

**Laying the Foundation for Establishment of New Mitchell's Satyr
(*Neonympha mitchellii mitchellii*) Populations in Indiana and Michigan
and Securing Populations through Updated Species Management Plans**

FY 2013 Semi Annual Progress Report



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Cover photograph: Mitchell's Satyr, Jackson County, MI. Jeremie Wilson

MNFI Progress Report: September 30, 2013 – March 30, 2014

Project Description:

The purpose of this project is to help secure Mitchell's satyr populations at 4 viable sites and to lay the groundwork for the introduction of MS at 2 potential introduction sites where suitable habitat has been restored. We will update 4 site conservation plans, identify factors that threaten the MS and its habitat at these sites and develop a 5 year action plan to address these threats. In addition this project will develop or update conservation plans at 2 potential introduction sites to identify management needs and recommend future actions. We will lay the groundwork for MS introduction by 1) development of standardized protocols for the translocation and/or introduction of MS, 2) assessment of MS populations at two Michigan sites proposed as collection sites for the captive rearing project and the Indiana site proposed as the source for the translocation of butterflies and 3) preliminary evaluation of the translocation of MS if this effort is initiated. We will also assist with MSB Working Group tasks.

Statement of Work

There are five goals for this one year project. 1) Update site conservation/management plans at 4 viable sites and 2 introduction sites 2) Develop standardized protocols for translocation and/or introduction of MS and 3) Evaluate the population status at sites proposed for collection or translocation of MS, 4) Conduct a preliminary evaluation of the MS translocation if initiated and 5) assist with coordination of MSB Working Group tasks

Comparison of Actual Accomplishments with the Goals and Objectives of the Award

1) Update site conservation/management plans at 4 viable sites and 2 introduction sites

We decided to update management plans for the following 4 viable sites: Grand River Fen, Coldwater Lake Fen, Cook Lake Rudy Road Fen and Shavehead Lake. In addition we determined that plans would be updated or developed for the 2 potential introduction sites: Swamp Angel Fen, (Indiana TNC preserve) and Park Lyndon Fen (Washtenaw County Parks). Daria Hyde and Brad Slaughter, MNFI met with Nate Fuller, SWMLC and Rodolfo Villegas, TNC on November 15, 2013 to discuss the development of a template for the updated management plans at the 4 viable sites and 2 introduction sites. Copies of current plans for these sites (if developed) were distributed and reviewed and further communications were conducted through email correspondence. A template was developed which incorporated elements of existing plans and focused objectives and actions on Mitchell's satyr recovery.

After further review, we determined that useful information could be gathered during Mitchell's satyr surveys in June and July of 2014 that would be useful for updating and revising current plans for these sites. We decided to gather this information (e.g. updating threats such as invasive species, Mitchell's satyr distribution at the site, photos of the site, etc.) and complete the plans in the fall of 2014. For this reason we requested a no-cost extension for the project so that we could complete this task and provide these plans with the final report.

2) Develop standardized protocols for translocation and/or introduction of MS

Preliminary protocols for the translocation and/or introduction of Mitchell's satyr were discussed with John Shuey, Indiana, TNC and David Cuthrell, MNFI on November 14, 2013. Draft protocols were then developed and reviewed. Additional investigation of case studies of the introduction of rare insects and protocols developed by organizations in other states was conducted. Further revisions to these protocols including specific guidelines for translocation and/or introductions of MS will be finalized during the fall of 2014. See Appendix 1.

3) Evaluate the population status at sites proposed for collection or translocation of MS

This task will be accomplished in June and July of 2014 during the time that adult Mitchell's satyrs are present. We will conduct timed-meander surveys during the peak flight of the Mitchell's satyrs at three sites that have been proposed as potential collections sites for Mitchell's satyrs for captive rearing or translocation.

4) Conduct a preliminary evaluation of the MS translocation if initiated

The Mitchell's satyr working group decided that no translocations would be conducted in 2014 but rather the site in Indiana that was being considered as a source population for a potential translocation would be evaluated during the Mitchell's satyr flight in June and July of 2014. Recommendations will be made to the Mitchell's satyr working group and included in future reports.

5) Assist with coordination of MSB Working Group tasks

The Mitchell's satyr working group met on October 29, 2013 to provide updates of ongoing projects, review results of the 2013 Mitchell's satyr surveys and to discuss future actions needed. I provided assistance to Tameka Dandridge, USFWS in developing and reviewing the meeting agenda and helped to lead the discussion on Mitchell's satyr introduction.

I participated in a meeting of the funding subcommittee of the MS working group on January 28, 2014 to discuss potential opportunities for future funding of specific objectives associated with the Mitchell's Satyr Conservation Strategy 2013- 2018.

I assisted Tameka with the development of the agenda for the spring Mitchell's satyr working group meeting on March 31, 2014, including the structure for the afternoon break-out sessions. Prior to the meeting I distributed a list of the individuals that volunteered to be lead for objectives in the Mitchell's satyr conservation strategy to help coordinate communication and updates on the associated tasks. I also updated and distributed a table depicting current trends for Mitchell's satyr sites, including ranking and determining potential viability for the sites and reported on this at the meeting.

Appendix 1
Draft Introduction Protocols

Draft Criteria and Protocol for Mitchell's Satyr Introduction

