**Lake Champlain Fisheries Research Program (LCFRP)**

The Lake Champlain Fisheries Research Program (LCFRP) is a competitive grant program on Lake Champlain, funded by the Great Lakes Fishery Commission (GLFC), to support research that (1) addresses basic or applied questions on fish ecology and/or fisheries on Lake Champlain and (2) is relevant to the Laurentian Great Lakes and/or other large lakes of the world. Lake Champlain is a large and heterogenous system comprising five regions that vary in trophic state, lake morphometry, and food-web communities. As such, Lake Champlain has a natural, experimental gradient on which to address questions about fisheries, physical and chemical habitat, and food-web structure and function, and to address how systems may respond to multiple stressors (e.g., climate change, invasive species, land use) and fisheries management actions. Of particular interest is comparative work between Lake Champlain and the Great Lakes (or other large lakes) to better understand historical, restored, or changing conditions (e.g., habitat use, morphology, behavior, and dynamics) and a context within which to interpret contemporary patterns and processes across basins. Applicants can view [GLFC fishery research themes](https://www.glfc.org/fishery-research.php) to develop cross-basin questions.

Proposals must be submitted by a collaborative research team, with co-investigators from at least two of the three political jurisdictions on Lake Champlain (New York, Québec, Vermont); we particularly encourage applications from investigators outside the University of Vermont and SUNY Plattsburgh, and welcome investigators from outside the Champlain basin. *Proposals focused on fisheries, habitat, or food webs in Lake Memphramagog will also be considered as part of this funding program.* A total of $425,000 is available to fund 1 to 4 projects. Projects may be up to three years in duration. Awards will cover the entire duration of successful proposals. Additional funding up to $20,000 may be available for projects that require access to the R/V *Marcelle Melosira*. Indirect costs may not exceed 5%.

Proposals must address basic and/or applied fish ecology/fisheries research questions on Lake Champlain or Lake Memphramagog with relevance to the Laurentian Great Lakes or other large lakes of the world. Some example topics include:

* Ecological, economic, and social impacts of competitive recreational fishing or the harvest and sale of fish by recreational fisheries
* Anthropogenic impacts on fish communities, food webs, and fisheries, including effects of shoreline development, flooding, and contaminants
* Current or anticipated impacts of invasive species on the Lake Champlain fish communities and food webs and approaches to preventing, mitigating or adapting to those impacts
* Ecology and management of coregonines (e.g., ciscoes and lake whitefish)

Evaluation of pre-proposals and full proposals will follow a protocol similar to that used by the GLFC Fishery Research Program (https://www.glfc.org/for-researchers.php).

Successful proposals will be funded as sub-awards through the University of Vermont (UVM) and indirect costs will be restricted to 5% of the total budget.

**Instructions for pre-proposals due NOV. 30, 2024**

**COMPLETING the pre-proposal form:**

1. Pre-proposals must be submitted to LCFRP@uvm.edu
2. Instructions are embedded within the sections of the pre-proposal form.
3. Total length of pre-proposal must not exceed one page.
4. Use 11-point Times New Roman font for body text of the pre-proposal. Do not change font styles or sizes of the headings and subheadings of the form. Delete the announcement and instructions pages and investigator instructions [contained in brackets within the pre-proposal form] prior to submittal of the pre-proposal.
5. Investigators must submit budget information in USD, including those from Canadian agencies or institutions.
6. Projects may not have start dates before August 1, 2025.
7. At the end of the pre-proposal, include a one-page CV for each investigator.
8. The pre-proposal and CVs of investigators should be compiled in a single PDF document with the filename [LastNameofPI]\_LCFRP\_Preproposal.pdf
9. Thel PDF file should be sent to LCFRP@uvm.edu with the subject line “LC Preproposal: PI LastName” prior to midnight (EST), November 30, 2024.

Questions can be sent to LCFRP@uvm.edu

Lake Champlain Fisheries Research Grant Program

**Title:** [Type title in **Sentence case** font. Use a short, descriptive title that captures the project’s purpose or goal.]

**Project leader(s):** [Include the name, agency or organization, address, phone number, and email of Principal Investigator. List the name, email, and agency of other investigators.]

**Costs: 1st yr: \_\_\_\_\_\_\_\_\_ Total: \_\_\_\_\_\_\_\_\_\_\_\_Project Dates:** [Provide the start and completion dates.]

[Include 1st yr costs and total cost. Funds are in USD.]

**Rationale:** [Briefly describe the rationale for the project, including the issue or question that will be addressed by the research. State the hypotheses or research questions to be explored. A good research question should be narrow enough to address specific issues but not so narrow that it can be addressed with a yes or no answer or the gathering of a few statistics. A well-thought-out and focused research question leads directly into hypotheses. Ecological hypotheses represent possible explanations of cause and effect (i.e., they explain observations or relationships among variables). Multiple competing, or alternative hypotheses can be developed to explain the observation. Predictions are what you expect to occur if the hypothesis is correct. For instance, if hypothesis A is supported, we predict result (1), result (2), and result (3), but NOT result (4) or result (5). Negative tests of predictions help eliminate flawed hypotheses. Once research questions and hypotheses are formulated, research objectives can be developed (see below). Describe why the proposed research is important and provide a brief justification for the hypotheses. Explain the reason why this project should be conducted and why the proposed work is significant.]

**Objectives:** [Numerically list research objectives in the sequence of their completion. Many pre-proposals fail to advance to a request for a full proposal due to poorly formulated objectives. Research objectives are statements that are related to scientific understanding based on interpretation of data analysis; objectives are **not methodological steps** (e.g., collect data, conduct experiments, analyze data, write report). Objectives identify a pattern, process, or relationship among variables to be tested, compared, or described, and can be used to evaluate progress of a project. Objectives should be worded to reflect the research questions to be answered, the hypotheses to be tested, and the processes to be described. A set of objectives are ideally related to each other. When little information exists to formulate questions and hypotheses, then descriptive research objectives are appropriate.]

**Methods:** [Provide a concise overview of proposed methods. For research projects, include study design, data collection procedures, analytical methods, reporting, and time frames.]

**Relevance:** [Describe how the proposed research will benefit research and/or management in Lake Champlain and/or the Great Lakes.]

**Deliverables and distribution of findings:** [Provide a concise description of products to be delivered and the medium(s) through which the research results will be disseminated. Products may include students trained, theses, peer-reviewed publications, databases, workshop and technical reports, public engagements, policy and management briefings, electronic files, and presentations. Medium(s) may include email listservs, websites, journals, management meetings, conferences, etc.]