



Sea Grant

LAKE CHAMPLAIN

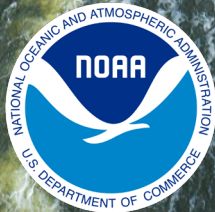
SCIENCE THAT INFORMS

**Lake Champlain
Sea Grant to fund
Research Focused
on People and the
Environment of the
Basin**

Lake Champlain Sea Grant supports research that informs land and water management practices and policy decisions in favor of ecosystem health and sustainable economies in the Lake Champlain basin.

Researchers collaborate with a wide variety of partners in the basin and throughout the Great Lakes-St. Lawrence ecosystem. We welcome diverse research and stakeholder perspectives, and we share scientific results and management implications with business, state, and local leaders and the communities they serve.

Between 2024 and 2026, Lake Champlain Sea Grant (LCSG) is funding five research projects led by researchers at Middlebury College, SUNY-Plattsburgh, Dartmouth College, and the University of Vermont (UVM). LCSG is a NOAA-funded partnership between UVM and SUNY-Plattsburgh that operates in cooperation with numerous regional, state, and local organizations. LCSG develops and delivers science-based information that benefits the environment and economies of the Lake Champlain basin.



STATE UNIVERSITY OF NEW YORK
PLATTSBURGH



University
of Vermont

Rubenstein School of Environment
and Natural Resources

2024–2026 Projects

MICROBIAL ECOLOGY AND COMMUNITY KNOWLEDGE

Dr. Erin Eggleston of Middlebury College will study microbial ecology and community knowledge to enhance our understanding of cyanobacterial blooms in Lake Champlain. Dr. Eggleston's project will generate community-centered data that will be communicated to state agencies and basin stakeholders through reports and in conversation with community members.

IMPACT OF VARIOUS LAND USES ON LAKESHORE WILDLIFE AND ECOSYSTEMS

Dr. Michale Glennon of Paul Smith's College's Adirondack Watershed Institute will pilot a program that studies the impact of various land uses on lakeshore wildlife and ecosystems on Upper Saranac Lake (Franklin County, NY). Dr. Glennon and her team will develop outreach and communication tools in collaboration with the Upper Saranac Lake Association, Upper Saranac Lake Foundation, and Adirondack Lakes Alliance to promote informed stewardship techniques that benefit native wildlife and their habitats around Upper Saranac Lake.

LEVELS OF BENEFICIAL OMEGA-3 FATTY ACIDS AND CONTAMINANTS SUCH AS MERCURY AND PFAS IN COMMONLY CAUGHT GAME FISH

Dr. Vivien Taylor from Dartmouth College will evaluate levels of beneficial omega-3 fatty acids and contaminants such as mercury and PFAS in commonly caught game fish from nearshore and offshore locations on Lake Champlain. Fish provide an accessible food source and supply of nutrients to a large population of recreational and subsistence anglers and their communities. However, safe consumption guidelines often target sport fish, which are found away from shore. Subsistence anglers tend to stay onshore where they need less equipment, and it's these shoreline areas that are more impacted by watershed nutrient inputs. This research will inform subsistence anglers to make healthy choices while fishing in Lake Champlain.

EFFECTS OF INVASIVE ALEWIFE ON THE FOOD WEB FUNCTION IN LAKE CHAMPLAIN

Dr. Justin Lesser of the University of Vermont's Rubenstein School will study the effects of invasive alewife on the food web function in Lake Champlain. Dr. Lesser and his team will collect fish samples within Lake Champlain and similar lake systems without alewife—Lake George and Lake Memphremagog. In addition to the food web research, this project will foster valuable cross-lake cooperation between researchers, communities, stakeholders, and managers of Lake Champlain (New York, Vermont, and Quebec), Lake George (New York), and Lake Memphremagog (Vermont and Quebec).

BARRIERS THAT PREVENT BLACK, INDIGENOUS, AND PEOPLE OF COLOR (BIPOC) STUDENTS FROM ENTERING THE ENVIRONMENTAL WORKFORCE

Dr. Leon Walls at the University of Vermont will expand upon work initiated by Dr. Kim Coleman in our last research award, now of RESNR. Dr. Walls and his team will examine barriers that prevent black, indigenous, and people of color (BIPOC) students from entering the environmental workforce. A PhD student will work with 400 Upward Bound students who identify as BIPOC. Upward Bound is a national program aimed at high school students from lower-income households or in households where neither parent holds a bachelor's degree. The students served through this project will be provided opportunities to experience watershed science and learn about a range of career options in environmental science.



Dr. Vivien Taylor collecting dragonfly larvae samples in Potash Brook