Permit 2023-003

Name:
Ying Chen

Department or Organization:
Queen's University

Email Address:
15yc24@queensu.ca

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:
Conservation genomics and causes of mito-nuclear discordance in trilling chorus frogs (Pseudacris triseriata and P. maculata) in Canada

Date/Dates requested:
March-April 2023

Number of people in group:
4

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...
Yes

Will the activity involve destructive sampling/collecting?
Yes

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

Please indicate any preparation or set-up you will need in the Martin Center for Field Studies an...
If available I wish to use access a freezer to store my ice packs so that I can keep my samples cold.

Please explain how the material will be collected (including equipment), and an estimate of how m...
I will mainly collect Western Chorus Frogs from their breeding ponds. I will bring my own sampling equipment including waders, recorders, thermometer digital temperature gun, caliper, scissors, gloves, headlamps, ethanol tubes, etc.

Provide a brief description of (1) your proposed activities, (2) goals, and (3) impacts of your u...
My fieldwork mainly aims to collect Western Chorus Frogs for genomic work. More specifically, I will locate chorus frogs in their breeding ponds by listening to their advertisement calls or visually surveying the pond. Once I find a frog, I will use directional microphone to record its calls and use a thermometer digital temperature gun to measure its body temperature. I will then hand capture the frog and measure its body size using a digital caliper. I will either euthanize the frog using benzocaine hydrochloride (maximum 1 individual per site) following the Canadian Council on Animal Care protocol, or clip two toes and release frogs at the point of capture within a few hours. The whole frog and toes will be stored in 95% ethanol. All the waders and field equipment will be disinfected with 10% bleach thoroughly before and after the fieldwork to avoid disease transmission. The chorus frog samples collected in the University of Akron Field Station and Bath Nature Preserve will be used in phylogenomic analyses in investigating whether P. triseriata lineage in Ontario are closely related with Ohio populations to infer evolutionary history of trilling chorus frogs and possible migration routes of chorus frogs from US refugia to Canada since the last glacial maximum. The impacts of my fieldwork will be limited to the breeding ponds used by Western Chorus Frog and there will be limited disturbance to other wildlife.

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