



# Co-Existing With Snakes

— by Connie Deegan, Naturalist, City of Johnson City

*Photos contributed by C. Deegan*

A great habitat will support all kinds of animals, even some which may not be included on your personal 'desired animal' list. Many people are never concerned if they see an owl, rabbit, fox or turtle in their yard, but a snake?!! What is going on? Snakes simply want what all other animals want: food, water, shelter and space. Providing good habitat for animals on your 'OK list' can also provide the same for others that you may not wish to entice. Some habitat manipulation may discourage snakes, but it can come at a cost, and you may have to make some tough choices regarding the other animals that you enjoy in your yard.



First touch

Let's look at this differently. Isn't it time for moving the needle a bit more towards 'awesome' when it comes to snakes? Many people have done just that. They have realized that short of turning their half acre lot into a wildlife desert, they can provide good wildlife habitat And embrace the snake.

You proclaim: "But some snakes are venomous and there is more at stake!" Your heebie jeebies are totally justified! "My kids! My dog! My cat!" This is a very tricky topic for educators and homeowners as well as the snakes. Even if you choose to engage a professional to remove the snakes from your property, they will either return or be replaced by others. A good habitat is not to be wasted! This can be very frustrating for the homeowner. If you live in a yard where known venomous species thrive, education is honestly the best way to deal with the issue. Plenty of people use this strategy and bites are non-existent because they now take common sense precautions. Lists of venomous species in your area are easy to find along with pictures for identification on line.

Let us consider poison ivy. If you are allergic to it, I bet you rarely get it because you recognize it in all of its variable presentations and you know what habitat it favors. When you have to work in it, you remain hyper-attentive, dress accordingly and wash up afterward. That is why you don't get it: you have educated yourself and taken precautions. This is the same process I suggest when observing snakes.

People who take this approach have learned what time of year they may start seeing snakes in their yard and when snakes become scarce due to brumation; (if their winters allow for colder weather). They pay attention to what the temperatures are when they see snakes and how that changes as their summers move forward into hotter daytime temps. They realize that a pump-driven, overflowing bird bath or a koi pond, after

days of hot, dry weather, will call in snakes as well as other wildlife to the water source. They remember that when they took the tarp off of their garden last spring, they disturbed a few snakes, so they will anticipate them this year, too. They will no longer leave the garage door open because they know that a nice, cool, protected space may be pretty inviting to a snake or two should they stumble upon it...

A few months ago, I wanted to figure out a way to acquire some non-disputable, factual venomous snakebite research for the area where I live, in Northeast Tennessee. (We have two venomous species here, the timber rattlesnake and the copperhead). I was able to track down the single individual that is responsible for recording each time that our local healthcare system has used antivenom for snakebite. I asked for and received very specific data from the years 2021 and 2022, regarding total snakebites where antivenom was administered. (The year 2021 was still considered a 'pandemic year' when people were historically spending even more time outdoors). This data included the person's age, sex, where on the body the bite occurred, the geographical location, and often the snake species. It was also noted what the individual was doing at the time of the bite.

The 29 counties of the health network includes the Appalachian Highlands: Northeast TN, Southwest VA, Northwest NC, and Southeast KY, (including all 21 of their hospital sites). There were 17 recorded bites in the last two years in this area known for outdoor recreation, rural land and agriculture. The bite statistics were based on antivenom use, which is only used for moderate to severe envenomation. Therefore, there is a possibility that there may have been some minor snake bites without these symptoms that received simple local wound care and were not recorded.

Let us consider some of the bite scenarios: two people were bitten while retrieving eggs in chicken coops. The snakes were there because the chicks were available and possibly rodents were attracted to chicken feed. This is considered an 'attractive nuisance', which could have been snake-proofed. A man was bitten while feeding his dogs in the barn. It is highly likely rodents were attracted to the daily dog feeding area. Two people stepped on a snake barefoot. One walked back to his car in the dark! Understandably, the snake reacted with a bite. One young child picked up a snake. We realize that children find almost any animal irresistible, but had they ever received 'the snake talk' and were told never to pick up any snake?

I did not 'cherry pick' the list of examples. All of the seventeen bites, from the information collected, clearly indicated that the people involved played a role in the bite. These snakes were not aggressive until faced with potential harm. A bit of snake smarts would have worked well in all of these instances.

People do coexist with snakes on their property and have no issues. Can you be one of them, utilizing a bit of forethought and education? Understand that the value of wildlife is not based on your opinion of it or mine. If it is here, it belongs, for reasons that you understand and reasons that you don't. We have allowed ourselves to dislike and/or harm certain animal species such as snakes, spiders, bats, sharks and others for a very long time. We can no longer afford to take links out of the chain. Fortunately, the tide is shifting and folks are more willing to comprehend that it is truly all connected and realize that an attitude of 'us versus them' no longer works.

Connie Deegan is a naturalist with Johnson City, TN Parks & Recreation, specializing in herpetology. She is the recipient of the 2021 TN Wildlife Federation Conservation Achievement Award for Conservation Educator of the Year and the 2022 Pinnacle Award for Adventure Tourism. Connie will present *Co-existing with Snakes* on Friday, April 28, at 7:30 PM in the Roan Mountain State Park Conference Center.



Ring-necked snake



***In Tennessee, it is illegal to harm, kill, remove from the wild, or possess native snakes taken from the wild without the proper permits.***

## GIVE PURPLE CONEFLOWER A WHIRL

by Tavia Cathcart Brown

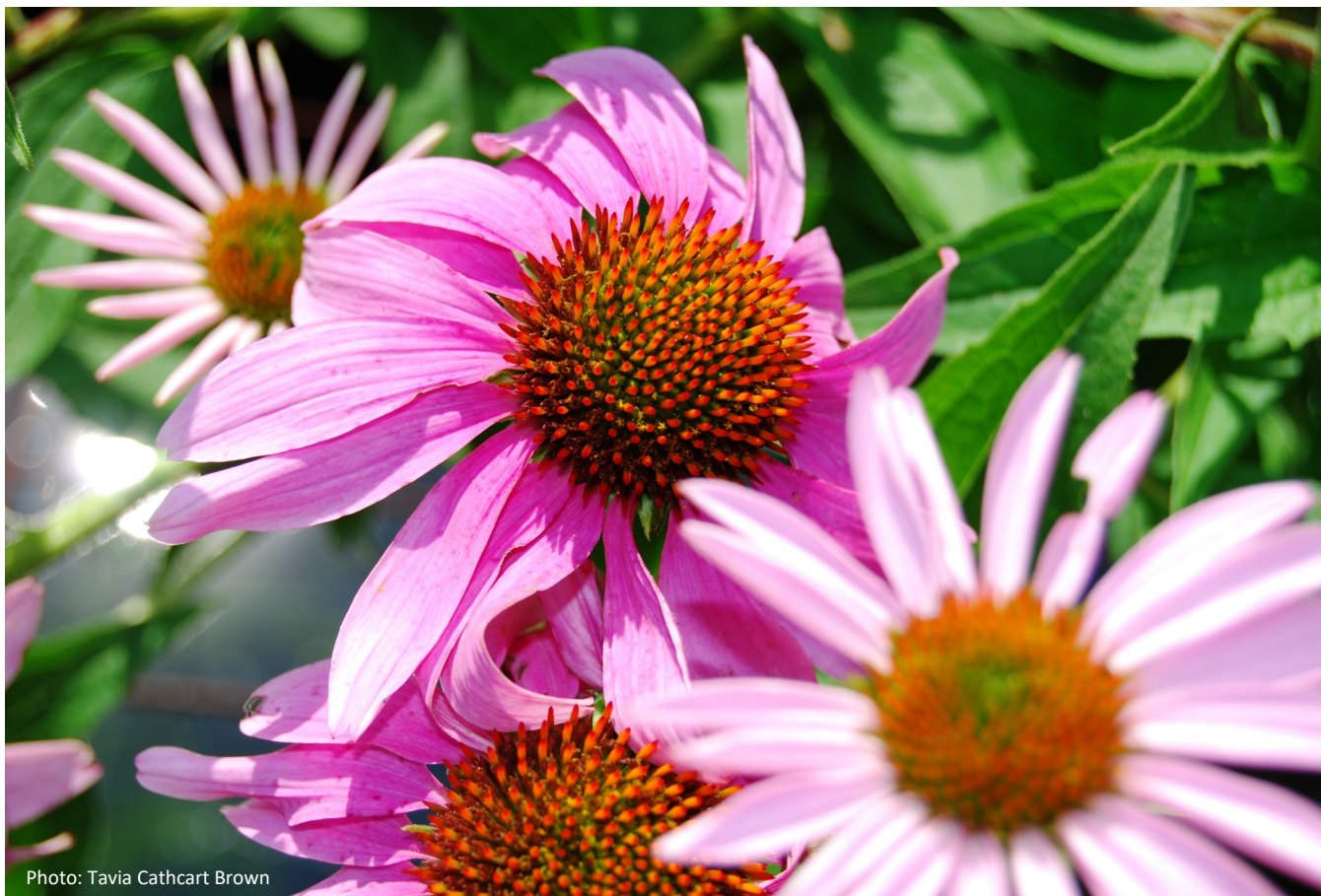


Photo: Tavia Cathcart Brown

Purple Coneflower *Echinacea purpurea* Other Common Names: Eastern Purple Coneflower, Snakeroot, Black Sampson

The appealing color, sturdy growth, and long-lasting flowers that attract a multitude of butterflies and bees make our native purple coneflower a bright and welcome summertime addition to the garden. It has notable uses as an herbal remedy, which makes it a ringer for an herbal medicine cabinet, as well.

Once established, purple coneflower often rises from 2.5 to 3-feet tall, with resplendent pink (sometimes purplish and rarely white) ray flowers that flare around (sometimes in a whirl) a cone-shaped disk of spiky flowers that vary from purple to rich orange with tips that appear dipped in crimson paint. As added interest, the ray flowers start out light and darken to a deep pink or purple as they age. The plant gets its genus name, *Echinacea*, from the Greek “*echino*,” which means hedgehog and refers to the spiny and rounded central disk; *purpurea* refers to the purplish color of the flowers.

If you struggle with browsing deer, it’s worth considering coneflowers, as their prickly stems and sand-paper-rough leaves are less tasty to ungulates and insects. (Very few plants may claim to be fully deer resistant; in drought-stricken areas, white-tailed deer have been known to eat birds.) Be aware that gophers and moles may nibble the roots, and slugs may inflict damage.

Purple coneflowers not only attract the *oohs* and *ahhs* of humans, you will likely see a charm of finch visitors! Goldfinches and house finches are frequent visitors atop robust stems as they pluck the sterile petals to access the seeds in the center.

## ***Echinacea is a Powerful Medicine***

Native Americans discovered that the root of purple coneflower produced a numbing effect. When chewed, the root causes a slight anesthetizing and tingling of the mouth and throat, and when placed against an aching tooth, it can prevent toothaches. This discovery led to *Echinacea purpurea* becoming a very important medicinal plant to Native Americans. From this discovery, the plants' many potent curative uses blossomed. Modern science has confirmed that many of the herbal remedies used by Native Americans were accurate.

Purple coneflower was used to calm coughs and lung infections such as bronchitis, to boost the immune system, and to ultimately ward off colds and flu-like symptoms. A poultice made of smashed roots was used for insect bites, for treating snakebite, as an anesthetic to arms and hands, and applied as a wash to reduce pain from burns. The roots and whole plant have been found to possess cortisone-like and antibacterial activity, which aids in treating sores, wounds, and burns. As an antiviral and antifungal agent, it was considered to be a significant healing plant for Native Americans. Native Americans learned of another *Echinacea* species, narrow-leaf coneflower (*E. angustifolia*), by observing that elk would seek out the plants when they were sick or wounded. The plants quickly were given the name Elk Root.

## ***Enlist Echinacea to Fight Illness***

*Echinacea* is a top selling herbal supplement to help fortify the immune system against the flu and other respiratory illnesses. The plant contains echinacins (a polysaccharide) that binds to cells, speeds the recognition of invading pathogens, helps prevent these infectious organisms from entering the cells, and reduces inflammation. *Echinacea* has long been recognized in Europe for its many medicinal uses, and in Germany today, more than 200 pharmaceutical products are made from the extracts. In other words, if you are feeling run-down and are beginning to feel sick, the best prescription might be to give this immune-building plant a chance.

Available in many forms, *Echinacea* may be taken as a tea, a tincture, in capsule form, as an ingredient of cough sprays, and as an ingredient in many supplements. This plant serves as a hand-up so you may recover faster. It might shorten the intensity and the duration of an illness. It isn't a "magic pill" to make a cold disappear overnight, but it will work with your body's own defense mechanisms and help you fight your infection. The earlier you can take *Echinacea* during the onset of cold symptoms, the better. Be sure to follow the directions – no more and no less than as instructed on the packaging. It should not be taken as a daily supplement; rather it is usually taken in intervals, such as a week on and a week off, or for 7 to 10 days, with a week off.

## ***Make Your Own Tincture***

If you have some healthy patches of three-year old or older coneflowers, you may want to concoct your own tincture (a plant extract made by soaking herbs in a liquid). I used to keep a gallon jar filled with my homemade *Echinacea* tincture to share with friends and family (a Mason jar is a good size, too).

My recipe was simple: Dig mature coneflower plants (aged three years or more), fill a jar with thoroughly washed and chopped roots, and add a few leaves and flowers. Pour 100-proof vodka over it, close the lid, and allow it to steep in a dark spot in a cool pantry. Every day for six to eight weeks, stir the aromatic concoction or shake the jar. Once the mixture darkens into a burgundy or earthy brown, strain the liquid through two layers of cheesecloth into smaller sterilized glass jars. Pour the liquid into small amber- or blue-colored dropper bottles to share with friends (properly labeled, of course). Stored in a cool spot, *Echinacea* tincture will keep up to two years.

I have experimented by adding ginger root, lemon wedges, and using brandy instead of vodka to make each dropper-full less stringent and more palatable, but in the end, whatever the flavor, I welcome the kick to my immune system so I may wake up happy and healthy another day.

**Tavia Cathcart Brown is Executive Director of the 170-acre Creasey Mahan Nature Preserve in Goshen, Kentucky, where she has established a two-acre Woodland Garden, multiple Certified Monarch Waystations and helped establish Kentucky's first full-time outdoor preschool, Thrive Forest School. She coauthored the field guide, *Wildflowers of Tennessee, the Ohio Valley, and Southern Appalachians*. Tavia will present *Flora Lore & Uses — Fascinating Stories about Flowers* on Saturday, April 29th at 7:30 PM in the Roan Mountain State Park Conference Center.**

# WINTER RALLY REPORT

—Tracy Campbell

The 2023 Winter Rally took place on a beautiful sunny Saturday in February. Nature enthusiasts of all ages gathered in front of the fire in the conference center to welcome three very knowledgeable and engaging speakers. Dr. Ryan Huish from the University of Virginia at Wise shared his passion for ethnobotany and the way he applies it to Appalachian Cove Forest Farm. Listeners were fascinated by the many plants found in our mountains, and the incredible ways that they are useful to us. Amy Van Devender brought to light some compelling stories about some forgotten women from our region who made incredible discoveries, making expeditions into the mountains to discover and research endemic snails as early as the 1800s. Her extensive research about these naturalists and their stories gave them the credit they deserve but were not given during their lifetimes. Dr. Wayne Van Devender of Appalachian State University shared the natural history and biodiversity of our native amphibians. Featuring his own amazing photography and stories from the field, Dr. Van Devender shared detailed accounts of all local species and how to better understand their roles in Southern Appalachian ecosystems.

After lunch, the weather was perfect for exploring and participants had three field trip choices. Marty Silver, ranger at Warriors Path State Park, led a group of wildlife trackers by the Doe River to learn how to find and identify the animal signs and tracks found in and around the park. Debi Campbell, along with Gary and Betty Bailey of the Elizabethton/Kingsport Bird Clubs guided a birding excursion around the park to observe and identify the wintering and resident birds of Roan Mountain. Cade Campbell, biology student ETSU, led an intrepid group to the spruce-fir forest to explore and discuss the ancient glacial refugia of Roan Mountain. Many rare lichens, fungi, and plants were visible despite the cold and lingering ice. A definite highlight was the rare, Roan Mountain endemic Rock-loving Covert Snail (*Fumonelix roanensis*) found by the Van Devenders who were among the highland group.



Rock-loving Covert Snail  
Photo by Cade Campbell

## GIFTS AND MEMORIALS

*Friends of Roan Mountain gratefully acknowledges these charitable gifts*

### Memorial Gifts

Sierra Gaskins in memory of her father, Richard Brown

### Donations

David Atkins

W. Mills Dyer

Jaime Herman

Susan Peters

Pam Baldwin

Lucinda Flodin

John and Connie McLendon

Anne Whittemore

Network for Good honoring Norma Morrison

Amazon Smile Charitable Contribution



**SAVE the DATE!** - Southern Appalachian Highlands Conservancy's June Jamboree, a day of free guided hikes and conservation celebration in the Roan Highlands - June 10. More details TBA at [Appalachian.org](http://Appalachian.org).

## SAHC purchases 52 Acres at Toms Branch near Carvers Gap

Persistence and patience reside at the core of conservation. Sometimes Southern Appalachian Highlands Conservancy, our partners, and/or landowners may not be in a position for permanent protection of a high priority parcel to move forward for years – perhaps even decades. Such was the case with the 52-acre parcel on Toms Branch that SAHC recently purchased in the Highlands of Roan. Located off TN Hwy 143 and adjoining Cherokee National Forest just north of Carvers Gap, the property is highly visible to hikers on the Appalachian Trail at Round Bald and Jane Bald. Its location, and the protection of water quality in Toms Branch, meant that it had been a conservation priority for SAHC, the U.S. Forest Service and the Appalachian Trail Conservancy for forty years.



“This is a case where SAHC took out a loan to secure a long-time priority for conservation, and will hold it until the U.S. Forest Service can acquire it from us, which will enable us to repay the loan,” elaborates Executive Director Carl Silverstein. “We are really in the midst of this transaction – we have saved the property from immediate danger of development, but putting it into the hands of the public will take some additional time and funding. We are thrilled to celebrate this stage now, and look forward to celebrating the transfer when that happens.”

“Because of its location, acquiring Toms Branch will have an outsized impact on protecting the southern Appalachian strain of Brook Trout,” says Cherokee Forest Supervisor Mike Wright. “SAHC has been a key partner to the Cherokee National Forest and we are grateful for their hard work on this.”

The Overmountain Chapter of Trout Unlimited contributed a \$6,000 donation towards the protection and stewardship of the Toms Branch tract. “The Overmountain Chapter Trout Unlimited is excited to partner with SAHC to protect the headwaters of the Doe and Watauga Rivers,” says Rhett Morris, chapter president. “Keeping these waters clean and cold will benefit trout and downstream communities for years to come. We are thankful for donors like the Tri Fly Tournament that make our support possible.”

Over decades, staff from SAHC built long-term relationships with landowners in the region, demonstrating a commitment to conservation and patience in establishing connections with people who have loved and lived in the region for generations.

Read more at [Appalachian.org/toms-branch](http://Appalachian.org/toms-branch)

## Roan Mountain Garlic Mustard Pull

On **Friday, April 28 from 9:30 AM to 2 PM** the Appalachian Trail Conservancy is partnering with the Southern Appalachian Highlands Conservancy (SAHC), Roan Mountain State Park, and the Cherokee National Forest to remove invasive garlic mustard from the park and heavily trafficked highways around Carver's Gap and SAHC conservation properties in the Highlands of Roan. Plucking out the pesky invaders when they are young and tender is relatively less labor intensive and very rewarding work, but it does take a lot of hands! We would like to invite you to enjoy a day outside on the A.T. while lending a hand and helping fellow volunteers to protect the natural habitats and biodiversity found along the A.T. landscape.

### Schedule:

**9:30 AM to 9:45 PM** - Introduction, safety talk, etc. Volunteers will be briefed, divided into groups, and dispersed across the Park and along public roadsides to pull garlic mustard. There will need to be some shuttling and driving of personal vehicles to make this happen.

**9:45 AM to 1:00 PM** – Pulling and bagging up garlic mustard!

**1:00 PM to 2:00 PM** – Lunch at the Conference Center and our official “weigh in”

Training, work gloves and trash bags will be provided. Please bring your own snacks, lunch and bottled water. Lunch is not provided. Water and light snacks are available from the Conference Center vending machines. Feel free to bring personal gloves or a trowel. Pulling garlic mustard is usually easy, but a trowel can be helpful for compacted roadside soil and stubborn roots. You will need a hat and/or sunscreen, long pants, sturdy shoes, lunch, water, a warm layer for high elevation hiking, and rain gear. It may be difficult to return to your car while we are working, so you may want a bag to keep your items with you throughout the day. More info at [https://volunteer.appalachiantrail.org/s/atc-project-details?c\\_reclid=a0q8Z00000DOXA0](https://volunteer.appalachiantrail.org/s/atc-project-details?c_reclid=a0q8Z00000DOXA0)

# The Xtreme Roan Adventures 2023 are going to be a *blast!*



Starting off with a big Free Friday Night on July 28. Dr. Gerardo Arceo -Gomez and his crew will present *The Amazing World of Pollinators* at 8:00 p.m. at the Roan Mountain State Park amphitheater.

Following the stage show we will offer a choice of dark Adventures: Larry McDaniel will host the Moth Party. Lance Jesse will lead you to find Salamanders at Night. Ranger Phil Hylan will lead the Lightening Bug Adventure. Some really groovy cats will take you for a Hike-a-Delic Experience to find some bioluminescence wonders. It's going to be far out man!

The full day of Adventures will start Saturday, July 29, with day registration at the R.M.S.P. amphitheater. Adventures will start at 9:00 a.m., and most Adventures will be offered again at 10:30.

9:00 AM	10:30 AM	LUNCH	1:30 PM
Wet Rocks Geology	Wet Rocks Geology	Lunch will be optional: Bring your own picnic or pre-order the catered sandwich lunch served at the R.M.S.P. Conference Center.  While at the conference Center, you can participate in Nature Crafts Fossil Casting Owl Pellet Dissection Wildlife Helpers Primitive Skills Owls at the Aviary	Snorkeling in the Doe River (Adventurers 12 yrs. and older)
Birding Adventure	Birding Adventure		Butterflies Adventure in the Field
Pollinator Adventure	Pollinator Adventure		Blueberry Adventure on the Mountaintop.
Snake Adventure	Snake Adventure		
Animal Signs Adventure	Animal Signs Adventure		
Leave-No-Trace	Wet & Wild Stream Ecology		

To keep up with any changes or additions to the schedule go to [Xtreme Roan Advnitures.org](http://XtremeRoanAdventures.org)

Or contact: Ken Turner, [ken@XtremeRoanAdventures.org](mailto:ken@XtremeRoanAdventures.org), 423-538-3419 or 423-366-9326 (M)

## Rally



## Fun!





Friends of Roan Mountain  
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 Elizabethton, TN 37643  
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Find us on the web at <http://www.friendsofroanmtn.org/>

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# Friendly Reminders



**MEAL Orders** – Payment for Spring Rally meals must be received by **Tuesday, April 25**. The reservation form can be found in the brochure or on our website. Mail your check and reservation form to Nancy Barrigar, 708 Allen Avenue, Elizabethton, TN 37643.

**You can now register online. Find the [link](#) and rally brochure on our website's homepage.**



**Door Prizes** -- We gladly accept items donated for door prizes. These will be given away on Friday and Saturday prior to the evening programs. Ideas: nature-related books, photos or art, outdoor gear, plants, homemade goodies . . .

*If you prefer to read your FoRM newsletters online (color version) email [friendsofroan@gmail.com](mailto:friendsofroan@gmail.com) with your request.*



	Spring Rally	Last Friday - Sunday in April	April 28 - 30, 2023
	Youth - XRA	Last Friday & Saturday in July	July 28 - 29, 2023
	Fall Rally	Friday - Sunday in September after Labor Day	Sept 8—10, 2023
	Winter Rally	Saturday in February near Valentine's Day	February 17, 2024