

# HEADWATERS

A core publication of the Lilly Center for Lakes & Streams | Autumn 2024

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lake research  
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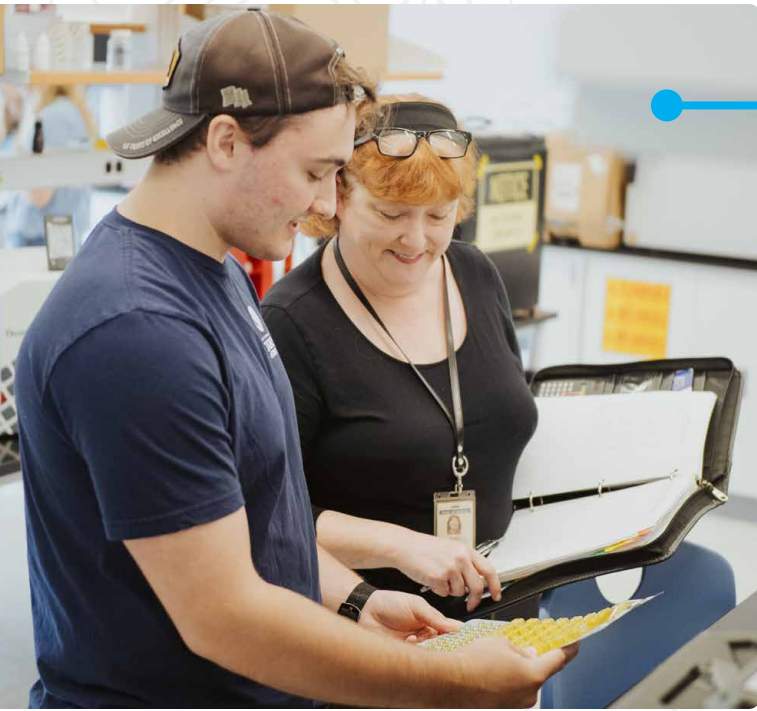
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LILLY CENTER FOR  
**LAKES  
& STREAMS**



Above: Katie Sullivan, Indiana Department of Health, looks on as lab assistant Connor Frentzel demonstrates *E. coli* testing.

# NEW CERTIFICATION AIDS LAKE RESEARCH

The Lilly Center is thrilled to announce its *E. coli* testing program has been certified by the Indiana State Department of Health. This achievement reflects the dedication and rigorous efforts of the Lilly Center's lab team. With this certification, our lab **ensures its ability** to provide reliable *E. coli* testing, strengthening its commitment to protecting local lakes and streams.

*E. coli*, a bacterium known for causing beach closures, can enter lakes and streams through sources like human and animal waste. The Lilly Center has been studying these pollutants since 2013, partnering with the K21 Health Foundation to **identify causes** of elevated *E. coli* levels. Our research provided the foundation for native shoreline installations that reduce runoff and discourage goose waste.

The certification adds a valuable tool to our ongoing efforts to make our lakes and streams clean, healthy, safe, and beautiful for future generations. •

***Read the full release and what this could mean for you by visiting our website: [lakes.grace.edu/field-notes/](https://lakes.grace.edu/field-notes/).***

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Cover: *Dolichospermum* is a blue-green algae that is suspected of producing *saxitoxin*, a toxin the Lilly Center now tests for. Learn more in Beneath the Surface (pg. 3).

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LILLY CENTER FOR  
**LAKES  
& STREAMS**

**GRACE**  
COLLEGE



# THE DOCTOR IS IN

This catchphrase opens every episode of the Lilly Center’s educational Lake Doctor Podcast. Dr. Nate Bosch, Lilly Center director, and Suzie Light interview expert guests that help make science **approachable and applicable**.

You won’t want to miss it! Each episode dives into a specific topic related to our lakes, their economic impact, and the science behind it all.

Settle in and enjoy hours of conversation with DNR staff, conservation officers, meteorologists, the founders of the Lilly Center, and much more!

At the time of printing, ten episodes of the **Lake Doctor Podcast** are available for listening and viewing wherever you get your podcasts, including Apple Podcasts, Spotify, and YouTube. •

*Pictured at left, L-R: Dr. David Hoffert, Warsaw Schools; Suzie Light; Nate Bosch; Dr. Rachael Hoffert, Grace College.*



Scan the QR code to listen to the Lake Doctor Podcast today!

# BENEATH THE SURFACE

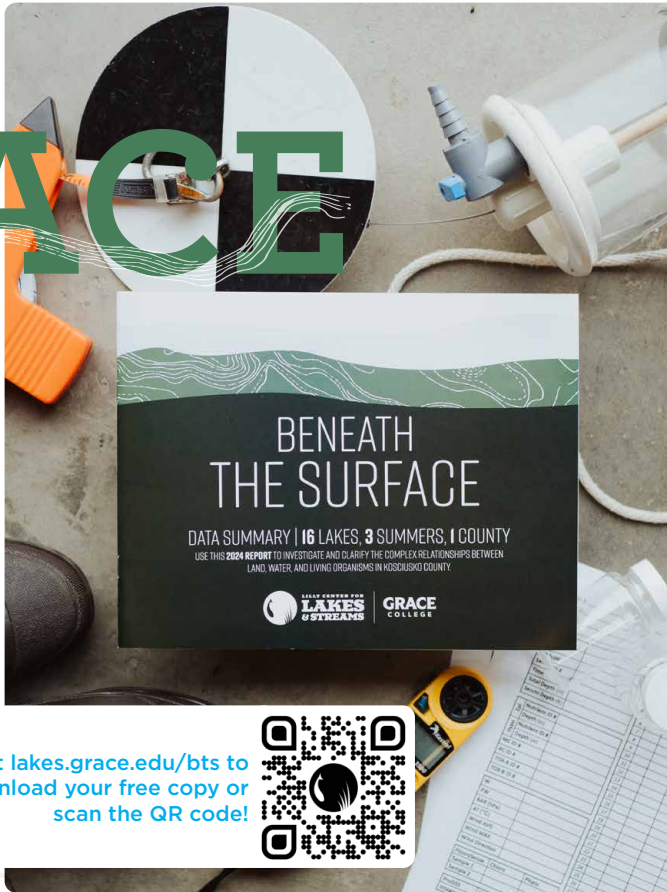
You probably love your lake and want to preserve it for future generations

— so does our team! Beneath the Surface equips you with the information your family, organization, or agency needs to care for the lakes.

We believe that a **countywide lakes culture** needs countywide research, education, and collaboration, so our team crafts original content for those in kindergarten through retirement. Due to the Lilly Center’s work, Kosciusko County’s lakes are some of the best studied in Indiana.

This library of valuable data shows patterns and trends in the health of our lakes, which in turn reveals specific management steps. •

*We invite you to dive Beneath the Surface with us!*



Visit [lakes.grace.edu/bts](http://lakes.grace.edu/bts) to download your free copy or scan the QR code!





CLAIRE SPRANKLE:

## INSPIRED BY AN AQUARIUM

Over 23,000 students in Kosciusko County have had an aquarium in their school classroom or library. Claire Sprankle was not one of them. But, the classroom across the hall from her sixth-grade room had a Lilly Center aquarium. She noticed college students, who she remembers as being “old,” visiting that classroom regularly to clean the aquarium.

As Claire grew older, she became more serious about her interests in the outdoors, animals, and photography. She invested her years at Warsaw High School by taking ecology and biology classes so she could one day study zoology or pre-veterinary medicine. Inspired by photographers like Joel Sartore, a National Geographic photographer, she took as many photography classes as possible, including an independent study. Her dream? To one day become a National Geographic photographer herself.

Choosing a college to attend was not a straightforward decision. Claire knew she wanted to stay near her family, but that meant modifying her idea to study zoology. Claire remembered the aquarium across the hall and investigated further. Once she knew that the Lilly Center was part of Grace College, she was hooked and enrolled as a freshman in 2024.

Claire jumped into college life with both feet and chose to **study environmental science** and minor in photography. Her first class was general ecology, taught by Lilly Center director Dr. Nate Bosch.

Within days of moving into her dorm room, she also applied and was hired to work on the Lilly Center’s aquarium team. Her teammates trained her to properly clean aquariums and care for the native fish that call it home.

“It’s really weird to me that I’m going to be that “old” person coming into the class-

### FAST FACTS



Hometown:  
Warsaw, IN



Areas of Study:  
**Environmental  
Science &  
Photography**



Lilly Center team:  
**Aquarium Team**



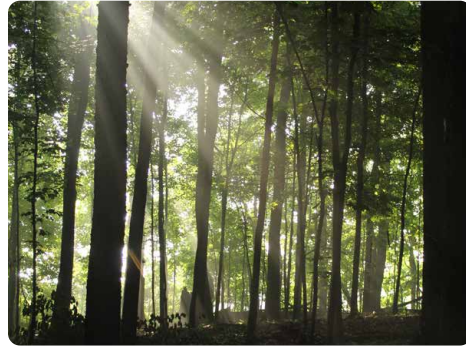
Dream Job:  
**Nat Geo  
photographer**



Favorite animal:  
**African Elephant**



Photos provided by Claire Sprankle



rooms and cleaning aquariums,” Claire said. “It’s crazy to me that I get to interact with students at my old school thanks to an aquarium.”

The Lilly Center’s aquarium program is an **extension of its education programs**. The aquarium team installs up to 40 aquariums in classrooms, school libraries, and community spaces each year. These beautiful installations serve as a focal point for Indiana standards-based lessons taught by classroom teachers, Lilly Center interns, or Grace College School of Education students.

The Lilly Center’s aquarium program has grown in response to feedback from teachers and students. While Classroom Lake Experience (the program in Claire’s elementary school) still exists, Lake in

the Library provides scientific lake lessons to every student in the school. Now, **everyone can participate** in award-winning, hands-on activities that help students of all ages know how to make their lakes and streams clean and healthy.

Working at the Lilly Center prepares Claire and the 45 other college interns on staff for their future environmental careers through **resume-building experiences**. Many graduated students choose to stay in northern Indiana. •

*You can support a student’s water literacy journey, whether they are 12 or 22 years old, by giving to the Lilly Center at [lakes.grace.edu/give](https://lakes.grace.edu/give).*

Thanks to Steel Dynamics Foundation, Wayne Kubek, Frank & Becky Levinson Charitable Fund, and Dick Teets, Jr, for their support in 2024 to attract and retain top student talent at the Lilly Center.

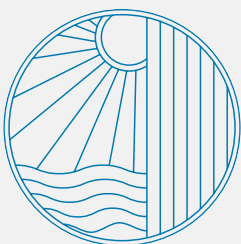


## DINNER IN CHERRY CREEK

According to Joel Wihebrink, water enthusiast and long-time

supporter, “Dinner in Cherry Creek was the most intimate, unique, elegant, and exclusive event we have **ever attended**.”

You won’t want to miss out on this unique fundraiser. Sponsor a table of 6 today and invite your friends who may not yet know of the Lilly Center’s work: [lakes.grace.edu/creekdinner](https://lakes.grace.edu/creekdinner). •



### Ensure your lake legacy.

Join the Lilly Center Legacy Society by making a gift through several estate options with tax advantages. Talk to Dr. Nate Bosch about how you can join the Founders Circle and become part of an initial group of 20 members today:

574.372.5282 | [boschns@grace.edu](mailto:boschns@grace.edu)

# OVER 600 4TH GRADERS ENJOY LAKE ADVENTURE DAY

In early September, fourth grade students from 10 elementary schools explored **scientific aspects** of local lakes like erosion, watersheds, and fish. Lake

Adventure Day is a partnership between Grace College's School of Education and the Lilly Center.

Corwin is a local 4th grader who attends Washington STEM Academy. Like many students his age, Corwin enjoys swimming in the lakes and looking for wildlife that inhabits them. However, Lake Adventure Day is an opportunity for Corwin to dive into lake science on the shores of Winona Lake. He particularly enjoyed the lesson on pollution.

During Lake Adventure Day, twenty senior students lead lessons with the help of freshmen college students. Senior students from the School of Education receive training from Lilly Center staff several weeks in advance. They receive instruction on using unique tools like sand tables, enviroscares, and fishing poles.

The future of Kosciusko County's lakes depends on students like Corwin. By **empowering future leaders** with knowledge and tools today, they will be equipped to make positive choices that impact our waterways for years to come. •



## 2024-25 FAST FACTS



100% booked



128 educational events



12,000+ student connections

*Lake Adventure Day is possible thanks to Warsaw Community Schools, Lakeland Christian Academy, and Sacred Heart. Education programs are sponsored by the Warren and Augusta Hume Foundation, The Papers, DePuy-Synthes, City of Warsaw Stormwater Utility, Warsaw Breakfast Optimist Club, and Zimmer-Biomet Foundation.*

# MOVE THE NEEDLE

And **invest** in research and education efforts that will benefit your lake for generations to come by:

- **Preparing** future environmental professionals
- Keeping our community **safe**
- **Educating** the next generation



Visit [lakes.grace.edu/give](https://lakes.grace.edu/give) or scan the QR code to invest today!

