



Community-Based Research (CBR) Project Proposal Form

U-Links Administration Only

Project Number (automatically generated by CBR database): 6141

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

Recommended Faculty Advisors:

PROJECT TITLE: Light Pollution Study on Paudash Lake

A – CONTACT INFORMATION

Date: July 24 2023

Contact person: Harvey Bischoff

Phone: 416-580-9196

Email: Harvey.bischof@gmail.com

B – COMMUNITY ORGANIZATION

a) Organization's name and address:

Paudash Lake Conservation Association

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

Advocacy organization for those living on and near Paudash Lake

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

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:

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?

Single student

e) Describe the purpose of the project:

This project will assess how light pollution affects the lake's biodiversity, aquatic life and behavior of wildlife, while also assessing the perceptions and attitudes of local cottagers and nearby residents towards outdoor lighting

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

The results of this project will promote the following themes within the Paudash Lake community: Ecosystem conservation, dark sky preservation, community engagement, policy recommendations, education and outreach and enhancing the overall quality of life of residents.

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

This project will benefit the County of Haliburton by promoting environmental stewardship, community engagement, increasing public awareness and education and furthers policy development that can be replicated in other areas of the county addressing similar issues.

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

Word of Mouth Social Media Newsletter News Article Other: _____

D – RESEARCH DESIGN

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

-How does light pollution from cottages and other sources affect the Paudash Lakes ecosystem?

(deviations in animal behavior, aquatic life with varying levels of light pollution?)

-What relationships exist between varying intensities of artificial light and the abundance of wildlife in and around Paudash Lake?

-How do the cottagers on Paudash Lake perceive artificial light pollution? What is their awareness of the potential environmental impacts associated to artificial light pollution?

-What are the most effective strategies (best practices) for reducing light pollution from cottages? How may these strategies be implemented into documents such as Paudash Lake Management Plan.

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

Field work and light measurements – On site measuring of light intensity to quantify light pollution into intervals established at various distance points from a set area.

Wildlife observing – Field observations in person, trail cams, hobbyist observation records to identify wildlife in area in current condition. Can compare between well lit and dark areas to monitor both nocturnal and diurnal animals.

Biodiversity Assessments – Ecological surveys of range of species in areas of varying light pollution levels. (Aquatic sampling, amphibian locating, bird watching, vegetation analysis?) * Depending on species studied may require time lengthy application process to include research)

Surveying – Create survey questions to gauge awareness of cottagers about artificial light pollution, determine their reasoning for the artificial light set up they own and assess willingness to adopt alternative methods. Can also include a social impact survey to determine the community support on darkness preservation initiatives.

GIS Mapping – Use GIS to show light pollution intensities across Paudash Lake to assess the potential impacts on the local area.

Data Analysis – Perform statistical analyses to identify trends between light pollution intensities (increases or decreases) and ecological changes (positive or negative). (Regression analysis?)

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

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:
Objective:
Date:

Task:
Objective:
Date:

Task: *Example - receive ethics approval*
Objective: *Meet university ethics requirements for interviews*
Date:

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.**
- 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.

