

M.L. 2013 Minnesota Aquatic Invasive Species Research Center Subproject Abstract

For the Period Ending June 30, 2019

SUBPROJECT TITLE: MAISRC Subproject 10: Citizen Science and Professional Training Programs to Support AIS Response

SUBPROJECT MANAGER: Daniel Larkin

AFFILIATION: University of Minnesota

MAILING ADDRESS: 135 Skok Hall, 2003 Upper Buford Circle

CITY/STATE/ZIP: St. Paul, MN 55108

PHONE: 612-625-6350

E-MAIL: djlarkin@umn.edu

WEBSITE: <http://larkinlab.cfans.umn.edu/>

FUNDING SOURCE: Environment and Natural Resources Trust Fund (ENRTF)

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SUBPROJECT BUDGET AMOUNT: \$525,389

AMOUNT SPENT: \$520,850

AMOUNT REMAINING: \$4,539

Sound bite of Subproject Outcomes and Results

We developed the AIS Detectors program to train volunteers to be “eyes on the water” for AIS detection and response. 299 people are certified and have contributed 10,000+ hours of work. The AIS Trackers program has been piloted and will launch next year. This project also launched Starry Trek.

Overall Subproject Outcome and Results

Early detection of invasive species is critical. However, there are few professionals addressing aquatic invasive species (AIS) in Minnesota relative to our state’s vast water resources. Furthermore, while many efforts each year seek to control AIS, there are gaps in synthesizing treatment outcomes. These gaps limit our ability to improve management and contribute to uncertainty for lake associations and others tasked with management decision-making. We developed AIS citizen science and training programs to address these challenges. Specifically, AIS Detectors trains volunteers as “eyes on the water” for AIS detection and response, and AIS Trackers educates non-professionals on AIS management and leverages monitoring data to refine management guidance. Over 820 Minnesotans have participated; more have been reached through presentations, media, and publications. To date, 299 people have become certified AIS Detectors and gone on to contribute >10,000 hours to outreach, stewardship, citizen science, and other volunteer activities, a service value >\$273,000. Outgrowths of Detectors have led to additional service, including “Starry Trek”, which annually draws ~200 volunteers statewide for targeted searches for the invasive alga starry stonewort. This event, in partnership with the Minnesota DNR and colleagues from Wisconsin, has led to identification of two new starry stonewort populations and associated opportunities for rapid response; over 500 people have participated. Through AIS Trackers, we developed a new online course to educate people about AIS management and new mechanisms for analyzing AIS treatment outcomes. Over 70 people have piloted this program, which will open in 2020 to a wide audience in Minnesota and beyond. Minnesotans benefit from our work through enhanced capacity for AIS surveillance and robust training that helps professionals and non-professionals alike make better-informed management decisions. Results show that natural resources benefit when we empower Minnesotans to contribute to AIS prevention efforts through rigorous, science-based training and service programs. These programs are now well-established and will continue to be implemented under support from MAISRC, UMN Extension, and program revenue.

Subproject Results Use and Dissemination

Information from our project has been disseminated through 2 publications (attached), 16 invited talks, 11 contributed presentations, 5 webinars, 69 media stories, and online resources. This project has also contributed significantly to MAISRC Subproject 8 (“Risk assessment, control, and restoration research on aquatic invasive plant species”).