From the Editor

appy summer! I hope you can get out and enjoy your favorite lake(s) during this period of long daylight and warm (hot) days. During this time



period, many of our lakes unfortunately become unusable because of problems that arise from warm water, excess nutrients, and all that summer sun. In particular, cyanobacteria

blooms, also call cyanobacteria Harmful Algal Blooms (HABs), among other terms, are common during this summer season. Every other summer, we highlight current work and insights related to HABs, and so this issue of *LakeLine* brings together a range of articles focused on HABs.

Rebecca M. Gorney, Jennifer L. Graham, and Jennifer C. Murphy dive into the term "Harmful Algal Blooms" (HABs) and break down and evaluate the importance of each word in that term, with context about how to describe a harmful algal bloom. Because of the variety of terms used to describe blooms, and the differences in responses and action thresholds across regions and levels of government, this article is both timely and quite useful. Their insights will hopefully help all of us in framing our messaging related to HABs in a more strategic and deliberate manner.

Anne Wilkinson, Dendy Lofton, and Katie Kemmit identify and review some of the common blind spots in monitoring for harmful algal blooms, which can result in underestimating bloom occurrences or toxicity of blooms. They provide context for improving monitoring programs by identifying potential gaps. LakeLine encourages letters to the editor. Do you have a lake-related question? Or, have you read something in LakeLine that stimulates your interest? We'd love to hear from you via e-mail, telephone, or postal letter.

Ron Zurawell and Jennifer Graydon provide an overview of cyanobacteria blooms across Canada, and the variability in monitoring and response frameworks among the Canadian provinces. They also include information about how citizen scientists are answering the call to assist with long-term bloom monitoring activities, which could be a useful model for others adopt.

Jennifer L. Jermalowicz-Jones and Ryan Navarre review cyanobacteria and their ability to adapt in and to various habitat conditions. They discuss the causes of blooms, and various means of mitigating the blooms.

In the Student Corner, **Benjamin Harris** discusses his work toward his M.Ed. in Environmental Education as a student at Bard College. Ben is working to evaluate the effectiveness of "Lake School" for lake residents and managers across the Poconos Mountains area of Pennsylvania. He evaluates the level of understanding among program participants before and after their participation in the curriculum, to gauge the effectiveness of educations programs for the citizen science community.

Our *Lakespert*, **Steve Lundt**, expertly weaves a summary of his summer reading on the "devil's element" (phosphorus) with some of the water woes that many of our lakes are facing, but beyond that he recognizes the implications of the global cycling of phosphorus and its impact on a larger scale.

We also hear from one of our NALMS interns, **Skye Embray**, who just completed her internship with the NALMS 314 Workgroup. Skye shares her background, and her upcoming transition to graduate school, as well as her future goals. She discusses her work for NALMS, the deliverables she crafted, to help restore funding for lake restoration and preservation activities.

NALMS president, **Kiyoko Yokota**, provides updates about NALMS, and some of her experiences with HABs.

It's also time to start thinking about attending the NALMS Annual Symposium. We include a preview of the program elements for the NALMS Symposium set for October 2023, in Erie, Pennsylvania. Thank you to NALMS Executive Director, **Philip Forsberg**, for compiling this information. Visit <u>https://</u> <u>www.nalms.org/nalms2023/</u> for up-to-date conference information.

Happy reading and enjoy your summer season!

Amy P. Smagula is a limnologist with the New Hampshire Department of Environmental Services, where she coordinates the Exotic Species Program and special studies of the state's lakes and ponds.

We'd like to hear from you!

Tell us what you think of *LakeLine.* We welcome your comments about specific articles and about the magazine in general. What would you like to see in *LakeLine*?

Send comments by letter or e-mail to editor Amy Smagula (see page 3 for contact information).

