

2021 ANNUAL REPORT RIVER BASIN CENTER



UNIVERSITY OF
GEORGIA
River Basin Center



15 new
faculty
members

79 total
faculty
members

Across
27
UGA units

Etheostoma stigmaeum, by Andrew Nagy

2021 by the numbers

\$6,400,000 in active grants
with an overall budget of **\$19.9 million**

Meet our...

Incoming John Spencer Fellow, Fabiola Lopez Avila, and incoming James E. Butler Fellow, Shelby Bauer.

The John Spencer Fellowship fund honors the legacy of John Kyle Spencer, a master's student at the Odum School of Ecology, and was established through the generosity of his friends and family. Columbus attorney James E. Butler, Jr. established the Butler Fellowships with a \$1 million gift to the Institute of Ecology in 2006.

Recipients of the John Spencer Research Grant awards, Courtney Scott, Warnell School of Forestry and Natural Resources, and Talia Levine, Odum School of Ecology.

These grants were inaugurated in 2016 with a generous donation from Kathleen Amos, John Spencer's mother. Ongoing support for the annual awards comes from donations.

Connecting freshwater science to management and policy

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Year highlights

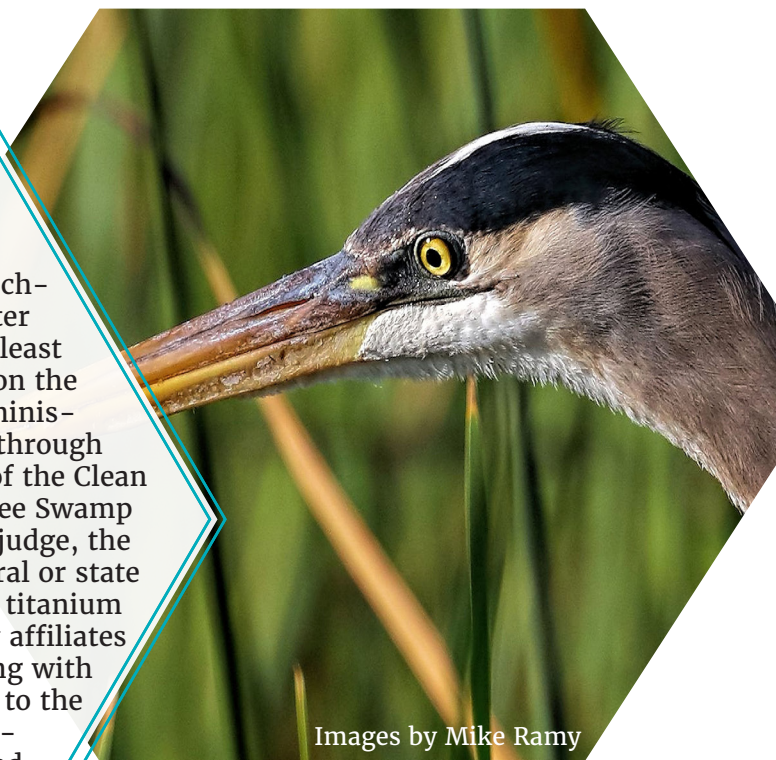


Years of persistence paid dividends for affiliate Susan Wilde. In 2001, along with colleagues, she began studying the death of bald eagles in the Southeast. They discovered and described a cyanobacteria, *Aetokthonos hydrillicola*, that lives on the plant hydrilla and acts as a toxin. But it took another decade of research and collaboration with labs in Germany to directly link the brain lesions found in the dead waterfowl with a molecule in the cyanobacteria. In 2021, in a study published in *Science*, with Steffen Breinlinger as lead author, the team detailed the molecule that causes avian vacuolar myelinopathy. We aren't the only group impressed—Wilde was awarded the Newcomb Cleveland Prize for her work, an honor conferred by The American Association for the Advancement of Science.

Image by Dorothy Kozlowski

A case study of the Okefenokee

The Okefenokee Swamp is one of Georgia's richest natural resources: it is the largest blackwater wetland ecosystem in North America and is the least disturbed and most intact freshwater ecosystem on the Atlantic Coastal Plain. But in 2020, the Trump Administration redefined the "Waters of the United States" through the Navigable Waters Rule to reduce the jurisdiction of the Clean Water Act, rendering substantial parts of the Okefenokee Swamp unprotected. Although this rule was later vacated by a judge, the Okefenokee lacks clear protection—at either the federal or state level—from many human activities, like a proposed titanium mine that could alter its unique hydrology. Faculty affiliates Rhett Jackson, Lori Sutter and Darold Batzer, along with graduate student Caleb Sytsma, called attention to the swamp's imperiled status in a 2021 article published in *Applied Wetland Science*. Jackson and Sutter were also featured in a documentary, "Sacred Waters: The Okefenokee in Peril," produced by the Okefenokee Protection Alliance.



Images by Mike Ramy

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