

This Week

Prepared by Office of University Communications

April 30, 2024

Bobcat Territory

Visit frontpage.gcsu.edu/events

Tuesday

30

Wednesday

01

5 p.m. - Bobcats vs. Newberry College John Kurtz Field

Thursday

02

Friday

03

p.m. - Commencement: College of Health

7 p.m. - Commencement: College of Education

Saturday

04

9 a.m. - Commencement: College of Busines and Technology

Sciences



The 13-year cicadas are here—yes, in Central Georgia

They don't sting, and they don't bite. They don't suck blood. They won't make you itch.

And your garden is safe.

But miniature exoskeletons might be attached to your house. You might see flickers of red-and-black buzz by. Over the weekend, you might've heard a monotonous droning begin.

No, your eyes are not deceiving you, and your ears are just fine.

And, despite some maps showing their arrival only in North Georgia—the cicadas ARE here. Yes, right here in Central Georgia.

How do we know? Signs of molting—empty skeletal shells are starting to be seen.

"I just found my first cicada molt. Temperatures are almost at the critical point," said Georgia College & State University expert Dr. Bruce Snyder, associate professor of biological and environmental sciences.

Cicadas stay beneath the ground as wingless nymphs, but they aren't hibernating. They feed off sap in tree roots and tunnel about.

When the year is right, they start burrowing up, waiting inside a hole near the surface of the ground—for just the right temperature, a process Snyder called "staging." When soil 8 inches deep reaches 64 degrees—they come out.

That began in Middle Georgia last weekend and will continue throughout this week and next. They'll be around for about a month.

Snyder didn't expect the cicadas until early May. The spring was wet and chilly. Pollen and blooms were a week late. Then, temperatures turned warm.

"They have been staging underground for weeks,"

Snyder said. "Based on the weather, I expect to see them coming up now in larger numbers."

The Great Southern Brood is thought to be the largest geographically of all periodical cicadas—seen in Maryland along the coast to Georgia and in parts of the Midwest.

In 2011, according to the Journal of Entomological Science, areas in Georgia with the densest periodical cicada populations included Augusta, Columbus, Rome, Macon and Milledgeville.

Their appearance this year is particularly interesting.

For the first time since Thomas Jefferson was the U.S. President in 1803, the arrival of the 13-year Southern Brood coincides with the appearance of the 17-year Northern Illinois Brood XIII. Together, they're expected to total a trillion periodical cicadas in 16 states.

This happens only every 221 years.

"It's a pretty rare opportunity," Snyder said.
"To have one happen where you're living is a good opportunity to learn. It's something people shouldn't miss."

You could almost say they're 'adorable' with black bodies, red eyes and red-orange-veined wings. They tend to congregate in areas with hardwood trees like oaks, maples and hickories.

A few "stragglers" come early, Snyder said, but most crawl out around the same time.

They shed their exoskeletons and noisily look for mates. They don't eat much. They just group together in trees in a loud chorus for one big reproductive party. They're clumsy flyers. So, a couple are bound to smack into you. Or your windshield. You may crunch them



An example of a cicada you can see now. Photo Credit: Adobe Stock.

underfoot. And your ears may ring from continuous buzzina.

"These cicada emergences are really incredible," Snyder said "They can be overwhelming. They're very loud." "But I wouldn't be worried about cicadas," he said.

"They're harmless. They have no interest in you. You just happen to be in their space."

So, yeah, they'll be everywhere. And that might be a nuisance.

It'll be louder. And it might not be the song you want to hear.

But they're only here a short time. They'll mate, lay eggs and disappear. For another 13 years.

GCSU MVP Liz Speelman honored with Collaboration Award



Liz Speelman (center) with members of the GCSU SoCPS.

"'If I did this, what else can I do?'"
is Liz Speelman's mantra. It's what has
gotten her across North America and over
the Atlantic Ocean to become Georgia College & State University's Outdoor Center
director and senior lecturer of outdoor
education.

Speelman, '07, has been a faculty and staff MVP at Georgia College for the last 15 years and plays a part in many areas across campus.

From teaching classes in the Outdoor Center to serving our Leadership Programs and supporting our current strategic plan—it's hard to find a place where she hasn't made her mark.

"I like being here, I love teaching our students, and I love who we get to work with," Liz said. "That's never changed."

That's why she was honored with the School of Continuing and Professional Studies' inaugural Collaboration Award. The award honors those who have opened the door to collaboration with the school.

"Liz has worked closely with our High Achievers Program, provided support for retreats in Historic Museums, and serves as one of our valued instructors in the Leadership & Management Academy in Continuing & Professional Education," said Angela Criscoe, executive director of the SoCPS.

"Her interpersonal skills, flexibility and willingness to share the responsibilities of providing a quality program are reasons we value our partnership with her and chose her as this year's internal partner awardee for the SoCPS Collaboration Award.," Criscoe said.

As a youth in Toronto, Canada, Liz's

fascination with the outdoors was fostered by family camping trips and activities outdoors. Continuing that adventurous tradition, Liz later crossed the Atlantic to study abroad at the University of Stirling in Scotland.

While studying environmental science there, Liz developed a 'If I could do this, what else can I do?' mentality.

That ethos eventually lead to her dream job at Georgia College. But before that,

she formed her passion for teaching in the schools of Ghana in West Africa.

After graduating university, Liz worked with Voluntary Service Overseas, a nonprofit international development charity. For those two years she taught high school math and physics, with and without electricity.

She taught with creativity, and the experience transformed her idea of what didactic teaching could be.

"That experience showed me that every class was different and each year class was different," Liz said. "Trying to make learning connect for each student was what started my love of teaching."

When she wanted to pursue an advance degree, she found Georgia College.

As the only full-time staff member at the Outdoor Center, Liz leads successful team-building programs. As a recognized expert in the U.S. and Canada for challenge course teamwork effectiveness, she's a model to her students and a community collaborator.

Class of 2024: Meet chemist Cole Smith

It all began with a library book for kids' experiments for Cole Smith, Georgia College & State University graduating chemistry senior. The book, filled with bookmarks and \$60 in library fines, was his pride and joy.

He couldn't imagine life without it. The book inspired him to seek opportunities for biotechnology research at Jasper County High School and led him to Georgia College's Young Scientist Program—a six-week program for highschoolers to explore university-level research.

"I took it in the summer and discovered that chemistry is what I want to do," Smith said. "I decided I was only going to come to Georgia College. I applied to one college, and that was Georgia College. I put all my eggs into one basket, and I got in."

He played rugby, held leadership positions in the Chemistry Club and volunteered at the Science Education Center since starting his college career. Along the way, Smith also managed to develop a working advanced adhesive.

From the start, Smith worked with Dr. Catrena Lisse, professor of chemistry, in her organic chemistry lab. Tasked with creating a gel that could work as a bandage and be photo-titratable—meaning it turns into a liquid when exposed to ultraviolet light—he did it.

"The worst part about Band-Aids™ is pulling them off, especially for people with traumatic injuries like burns," Smith said. "Being able to titrate it back into a solution with UV light, or turn the adhesive into a liquid, and dab it off could be really helpful."

Students coming after him will carry the project forward.
Smith hopes they can make other contributions toward creating an anti-microbial advanced bandage.

Smith enjoys paying forward science exploration opportunities to the local students of tomorrow. He did this by supporting countless science fairs, magic shows and outreach events organized by Georgia College's Science Education Center.

"Otherwise, either science is scary, or science feels too foreign for them to think they could do it," Smith said. "We want to inspire them and show them it's cool. It's really fun, and you can get up there and do it, even being from a small town or a lowincome household."

"I was them at one point, so I

wanted to keep spreading that message," he said.

Smith is the only member of his immediate family to graduate high school. He's also a first-generation college student. This motivates him to support the development of his nieces and nephews. With a blended family of 17 siblings, there's a lot to accomplish.

He'll start by taking a year off to pay off his student loans. During that off year, he's hoping to work in the kaolin industry of Georgia. After that, for Smith, the sky's the limit.

Schools like UNC Chapel Hill, Vanderbilt and Duke University are at the top of his list for doctoral programs, and he knows he can get there.

"At this point I could walk into any faculty members' office and ask them questions about life, resumes, chemistry—anything—and they're always right there to help," Smith said. "The fact that we get to do independent research here and use all these sophisticated instruments—it was just fabulous. I knew I wanted to do that for my undergrad career."



Pictured above: graduating senior Cole Smith.

Did you know?

You can help scientists like Snyder by becoming community science data collectors. Citizens can record numbers and cicada locations using one of two apps: iNaturalist and Cicada Safari.

They want to know things like:

- Timing, how cicadas know when to emerge and if other triggers besides temperature factor in.
- Distribution, where cicadas numbers grow or shrink over time and why.
- Predator satiation, when there's a sudden abundance
 of insects to eat. Birds, animals, snakes, lizards and
 other vertebrates become engorged. They stop eating,
 scientists theorize, leaving plenty of cicadas to finish
 mating and lay eggs, ensuring survival of the species
- Overdevelopment, how environmental damage can eliminate entire cicada populations from one emergence to the next.