



Community-Based Research (CBR) Project Proposal Form

U-Links Administration Only

Project Number (automatically generated by CBR database): 5081

Recommended Courses and/or Disciplines (i.e. GEOG4030Y, FRSC4890Y, IDST3700Y/3710H/3720H, ERSC3160H, PSYCH or Alternatives):

Recommended Faculty Advisors:

PROJECT TITLE: Serenity Wetland - Wetland Assessment

A – CONTACT INFORMATION

Date: January 8, 2022

Contact person: Robert Hood / Andrea Jackson

Phone: Robert: 705-934-5257

Andrea: 647-530-6271

Email: Robert: robhood59@gmail.com

Andrea: jackson@aei.ca

B – COMMUNITY ORGANIZATION

a) **Organization's name and address:**

Andrea Jackson, Serenity Wetland Alliance, 1239 South Wilberforce Road, Tory Hill, ON, K0L 2Y0

The wetland is located at the end of the Dillman Trail, off the South Wilberforce Road, Tory Hill, ON

b) **Briefly state the organization's purpose and the products or services offered:**

A volunteer group dedicated to the protection of a pristine wetland habitat in Highlands East.

c) **Has an immediate supervisor or board approved this application?** Yes

C - PROJECT SCOPE

a) **Full year undergraduate CBR projects are allotted 220 hours total, per 1-2 students on a single project. The condensed hours are similar to six weeks of full-time work. Full term students would be working on this project from September to April as part of a course, while balancing work from other courses as well. Half term students will be working on this project from September - December or January to April. Does the scope of your project fit within this timeframe?**

Yes • No • Comments: Project would work best in Spring/Summer Term

b) Select the theme(s) for your project:

• Cultural • Economic • Environmental • Social • Other:

c) Based on the timeframe and complexity of your project, please indicate the potential project scale:

- Single year project
- Multi-year project (requiring follow up or several parts)
- Ideal for undergraduate students
- Ideal for graduate students (requires specialized knowledge/in-depth consideration of theory)

d) Is your project appropriate for a single student or a group?

Best for a small group.

e) Describe the purpose of the project:

The purpose of this project is to provide data and an inventory of species that can be used to initiate an Environmental Impact Assessment. A study of organism-environment interactions across a carbon sink ecosystem. The goal is to have the wetland designated as Provincially Significant and to prohibit trail construction for motorized vehicles through the area.

f) How will the project benefit your organization and/or clients?

It will promote the awareness of wetlands and their importance, and support others to consider seeking protections for wetlands in their communities. This project has the potential to be the first recognized carbon sink in Highlands East, that is protecting the watershed and mitigating flooding due to the threat of climate change.

g) How will the results of this project benefit Haliburton County?

Many wetlands within Haliburton County remain unclassified, and their significance on a provincial scale is unknown. Wetlands throughout Ontario are under threat through numerous human activities.

D – RESEARCH DESIGN

a) What are the proposed research questions to be answered?

- Are there species at risk present in the wetland, or that use the wetland seasonally?
- What species are present?
- What apex predators are present, indicating the health of the ecosystem.
- Identify ecological/cultural functions/services of the wetland.
- What are the major water sources and boundaries of the wetland?
- What would be the effects of motorized traffic on the habitat?

b) What are your ideas on how these questions might be answered (i.e. survey, literature review, field work etc.)?

- Field work, collecting data/making observations
- Photographic documentation
- Combine own observations with the findings of others in and around the wetland through resources such as iNaturalist, eBird, Natural Heritage Information Centre (NHIC), etc.
- Literature Review

c) Do you have knowledge of or expertise with these types of research methods?

Citizen Science – for a decade Robert Hood has been photographing and cataloging the plant and animal species of Serenity Wetland, and is currently contributing to iNaturalist Canada online.

E - SCREENING AND/OR TRAINING

a) Do the students require any specific screening or training? (e.g. police checks, confidentiality agreements, CPR, WHMIS):

Yes No **Probably not, except watercraft procedures and safety**

Comments: Students will need to complete all Health and Safety Training provided by U-Links prior to site visit.

EXAMPLES: Projects involving vulnerable populations may require police checks. Some types of field work may involve WHMIS or other safety related training. Students and hosts working on boats need to understand and follow the U-Links Boat Safety Guidelines.

F – RESEARCH ETHICS

a) Does the research involve human subjects? (i.e. surveys, interviews)

Yes No **NO**

NOTE: If yes, the students may be required to submit an application for ethical review of the research. This process may take several weeks and will need to be taken into consideration when creating project timelines.

b) If your project involves collecting human subject data (i.e. interview transcripts), would you like access to that “raw” data at the end of the project, in addition to receiving the “summary” of data in the final report?

Yes No **NO**

c) Does the organization/employer have policies about research ethics approval?

Yes No **NO**

If yes, please explain:

G – PROJECT TASKS AND TIMELINE *(This section should be completed by the final draft)*

a) Please outline the major tasks and timelines involved in completing the project.

These tasks include important information to be gathered, key stakeholders who should be involved relevant dates for your organization, and critical meetings for the student to attend. Your Coordinator can help you complete this section.

Task: Set initial meeting with host organization and students

Objective: Familiarize students with project

Date: Early May

Task: Complete Project Agreement

Objective: Finalize responsibilities, logistics, etc. for each party

Date: Early May in conjunction with initial meeting and prior to any site visits

Task: Map extents of wetland, identify wetland types, indicate on map

Objective: To create a map of the wetland for the Host and to identify the boundaries for studies

Date: Prior to field work, field work to confirm boundaries once on site

Task: Visit wetland, identify in an environmentally appropriate manner

Objective: Visit selected sites throughout the wetland(s) to collect specimens to be analyzed. This will be followed by students sorting and identifying specimens (if necessary) in a nearby location whenever possible. Create photographic record. Ideally record in iNature or NHIC (restricted area to record species at risk found), and/or use the NHIC recording spreadsheet provided by Host

“Evaluators should have a good understanding of the differences between swamp, marsh, bog and fen wetland types before conducting the field portion of the wetland evaluation. They should be able to identify the vegetation communities and common plant species commonly found in each of these wetland types. Information should be recorded on field data sheets, on the field map, and on the data summary sheets (use of a GPS unit and camera is also recommended). Evaluators should make note of the following features when in the field:

- Active beaver lodges/dams
- Locations of rare species (note habitat, abundance, behaviour, etc.)
- Wildlife observations (e.g., furbearers, waterfowl, baitfish, bullfrogs, snapping turtles)
- Plant species observations (e.g., wild rice, cranberries)
- Location, nature, and directions of water flow at all inflowing and out-flowing rivulets, streams or ditches, etc.
- Human-related ‘disturbances’ (e.g., fill, docks, houses, cattle grazing, etc.)
- Evidence of recreational activities (e.g., nature appreciation, hunting, fishing)
- Locations of seeps or springs
- Presence of laggs
- Iron precipitates, marl deposits
- Winter cover for wildlife
- Ungulate summer habitat, moose aquatic feeding habitat
- Suitability of wetland for waterfowl breeding,
- Presence of waterfowl breeding, waterfowl staging, and waterfowl moulting
- Surrounding topography (e.g., flat, rolling, hilly, steep)
- Surrounding habitat diversity
- Soils/substrates for each vegetation community
- Vegetation community forms (dominant and others)

- Wetland and site type
- Percent open water (see section 1.2.6 – ‘Open Water Types’ for more information)
- Fish habitat (low or high marsh, seasonal or permanent swamp, fish or habitat observed)
- Observations/locations of invasive species
- Weather condition during evaluation

NOTE: Field observations are only required for fish habitat assessment when there is insufficient existing information to assign a score of locally, regionally, or provincially significant (see section 4.2.7). When this is the case, the one most dominant vegetation species of the dominant form must be recorded for each marsh community. Also note whether the community is to be considered as low marsh or high marsh, or seasonally or permanently flooded swamp fish habitat.” SOURCE “Ontario Wetland Evaluation System” (OWES) Northern Manual”

Date: Mid-May through Mid-June (dependent on specific species)

Task: All data and field sheets submitted

Objective: To ensure data can be safely stored and backed up by U-Links staff

Date: Mid-June

Task: Preliminary Draft

Objective: Have students show their work and ensure that all parties are satisfied and that the report is meeting the needs of the host organization. Allows for early comments by the host organization.

Date: Early July

Task: Complete poster for Celebration of Research

Objective: Students will finish poster for celebration of research in time for U-Links to send to the printing company. Early drafts will be sent to host organization for review prior to deadline.

Date: Mid July

Task: Final Draft

Objective: Have final draft completed prior to Celebration of Research to give host organization enough time to comment on results and make changes where necessary.

Date: Late July

Task: Host review and feedback on Final Draft

Objective: Provide feedback to students on the final draft of the report so that revisions can be made

Date: Comments due by Late July

Task: Final Report

Objective: Publication of report and other documents on the U-Links website and Haliburton County Collection database. Hosts will receive final report and other deliverables for final approval prior to publishing.

Date: Early August

Task: Participate in the Celebration of Research

Objective: Share research and knowledge with the public; make connections

Date: TBD, 2025

b) Indicate important start and end dates for the project, if applicable:

H – RESOURCES

NOTE: All known and needed resources should be listed in this section (e.g. for project coordination, data collection and analysis, software, hardware, photocopying, office supplies, workspace, travel expenses, food and refreshments, training, etc.). Students' travel expenses are reimbursed by U-Links at the end of the term.

- a) **What resources are needed to support the research – financial or otherwise? Please indicate what, if any, resources your organization might be able to provide.**
- [Area for students for basic camping on site \(if necessary\) - Host](#)
 - [Kayak/canoes to survey site – Host/U-Links](#)
 - [Health and Safety Equipment – U-Links](#)
 - [Providing potable water – Host](#)
 - [Free Wifi available at Wilberforce Library](#)
 - [Digital camera, GPS technology, and Laptop required for mapping, recording data and accessing iNaturalist](#)
- b) **Do you anticipate needing funding or other types of resources? If so, please explain (including any ideas on where resourcing may be obtained):**

I – KNOWLEDGE SHARING

NOTE: Please note the researcher(s) will own the copyright for all work completed as part of his/her involvement, but the lead organization/group/employer may use all project outputs in whole or in part, as it sees fit as long as the researcher(s) is duly credited as the author. If work is completed collaboratively, copyright will be decided by all project participants.

- a) **How are the project results to be circulated and made useful to the broader community? Please indicate all that applies from the list below:**
- Academic article
 - Conference/forum
 - Manual
 - Marketing, promotional, newsletter, outreach materials
 - Policy brief
 - [Report, plus Q&A on the report](#)
 - Roundtable
 - Video
 - Workshop
 - Presentation to the host organization
 - Not sure of the above, let's talk some more
- b) **If there are special circumstances where results might not be made public, please explain:**

J - ACKNOWLEDGEMENT

- a) **Are you able to credit U-Links when utilizing project results for the development of new programs, funding applications, policy, and other community endeavors?** *(Suggestions: cite U-Links and display our logo in your organization's printed matter and on your website, credit U-Links when speaking about your project in public and in the press, social media etc.)*

Yes No Possibly **YES, will be posted to *Serenity Wetland Alliance* website**

- b) **Following successful completion of the research project, with results beneficial to the goals of your organization, would you consider a financial contribution to U-Links?**

Yes No Possibly **YES**

- c) **Can we highlight your project on our website and in social media?**

Yes No **Can we discuss this?**

K – PROJECT PROMOTION

Please “insert” an image below to help promote your project proposal.

WEBSITE www.stonecirclepress.com/serenity-wetland-alliance.html



MAPS



Location of Serenity Wetland within orange boundary, south of Wilberforce, ON



Exaggerated landscape to show potential water flow sources through Serenity Wetland