Permit 2022-002

South Woods

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Name:
 Bernd Steklis
Department or Organization:
 Biology
Email Address:
 bfs15@uakron.edu
Are you requesting renewal of a previously approved permit application?
 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:
 PhD Dissertation Research
Date/Dates requested:
 4/29/22-8/31/22
Number of people in group:
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...
Will the activity involve destructive sampling/collecting?
 Yes
Which Research Areas?
 18 Acres
 Beefy's Woods
 Garden Pond
 Grandview Alley
 Round Top
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Please explain how the material will be collected (including equipment), and an estimate of how m... I will be collecting several species of spiders near bodies of water and in wooded areas. 8-10 individuals of each species will be collected (~5 species). The spiders will be collected with forceps and placed in small transport tubes. The webs will remain intact.

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

I plan on collecting several species of spiders, some of which live in semi-aquatic environments such as on the shoreline of bodies of water. Once collected, the spiders will be used to produce silk attachment discs that will be exposed to various conditions and tested for various mechanical properties. The goal is to gain a better understanding of the performance of semi-aquatic spiders' silks compared to terrestrial spiders' silks. This will lay the foundation for future research of bioinspired wet adhesives based on semi-aquatic spiders' silks.

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