

# HEADWATERS

A core publication of the Lilly Center for Lakes & Streams | Winter 2021

**2021 IS BLOWING IN.  
WE'RE READY FOR A NEW  
YEAR OF LAKE SCIENCE!**  
THIS IS A KESTREL WEATHER METER.  
WE USE TO MEASURE WIND SPEED  
AND AIR TEMPERATURE AT EACH  
SAMPLING SITE!



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LILLY CENTER FOR  
**LAKES  
& STREAMS**



## CAN BLUE-GREEN ALGAE BLOOM DURING THE WINTER?

See the green-grey tint in the picture to the left? This was taken in December, 2020, at Center Lake. An observant homeowner spotted the bloom and shared their observations with us, and our research program specialist, Adrienne Daeger, went to sample the bloom.

After analysis and identification in our lab, Adrienne and Dr. Joe Frentzel, department chair and biology professor at Grace College, determined that the bloom was a blue-green algae bloom. Although uncommon, winter blooms are not unheard of.

### WHAT IS BLUE-GREEN ALGAE?

Blue-green algae is a form of cyanobacteria. It tends to bloom in warm, shallow water where too many nutrients are present. It can produce a toxin called microcystin, which is harmful for pets and people.

*More on the back cover!*

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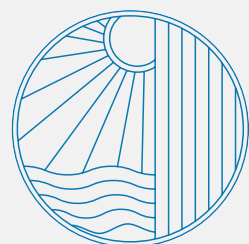
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### STAFF

- |  |   |
|--|---|
| <b>Dr. Nate Bosch</b><br>Director                  | <b>Adrienne Daeger</b><br>Research Program Specialist   |
| <b>Alex Hall</b><br>Associate Director             | <b>Abby Phinney</b><br>Public Relations Specialist      |
| <b>Amy Bloemendaal</b><br>Development Assistant    | <b>Caitlin Yoder</b><br>Community Engagement Specialist |
| <b>Sarah Baier</b><br>Education Program Specialist |   |

### CONTACT

- |                                   |   |
|-----------------------------------|---|
| <b>Email</b><br>lakes@grace.edu   | <b>Phone</b><br>574-372-5100, ext. 6445 |
| <b>Website</b><br>lakes.grace.edu |   |



### Ensure your lake legacy.

Join the Lilly Center Legacy Society by making a gift through a bequest. Talk to Dr. Nate Bosch or Amy Bloemendaal about how you can join the Founders Circle, an initiating group of 20 individuals or families, today:

574.372.5100, ext. 6445 | bloemea@grace.edu

# A taste of summer

By Abby Phinney, public relations specialist. Excerpt taken from *Your Lake, Your Story*, an upcoming Lilly Center publication available in June 2021.



Sally Springer's delicious oatmeal cookies are a go-to dessert for her children and grandchildren. To prepare for her family's summertime visits, Sally makes and freezes large batches of the yummy baked goods, so they are ready to be warmed up and handed out after a day on Syracuse Lake.

Many of the Springer family traditions revolve around food; it is one way they connect and pass down memories. "We eat whenever everyone is out of the water," Sally says. "Somehow being on the lake makes everything taste a little better." •



## MIMI'S OATMEAL COOKIES

FROM THE KITCHEN OF SALLY SPRINGER

1. Heat oven to 350°.
2. Beat brown sugar, granulated sugar and butter until creamy. Add eggs and beat again. Add flour, baking soda and cinnamon and mix again. Add two cups of oats, combine, then add the other two and mix again. Add milk and mix thoroughly.
3. Put a small amount of oil on cookie sheet.
4. Using a tablespoon, put a tablespoon of dough on cookie sheet (not a heaping tablespoon but a nice, generous portion.) I usually get 9 to 12 cookies on a sheet. The cookies do spread (a little) when they bake.
5. Bake 10 to 12 minutes. DO NOT OVER-BAKE! They should just begin to brown on top when they are ready to take out of oven.
6. Cool cookies completely before storing.
7. Place a couple of pieces of regular bread (about 1/4 of a slice) in the container with the cookies. This keeps them fresh and moist. Serve at room tempera-

- 1 cup packed light brown sugar
- 1 cup granulated sugar (if you want your cookies to have less sugar, do not use the granulated sugar at all)
- 1 cup butter
- 2 eggs
- 2 cup sifted flour
- 1 teaspoon baking soda
- 2 teaspoons cinnamon
- 4 cups of 1 Minute Quaker Oats (uncooked; very important to use 1 minute oats)
- 4 tablespoons milk

# Are you and your lake on a first-name basis?

THIS YEAR, ALLOW US TO INTRODUCE YOU.

**W**hat does your lake like? What does it dislike? This year, we are excited to invite you to a series of events that will help you get to know your lake on a personal level. You will get an up-close look at its inhabitants, explore its inflowing and outflowing streams, learn about its favorite influencers, and much more. We look forward to offering you **20+ opportunities** for online and in-person learning! Here are a few upcoming events:

## FEBRUARY

**Expedition: Raptors** | Feb. 27 | 3-4 p.m. | Koinonia Environmental Center

## MARCH

**Workshop: Native Seed Starting** | Mar. 4 | 6-7:30 p.m. | Winona Lake Senior Center

**Webinar: Spill & Pollution Reporting** | Mar. 9 | 1-2 p.m. | Virtual

## APRIL

**Lunch 'n Learn: Goose Management** | Apr. 15 | 12-1 p.m. | The Lilly Center

**Expedition: Heron Rookery** | Apr. 20 | 1-3:30 p.m.

**Art Contest Display** | Opens Apr. 22 | The Lilly Center

Save your seat at one or all of these events by visiting our website: [lakes.grace.edu/calendar](https://lakes.grace.edu/calendar). **Please note that all events have limited spots and are subject to change.** Follow us on Facebook (@centerforlakes) for up-to-date information!

Monarch butterfly  
*Danaus plexippus*

This easily-spotted insect is known for its bright orange and black wings. In its caterpillar stage, it prefers to snack on milkweed. Monarchs typically live 5-8 months.



**A**lso this year, our research and education programs are anticipating the growth of new and ongoing projects, from algae counting to outdoor education.

## RESEARCH

We will continue taking a deep dive into algae counting and identification. With our new research team members trained up and additional, high-powered lab equipment in place, we will continue to explore the algae in our lakes to keep you and your family safe and healthy!

## EDUCATION

The education team is currently working with public, private and homeschool classrooms to sign up for two new program offerings. The team is excited to launch a line of brand new Virtual Visits, and get students into nature with our all new K-6-grade outdoor education programs. Our calendar is filling up quickly! •

Do you want to learn about your lake from the comfort of your couch? Visit our blog to read about aquatic plants, shoreline management and more: [lakes.grace.edu/field-notes](https://lakes.grace.edu/field-notes)

Common arrowhead  
*Sagittaria latifolia*

This perennial, semi-aquatic plant usually grows to 6-48 inches. It has white flowers that bloom in late summer. Arrowhead is native to Indiana.

Bug finder  
*Expedition activity*

Using this handheld viewfinder, which functions like a magnifying glass, you can see a bug, leaf or any other small creature up close. This kind of viewfinder can also hold a small amount of water, allowing you to see live aquatic organisms!

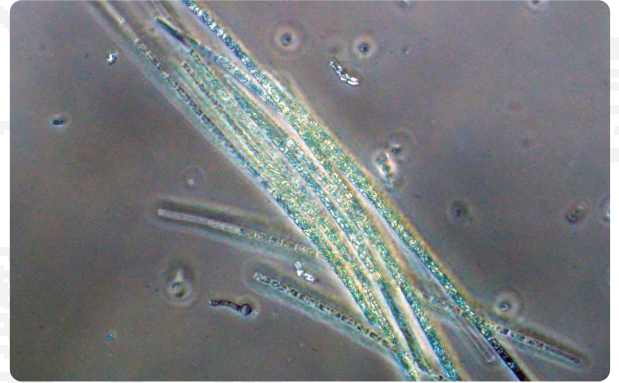
*Continued from the inside cover:*

The bloom spotted in early December, 2020, on Center Lake was determined to be blue-green algae. The shoreline bloom contained an elevated level of microcystin: 14.9 ppb. That is almost twice the Indiana Department of Environmental Management human health threshold, which is set at 8.0 ppb.

“That week, we also had reports of blooms in spots on other local lakes, like Dewart,” Adrienne added.

While blue-green algae is usually suppressed in colder weather, winter blooms are possible. “We’re not sure what triggers them yet, but that’s a part of what we’re studying when we go out and sample a bloom in the winter, and in other times of the year!” Adrienne added. Thankfully, there have been no reported illnesses related to the bloom on Center Lake.

If you notice a bloom on your lake, email us at [lakes@grace.edu](mailto:lakes@grace.edu) and we will work with you to identify what is in the water. •



Here’s what the bloom sample looks like under a microscope! The top image shows *Aphanizomenon*. The bottom shows *Anabaena*. Both are forms of cyanobacteria.



## MEET AMY.

Amy Bloemendaal has worked at the Lilly Center since 2013; she’s one of the center’s longest-serving staff members (only our director has worked at the center longer). Amy currently serves as our development assistant, curating materials for and communicating regularly with our supporters. She serves those of you who make our work possible. You may have received a handwritten thank-you note from Amy or contacted her to RSVP for one of our summer social events. You can contact her with questions about making a gift, and if you’ve received a specific gift receipt or annual giving statement, it was Amy who helped with that! To reach out to her directly, email [bloemea@grace.edu](mailto:bloemea@grace.edu) or call 574-372-5100, ext. 6445.



## LIKE WHAT WE’RE DOING?

We like you, too! You can give and get involved by visiting our website: [lakes.grace.edu](http://lakes.grace.edu).