Permit 2009-0001

Field Name	Field Value
Name	Mitch Bern
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Web_Address	
Renewal	No
Permit_Number	
Activity	Research
Project	Signal divergence in two closely related species of wolf spider
Dates	3/12/09 - 7/31/09
Group_Size	2
Research_Area	Yes
Grandview_Alley	Yes
Sensitive_Area	No
Other_Areas	No
Building	No
Prep_Work	
Sampling_Collecting	No
Sampling_Methods	The spider species which will be collected are extremely abundant and have very high rates of reproduction and mortality in nature. Removing such relativly low numbers from the population will not negativly impact these species, any other species or abiotic components of their environment.
Description	Using headlamps and collection vials University of Akron Professor Dr. Todd Blackledge and I plan to collect samples of two species of wolf spiders, Schizocosa bilineata and Schizocosa crassipalpata, during dusk and early night time hours from the Bath Nature Preserve. These two closely related species have overlapping habitats and utilize both visual and vibratory signal components in their courtship displays. Our research aim is to better understand how differences in these visual and vibratory components may have contributed to the differentiation and divergence between these two species. I will accomplish this by exposing females to high and low quality males' courtship displays in both light (visual and vibratory) and dark (vibratory only) conditions. This study will potentially have broad impacts our understanding of sexual selection, complex animal signals and

	speciation.
Agreement	Accept