Stone Laboratory Broadens its Science Education Reach Through Virtual Learning

Impact Statement 2020

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SUMMARY
Stone Lab’s Lake Erie Science Field Trip program has brought hands-on science and discovery to nearly 300,000 participants since 1973, an experience many could not have had in a traditional classroom setting. Middle and high school students and adults not only learn about current Lake Erie research, but participate in data collection for ongoing studies, deepening their understanding of the lake’s importance to Ohio and the region. As the COVID-19 pandemic hit, Stone Lab adapted, offering alternative learning with virtual workshops and creating a virtual field trip experience to expand the program’s reach.
RESPONSE
As the COVID-19 pandemic forced the cancellation of Stone Lab in-person field trips and courses in 2020, the program readjusted, creating the framework for a virtual Stone Lab field trip experience and online workshops for natural resource managers’ professional development. Stone Lab offered its Algae and Cyanobacteria Identification workshop virtually in the fall of 2020, and scheduled virtual workshops, including the algae and cyanobacteria workshop and a new benthic macroinvertebrate identification workshop, in spring 2021. The virtual field trip curriculum, launching in summer 2021, will provide teachers with five modules ranging from fish identification to herpetology with lessons, continuing education credit for teachers, videos created by Stone Lab staff and the opportunity for students to chat with Ohio Sea Grant and Stone Lab biologists (go.osu.edu/SLvirtual). Stone Lab also created an Ecosystem Explorer video and Live From the Field: Harmful Algal Blooms videos that can be used by undergraduate ecology classes that highlight habitats and ecological processes of the Lake Erie coast.

IMPACT
Thirty-six people participated in the fall Algal Identification workshop, nearly triple what the in-person workshop typically receives. Feedback from the participants was overwhelmingly positive and included comments such as “I felt like it was a good course for anyone, regardless of their experience working with algae,” “I was honestly blown away by how helpful this workshop was for me, especially given the virtual format,” and “Seriously great class! I was skeptical of an online algae course, but the format and content were incredibly informative and well thought out.” Experience with the virtual algae ID workshop is also informing the development of additional workshops for 2021, both for K-12 students and for working water quality professionals.