

# MOUNTAINS

## NC father-daughter team discovers aquatic organism



**Word from the Smokies**  
Frances Figart  
Columnist

A new aquatic organism has been discovered in Great Smoky Mountains National Park from a wetland near the Oconaluftee Visitor Center. It's a microscopic worm-like creature that feeds on algae and bacteria, and it appears to be pretty common across North America and much of the world, if one thinks to look for it.

What's significant about this tiny new find is that it represents a phylum never before documented in the park. It belongs to a group of living things called the hairybellies, named for the rows of cilia that they use to propel themselves through the water.

It was found by a father and daughter team who were actually out looking for something completely different. Paul E. Super, science coordinator for Appalachian Highlands Science Learning Center at The Purchase in Haywood County, and his daughter, Sarah Elizabeth Super, were working with Dr. Paul Davison of Northern Alabama University to locate a certain fungus called Sommerstroffia that feeds on aquatic organisms known as rotifers.

"We started getting interested in all the other critters that were showing up in the pond water samples we were collecting," Paul Super said. "While checking the samples, I noticed an unusual critter gliding along, about the same size as our rotifers. I called her attention to it. After a little book research, we discovered that it was of the phylum Gastrotricha, which is an obscure group not uncommon on submerged vegetation in fresh water. There are also a number of these species that can be found in beach sand at the ocean."

The Smokies is home to a groundbreaking effort, managed by the nonprofit Discover Life in America (DLiA), to identify and try to understand every



**Sarah Elizabeth Super helped discover an aquatic organism that represents a phylum never before documented in the park.** PHOTOS COURTESY OF PAUL E. SUPER



**This slide image shows what all the fuss is about and provides documentation of a phylum never before recorded for Great Smoky Mountains National Park, the Gastrotrich, a little hairybelly with a forked tail.**

species living within the park's boundaries. The project is called the All Taxa Biodiversity Inventory (ATBI), and this tiny critter takes its tally up to 21,125 species known to the Smokies.

"A new phylum is significant," said Will Kuhn, director of science and research for DLiA. "You may remember the Linnaean classification system from high school biology—kingdom, phylum, class, order, family, genus, species. Chordata is an example of a phylum; it contains all animals with a backbone, including fish, birds, mammals, am-

phibians, reptiles. We regularly add new species and genus records for the Smokies, and occasionally we find a new family, but it's extremely rare to add groups above the family level."

Sarah Elizabeth Super — who will be attending Waynesville's Tuscola High School once the pandemic lifts — has been doing her schooling remotely. Since she would normally be out on field trips with her science teacher, her dad suggested she join in the search for the Sommerstroffia fungus. She had no idea she would be discovering a completely new park record of such significance.

"It's been great to have the opportunity to work on something without predetermined results," she said, "not following a rote script knowing what will come of it, but rather gaining real information new and relevant to the park."

Because the Smokies has been above sea level and escaped glaciation for millions of years, it has the perfect conditions to support biodiversity — including the best old-growth watersheds in the eastern U.S. Yet most of the 20,000+ species that reside in GSMNP are lifeforms you wouldn't notice on a casual hike unless you were looking extremely closely. The important ecosystem services these tiny organisms provide support the web of life on which charismatic species like bear and elk ultimately depend.

"I don't even know when the last new phylum was recorded," Kuhn said. "It just goes to show how diverse and unexplored this area still is, even after 23 years of intensive study. When we focus on the small things, there is still so much more to discover."

Frances Figart is the editor of Smokies Life magazine and the Creative Services Director for the 28,000-member Great Smoky Mountains Association, an educational nonprofit partner of Great Smoky Mountains National Park. Learn more at smokiesinformation.org and reach the author at frances@gsmassoc.org.

## Mills River board tables townhome development

Lurah Lowery Asheville Citizen Times  
USA TODAY NETWORK

The Mills River Planning Board took no action March 16 on a proposed 92-unit townhome development on Banner Farm Road.

Moore & Son Site Contractors, developer and owner of the project, told the board earlier this month the plan is to sell each duplex for \$325,000 to \$375,000 to meet a need for "workforce housing." The units are proposed to vary in size from 1,200 square feet to 1,500 square feet.

Chairwoman Sherri Hill said March 16 the special-use permit application for the project is incomplete because there isn't an approved sewer system plan. The town's ordinance code requires the plan to be submitted with the permit application, she said.

Because of that missing piece, Hill asked the board for a motion to table a decision on the project. Board member Jim Foster made the motion to table it, then after discussion withdrew the motion and made a motion to take no action. That motion was unanimously approved.

"This is just all messed up," Foster said. "We need to let (Town Manager) Daniel (Cobb) get it right and his crew. I don't know how this happened and why it happened."

Tension was obvious among the board members, Devin Staley with Blue Ridge Engineering and Rick Moore with Moore & Son due to confusion about the permit approval process.

Cobb told the board and the applicants that he "screwed up" and read the ordinance wrong.

"I got it out of order," Cobb said. "There is some contradictory language in this ordinance as well as in the subdivision ordinance as well as the use allowances in this district and so this

See TOWNHOMES, Page 9A

Homes

Love the house. Know the neighborhood.

## OPEN HOUSES

**OPEN SAT 2-4**

[www.carolinamountainsales.com](http://www.carolinamountainsales.com)

**71 Hubbard Avenue ASHEVILLE 28806 \$389,999**

Welcome to West Asheville and a charming place to call home! 3-bed · 2.5-baths · 1,486 Sq.Ft. Adhering to CDC guidelines 1-buyer group will tour home at a time. An appt. is recommended- call listing agent for more info.

*Carolina MOUNTAIN SALES*

**Cory Wall**  
Cory@CarolinaMountainSales.com  
828-674-9766

**Find a home that fits your family in a neighborhood that fits your life.**

**To Feature Your Home Here, Contact Us Today!**

**LOOKING TO BUY A HOME?**

**To Feature Your Home Here, Contact Us Today!**

Your dream home should come with a dream neighborhood. Homes provides exclusive details on neighborhoods, lifestyles and area amenities with every listing.

CITIZEN-TIMES

[www.citizen-times.com/homes](http://www.citizen-times.com/homes)

Homes

Love the house. Know the neighborhood.

## Citizen Times

PART OF THE USA TODAY NETWORK

### Customer service

To view important information online related to your subscription, visit [aboutyoursubscription.citizen-times.com](http://aboutyoursubscription.citizen-times.com). You can also manage your subscription at [account.citizen-times.com](http://account.citizen-times.com). Contact the Citizen Times for questions or to report issues via email at [citizentimes@gannett.com](mailto:citizentimes@gannett.com) or 1-800-672-2472.

### Operating hours are:

- Monday-Friday: 8:00 a.m.-7:00 p.m.
- Saturday: 7:00 a.m. -11:00 a.m. for technical support only
- Sunday & holidays: 7:00 a.m.-11:00 a.m.

### Full access subscriptions

Subscribe and save today by visiting [citizen-times.com/subscribe](http://citizen-times.com/subscribe). Subscriptions below are billed per month and include access to citizen-times.com, tablet and smartphone apps, and the e-Edition, a digital replica of the print edition.

- Delivery of the Monday through Sunday print editions: \$68.00\*
- Delivery of the Friday through Sunday print editions: \$39.00\*
- Delivery of the Sunday and Wednesday print editions: \$32.00\*
- Delivery of the Sunday print editions: \$25.00\*

\*Plus applicable taxes

### Corrections and clarifications

Our goal is to promptly correct errors. Email us at [asheville.gannett.com](mailto:asheville.gannett.com) to report a mistake or call 828-232-5829. Describe the error, where you saw it, the date, page number, or the URL.

### Contact us

Customer Service ..... 1-800-672-2472  
News Director ..... Jewell Walston | 828-232-5829  
Advertising ..... 828-252-5611  
Obituaries ..... 828-232-5966

### Postal information

Citizen Times, USPS #236-000, ISSN #0336-0000, is published Monday through Sunday at 14 O. Henry Ave., Asheville, NC 28802. Periodicals postage paid at Asheville, NC 28802.  
Postmaster: Send address changes to Customer Service, PO Box 62670, San Angelo, TX 76906.