USA TODAY NEWS

MOUNTAINS

Science series returns with eye on butterflies



Word from the Smokies Aaron Searcy Columnist

Warren Bielenberg spends a lot of time photographing Southern Appalachian butterflies in Great Smoky Mountains National Park. But he willingly admits that his journey of butterfly discovery didn't begin in earnest until he retired from 34 years as a park ranger and began volunteering in the park's popular Cades Cove.

"One day there was a family of three with a little girl, maybe 11 or 12 years old, near a group of blue butterflies along the road," said Bielenberg. "I went over and said they looked like pipevine swallowtails. But then the little girl immediately corrected me and said, 'No, those are spicebush swallowtails!' I'd never heard of them, but she pointed out a very subtle difference between the two."

That experience serves as a reminder to Bielenberg that, no matter your age, there is always more to learn. He'll help others dive into the world of Southern Appalachian butterflies on May 21, when park partner organization Discover Life in America (DLiA) kicks off its free Science at Sugarlands speaker series. For this, the first in a six-part education series, Bielenberg will share findings from a long-term butterfly survey program in the Cades Cove area.

"They like sunny, warm, calm days and lots of flowers," said Bielenberg, 'which makes Cades Cove one of the best butterfly destinations in the park."

The Science at Sugarlands series was created in 2017 to provide an opportunity for regional scientists to share their research with general audiences, answer questions, and discuss the latest issues affecting regional biodiversity and conservation. This year, DLiA will host its annual speaker series online from 1-3 p.m. on the third Friday of every month from May through October. Registration for the first free event is currently open at dlia.org.

"The whole idea is to bring some of the more obscure and interesting species and groups of organisms to the



Science at Sugarlands presenter Warren Bielenberg holds a butterfly collected in Great Smoky Mountains National Park. The park is home to nearly 2,000 different species of moths and butterflies. PHOTOS PROVIDED BY WARREN BIFLENBERG

forefront, so the public can be as fascinated as we are by these animals and plants we get to learn about through the ATBI," said Todd Witcher, executive director of DLiA.

The ATBI, or the All Taxa Biodiversity Inventory, is a joint effort between DLiA and the National Park System begun in 1998 to identify and understand every species within Great Smoky Mountains National Park. Through the project, DLiA has helped add more than 10,000 species to the inventory of life in the park and more than 1,000 species entirely new to science.

"Most people think of a few wellknown types of butterflies and moths that exist in the park and the surrounding areas, like monarchs or tiger swallowtails," said Witcher. "But it's important to realize the breadth of diversity in the park, and for this particular group, Lepidoptera, there are not just a few but almost 2,000 different species in the park. And we have to protect every last one of them."

Butterflies are typically active in the Great Smoky Mountains from April through late October. In addition to Cades Cove, Cataloochee Valley, on the North Carolina side of the Smokies, also offers prime butterfly viewing thanks to its abundance of water, food sources, and larval host plants. With their eyecatching flashes of color and leisurely, floating pace, butterflies make for great wildlife watching can often be easy subjects to approach and photograph. In the warmer months, many species will congregate in damp areas in a phenomenon known as "puddling."

Observing and photographing butterflies is also valuable to science. According to Bielenberg, public use of wildlife identification apps like iNaturalist and long-term butterfly surveying efforts like the one in Cades Cove are key to understanding trends impacting global biodiversity.

"Survey routes established on public lands can be surveyed year after year without having to worry about changes in land ownership," said Bielenberg. "This lets you track long-term changes in butterfly species along with habitat change within that route.'

Butterflies are foundational to ecosystems around the world as pollinating insects. Since some can be considered indicator species, recording changes in their numbers over time gives researchers valuable insights into a larger pic-



A coral hairstreak, Satyrium titus, alights on a native butterfly weed food plant. Warren Bielenberg documented the first sighting of a coral hairstreak in Great Smoky Mountains National



The common buckeye, aka Junonia coenia, prefers sunny, open areas with low vegetation.

ture of ecological health. Such longterm monitoring has shown declines in the total abundance of important insects like bees, moths, and butterflies attributable to pesticide use, climate change, and habitat loss due to development and agriculture.

Through the return of the Science at Sugarlands series, Bielenberg hopes to invite others to tune in to the important and endlessly fascinating world of butterflies.

'It's just another good reason to get outside and pay attention," he said. "You never know what you're going to see."

Aaron Searcy is a contributing editor for Smokies Life magazine and a publications associate for the 28,000-member Great Smoky Mountains Association, an educational nonprofit partner of Great Smoky Mountains National Learn more smokiesinformation.org and reach the author at Aaron@gsmassoc.org.

Well-Bred Bakery to join Grove Arcade's 'restaurant row'

Mackensy Lunsford

Asheville Citizen Times USA TODAY NETWORK

ASHEVILLE - One of WNC's best bakeries is getting a downtown Asheville location.

Well-Bred Bakery and Cafe will join a burgeoning "restaurant row" coming together in the Grove Arcade.

The bakery might be best known for its pastries, including sumptuous eclairs in petite and "mountain' sizes. But the cafe menu is also a draw, with its salads, croissant sandwiches and

They'll be on the menu at this newest Grove Arcade spot in suite 112, said Well-Bred's sales and marketing manager Mary Logsdon. That's the former location of Fresh Quarter produce, an outpost of Mountain Foods.

Though the Fresh Quarter closed in March, Mountain Foods still provides many area restaurants with local and regional produce.

Logsdon said the Grove Arcade's ownership and management, Dewey Property Advisors, reached out to Well-Bred to fill the vacant space.

"They're trying to build a community

there, and we're thrilled to be a part of it," she said.

Well-Bred, founded at 26 North Main St. Weaverville, also has a Biltmore Village location and a food truck, which opened in September at 232 Reems Creek Road.

Logsdon said the newest Well-Bred will open June 2, provided the restaurant is well-staffed and equipment and other supplies arrive on time. Both the Weaverville and Biltmore Village locations are also on the hunt for more staff.

The Grove Arcade location is small, at just about 250 square feet. But with refrigerated and dry storage downstairs and plenty of seating within the Grove Arcade's central promenade, it should be enough, Logsdon said.

The restaurant will be counter service only, with two bakery cases and likely some grab-and-go juice, kombucha and other drinks.

There will be plenty of sweets, including an array of cookies, assorted cake slices and yes, those eclairs. "There might be a mutiny if we didn't," Logsdon

Breakfast will be served all day and will include croissant breakfast sandwiches, burritos and quiche.



The mountain eclair at Well-Bred Bakery is far lighter than its namesake but decidedly monstrous.

ANGELA WILHELM/CITIZEN TIMES

For lunch, the restaurant will serve a half-dozen sandwiches, including chicken salad croissants, an Italian on Ciabatta, turkey on a pretzel roll and grilled cheese. Well-Bred will have a small menu of rotating sides and several salad bowls.

Plans are eventually to provide some ready-made sandwiches and salads for quick service.

Though there's a small prep counter in the space, most everything will be prepared in Well-Bred's Weaverville production kitchen and delivered fresh

to the Grove Arcade.

To be sure, there are a lot of logistics involved in this particular move, Logsdon said.

'We'll have a learning curve," she said. "We've never opened in a place like the Grove Arcade, but it's a beautiful building, and we're very excited."

One notable thing will not be available at Well-Bred's newest location: whole cakes. There's just not enough room, and those cakes are uncommonly heavy.

"A half sheet cake weighs 20 pounds," said Logsdon. "And if people have to park in the Wall Street garage, that would be pretty awkward to carry."

Well-Bred will be open from 8:30 a.m.-4 p.m. daily. The Grove Arcade is at 1 Page Ave. Look for a forthcoming story to learn more about the recent and upcoming changes at the historic downtown Asheville building.

Mackensy Lunsford has lived in Asheville for more than 20 years, and has been a staff writer for the Asheville Citizen Times since 2012. Lunsford is a former professional line cook and onetime restaurant owner.

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