



Community-Based Research (CBR) Project Proposal Form

U-Links Administration Only

Project Number *(automatically generated by CBR database)*:

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

Recommended Faculty Advisors:

PROJECT TITLE: Loon Artificial Nesting Platform Project

A – CONTACT INFORMATION

Date: January 25, 2024

Contact person: Alison King

Phone: (416) 315-3715

Email: alison.king@mediaprofile.com

B – COMMUNITY ORGANIZATION

- a) Organization's name and address: Halls & Hawk Lakes Property Owners Association (HHLPOA)
 - b) Briefly state the organization's purpose and the products or services offered:
The HHLPOA's mission is preserving and enhancing our lake community. Much of the focus is on environmental issues with an aim of maintaining or improving our natural environment and the overall quality of life on our lakes. We are organized to support five different strategies; membership, education, lake stewardship, communications and social programs.
 - c) Has an immediate supervisor or board approved this application?
This application is approved by the board and will be led by board member Alison King with a committee.
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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 is developed to span Spring/Summer and Fall semesters.

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?

Suggested single graduate student or small group of undergraduates

e) Describe the purpose of the project:

The purpose of this two-semester research project in Haliburton County is to investigate, optimize, and promote the sustainable coexistence of loons and the local ecosystem. Through an integrated approach, the study aims to understand the ecological factors influencing loon nesting, refine artificial nesting platform designs, and actively engage the local community. This project seeks to enhance the conservation of loon populations while addressing factors such as predator dynamics, climate change resilience, water quality, human impacts, genetic diversity, and food availability that may affect their well-being in the unique and dynamic environment of Haliburton County. The project will align with EMAN protocols to ensure rigorous and standardized data collection, analysis, and reporting.

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

Actively involving the local community in the research process fosters a sense of ownership and responsibility for the well-being of loons. The project's educational initiatives and community participation opportunities can raise awareness about the importance of conserving these iconic birds and the overall health of the lake ecosystem.

How will the results of this project benefit Haliburton County?

The research project's results can serve as a model for other lake associations and conservation organizations facing similar conservation challenges. Knowledge sharing and collaboration can lead to more effective conservation efforts across a larger geographical area of Haliburton County.

g) How did you hear about U-Links Centre for Community Based Research?

Word of Mouth Social Media Newsletter News Article Other: we have very successfully partnered with U-Links in the past.

D – RESEARCH DESIGN

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

- ❖ *What are the preferred nesting site characteristics for loons in Haliburton County?*
- ❖ *How do ecological & hydrological features, including vegetation types and water level fluctuations due to drawdown, influence nesting success of loons in the study area?*
- ❖ *What factors influence the selection of nesting sites by loons in Haliburton County, and how do they prioritize various ecological features when choosing a site?*
- ❖ *How can the design of artificial nesting platforms be optimized to mimic natural nesting sites for loons?*

- ❖ *How do loons in the study area respond to introduction of artificial nesting platforms and what are the behavioral changes in nest selection, incubation and chick-rearing activities?*
- ❖ *What is the impact of natural predators on loon nests, and how can predator management strategies be developed?*
- ❖ *How does climate change affect timing and success of loon nesting, and what adaptive measures can be implemented to ensure platform viability?*
- ❖ *How do human activities and disturbances affect loons and their nesting behavior? What guidelines can be proposed for responsible human interaction with habitat areas.*
- ❖ *How does food availability and foraging habitat quality impact loon nesting success?*

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

- ❖ **Literature Review**
- ❖ **Field Survey / Data Collection**
 - o **Prototype Construction & Installation**
 - o **Monitoring and Community Engagement**

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

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

Comments:

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

**This project could be incorporated to include human data collection but is not mandatory.*

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

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

Yes 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: First Meeting / Student Orientation

Objective: Discuss the project objectives and scope

Date: Week 1-2

Task: Complete project agreement

Objective: Develop, discuss and sign project agreement by all parties, including breakdown of tasks and initial research. Develop applications necessary including ethics clearance for data collection.

Date: Week 3-4

Task: Field Surveys and Data Collection

Objective: Site selection and preparation, collect baseline data on loon presence and nesting sites

Date: Week 5-6

Task: Field work and data collection

Objective: Continue to collect data on ecological and hydrological parameters including water level monitoring and other microclimatic conditions.

Date: Week 7-12

Task: Prototype Construction & Installation

Objective: Design optimization based on collected data and construction of nesting platforms. Install monitoring equipment and nesting platforms at site locations

Date: Week 13-16

Task: Monitoring and Community Engagement

Objective: Continuous monitoring of loon behavior and nesting activities. Initiate community engagement efforts/educational initiatives. Assess impact of human activities and disturbances on loons. Study impact of water quality and contaminants and investigate food availability and foraging habitat quality.

Date: Week 17-18

Task: Monitoring Continued & Data Analysis and Reporting

Objective: Final analysis and reporting on findings, create conservation recommendations to engage further with local community.

Date: Week 19-24

Task: Celebration of Research

Objective: Present research findings at Haliburton Community

Date: 2025

Etc:

- 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.**
We have an approved budget which includes a donation to U-Links and funds needs to support the building of the loon nesting platforms. We also have commitment from board members for transportation of researchers on the lake and surveillance of loon population.
- 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
 - 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

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

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

Yes No

K – PROJECT PROMOTION

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

