

Permit 2018-001

Name:

Nancy Collins

Department or Organization:

Citizen Scientist

Email Address:

ycnancy2k@hotmail.com

Web Address where the public can learn more about this proposed activity (optional):

www.oecanthinae.com

Are you requesting renewal of a previously approved permit applicaton?

No

Type of activities at The University of Akron Field Station and Bath Nature Preserve

Research

Title of project or class name and course number:

na

Date/Dates requested:

Sep 7-9, 2018

Number of people in group:

3

I am requesting permission to use a Research Area.

Yes

I am requesting permission to use a Sensitive Area.

Yes

I am requesting permission to use areas outside of the designated Research or Sensitive Areas.

Yes

I would like to use the Martin Center for Field Studies and Environmental Education for this prop...

No

Will the activity involve destructive sampling/collecting?

No

Which Research Areas?

- 18 Acres
- Beefy's Woods
- Garden Pond
- Grandview Alley
- Round Top
- South Woods

Which Sensitive Areas?

- Bath Pond
- Garden Bowl
- North Fork
- Tamarack Bog / Wetland

Which areas outside of the designated Research or Sensitive Areas?

- Public Access areas of Bath Nature Preserve
- Steiner's Woods
- Panzner Wetlands

Provide a brief description of (1) your proposed activities, (2) goals, and (3) impacts of your u...

Hello. I am a citizen scientist who studies Oecanthinae (tree crickets). I work under the mentorship of Dr. Thomas J. Walker, Professor Emeritus, University of Florida-Gainesville. Dr. Walker described *Oecanthus laricis* (Tamarack tree cricket) in 1963 under the guidance of Dr. Richard Alexander, Professor Emeritus, University of Michigan in Ann Arbor. *Oecanthus laricis* is one of the most understudied tree crickets in the U.S. I am requesting a permit to collect (5) individuals of four different species of tree crickets found in Ohio, including *O. laricis*, at Bath Nature Preserve in September 2018.

This summer I will be visiting several states in order to collect 18 of the 20 tree cricket species recorded in the U.S. in order to carry out a comprehensive analysis of this small subfamily of crickets. Samples will be sent to researchers in Texas for DNA testing, researchers in Brazil for karyotyping, and researchers in Canada to compare morphology. *Oecanthus laricis* is one of my high priority species since little is known about them. They are found only in Michigan and Ohio on Tamaracks and Hemlocks. I also hope to collect *O. latipennis*, *O. nigricornis* and *O. exclamationis*. These three species are known to inhabit Ohio.

In Ohio, I will be accompanied by Dr. Lisa Rainsong and Wendy Partridge. Dr. Rainsong has held permits with the University in previous years, and is familiar with Bath Nature Preserve. We will be searching a wide variety of vegetation – including ground plants, shrubs and trees. *O. latipennis* and *O. nigricornis* will be collected by hand as they dwell within six feet of the ground. *Oecanthus laricis* and *O. exclamationis* will be collected by net, as they dwell in trees. If there are damaged small branch tips high on Tamarack or Hemlock trees, they might break off into the net. The nets will have extended handles, thus no trees will be climbed. Dr. Rainsong,

Wendy and I are very sensitive to preserving natural habitats, thus damage or destruction of vegetation will be carefully guarded against.

The best process for locating adult tree crickets is to listen for singing males. For this reason, I am requesting a permit to include the entire preserve, to collect from where the singing takes us. Along with the three labs who will be performing karyotyping, DNA analysis and morphological comparisons, I will be studying an adult pair to record their behavior, and to take photographs, videos and audio recordings. For these studies, I need to collect live tree crickets – for observations as well as for the lab analyses.

Photos, videos and audio recordings will be available to share with the preserve and with the university. The pair used for observations will ultimately be donated to the University of Wisconsin-Madison to expand their Oecanthinae collection. If the University of Akron would like specimens, I request that the total number I am allowed to collect be increased to (7) of each of the four species.

By checking this box, I agree to the above terms and state that all of the above information is c...

I agree