

Permit 2021-001

Name:

Rick Lehtinen

Department or Organization:

The College of Wooster

Email Address:

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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:

Interspecific competition and character displacement in terrestrial salamanders (Plethodon)

Date/Dates requested:

set out cover boards in spring 2021, sample first time Oct. 2021

Number of people in group:

1

I am requesting permission to use a Research Area.

Yes

I am requesting permission to use a Sensitive Area.

No

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

No

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?

South Woods

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

I propose to study the outcomes of interspecific competition between two terrestrial salamander species (*Plethodon cinereus* and *P. electromorphus*) using coverboard arrays. Coverboards are a passive, non-destructive sampling technique where small pieces of untreated lumber are set out to attract

salamanders who use them as refuges. I propose to put out a total of 48 coverboards in the South Woods spread out in three different forest microhabitats (ridgetop, slopes, and stream-side forest). Identical arrays are already in place at five other study sites in north-eastern and north-central Ohio. Two of these study sites are "electromorphus only", two (including Bath, if approved) are "cinereus only" and two are sites where both species co-occur together. I plan to assess abundance and body-condition among the microhabitats at all six sites in these coverboard arrays to assess possible niche partitioning where the species occur together and possible competitive release where only one species occurs. Each coverboard would be sampled at least twice per year in the peak activity seasons (spring and fall) and all salamanders found would be identified, weighed, photographed and released immediately thereafter. To obtain the necessary sample sizes, I would like to collect data for at least four or five years.

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