the Platte River, Skinner Road, Benzie County, Michigan. May 17, 2018. All photographs in report by L.N. May.

Introduction

In 2018, the Conservation Resource Alliance requested Michigan Natural Features Inventory (MNFI) to conduct surveys for the federally endangered Michigan monkey-flower (*Mimulus michiganensis*) along two stretches of the North Branch of the Platte River in Benzie County (T27N R14W Sec21). The goal is to determine the possible impacts related to culvert replacements on Dymond and Skinner Roads to improve fish passage. The Michigan monkey-flower population within the area is well known, first documented in 1965, with follow-up observations as recent as 2012. The purpose of this survey is to check the status and extent of the population, mark populations in the field, and assess potential impacts related to the culvert replacement.

Methods

Prior to the field surveys, MNFI conducted a standard search of the Natural Heritage Database for Michigan monkey-flower occurrences within a half-mile of the project sites. It was determined that there is an element occurrence record for Michigan monkey-flower 300 feet east (upstream) of the Skinner Road culvert site (EOR 5658 10). This record was first documented in 1965, with follow-up visits as recent as 2012.

On May 17th and July 6th 2018, a thorough meander survey was conducted one half-mile upstream and one half-mile downstream of the project sites at the crossings of Dymond Road (44.72579, -86.00945) and Skinner Road (44.72301, -86.00881). The meander search covered the river banks and bed as well as the small streams, springs, and seeps feeding the river. Michigan monkey-flower colonies were flagged with yellow and black striped flagging tape and GPS points were taken at each location. Following the field surveys, an element occurrence record was recorded.

Findings

On May 17th, Michigan monkey-flower was observed 300 feet east (upstream) of the Skinner Road culvert, corresponding with the aforementioned findings in the Natural Heritage Database. The population has three distinct colonies within 100 feet of each other.

On July 6th, the previously observed population was relocated, and a newly observed population was recorded 1000 ft east (upstream) of the culvert (700 ft east of the known population).

Location Coordinates (WGS84 Decimal Degrees):

Sub-population	Latitude	Longitude
1	44.7234	-86.0075
2	44.7236	-86.0073
3	44.7235	-86.0073
4	44.7237	-86.0047
5	44.7237	-86.0044

See Special Plant form attached.

Acknowledgements

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Literature Cited

Michigan Natural Features Inventory (MNFI). 2018. Natural heritage database: EOR 5658 10. Michigan Natural Features Inventory, Lansing, MI.