

WILDLIFE REHABILITATORS OF NORTH CAROLINA

OFFICIAL QUARTERLY NEWSLETTER OF WRNC INC.



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President's Message: "Pictures Are Worth A Thousand Memories"

WRITTEN BY REBEKAH KRISTON

I scrolled through the pictures on my phone today looking for a picture of my daughter to show to my friend. To my surprise, it took me several minutes to find the latest picture of her, which had been taken two months ago. I thought to myself, "Wow, had it really been that long since I had taken a picture of my sweet Lilly?" I always have my phone out taking pictures so I couldn't imagine why the most recent one was taken so long ago. Then, it hit me. I realized I had more pictures of my animals in rehab than I did of my own daughter. For that matter, my husband, parents, sister, grandmother, all the people who matter most to me were lost in the sea of animal photos.

President's Message

WRITTEN BY REBEKAH KRISTON

I felt horrible when I realized that it appeared that I only cared about the animals that were my patients. While I understand that it is necessary to take photos of rehab animals, their injuries, their recovery process, and their releases, it is also necessary that I don't neglect my family for the sake of the animals. Photos give us a means of educating other rehabilitators and the public, but they also provide us with memories of experiences. Our memories should not only be of our work as wildlife rehabilitators, but also of the times that we spent with those little family members who are "imprinting on" us and those bigger family members that we have "imprinted on". As this year comes to an end and a new year begins, if you have been like me, I challenge you to change. Don't lose the lives of the ones you love and the ones who love you while trying to save the lives of wild animals. Wildlife rehabilitators are the most giving people that walk on this planet, but don't forget to give the most of your time to those who are your family. Take photos of them. With them. These photos provide us with memories that shape and remind us of who we are, why we love, why we cry, and why we celebrate. I praise all of you for the hard work you have done this year, but most of all I hope for you the most wonderful times and memories with your families. Wishing you all the happiest of the holidays and a joyous New Year!

Photo By Rebekah Kriston.



WRNC Symposium Is Coming Up!



Photo by John Althouse.

*Mark your calendars and join us at
NCSU Veterinary College January 17th
and 18th for a weekend of classes,
vendors, networking, and so much more!*

Photo by John Althouse.

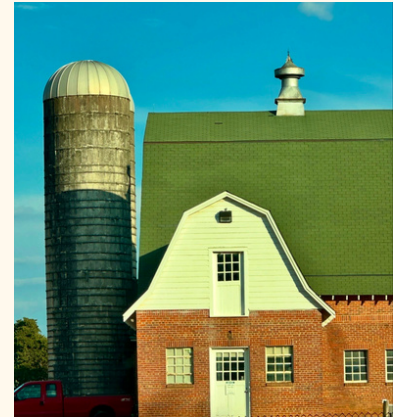


Photo by John Althouse.

Wildlife Rehabilitators of North Carolina's (WRNC's) Annual Symposium is back for a full weekend of learning, community, and fun! Designed for rehabilitators of all experience levels, students, volunteers, and veterinary professionals, this three-day event offers an immersive and enriching experience for the wildlife rehabilitation community.

Saturday and Sunday bring a robust schedule of educational sessions, guest speakers, and hands-on labs. Participants can expect instruction on some of the basics of wildlife rehabilitation, as well as the option to attend more advanced-level courses. The specialized labs provide unique opportunities to practice skills directly under the guidance of experienced professionals. Some sessions are approved for veterinary CE credit, and there is a track approved for vet techs.

Saturday night features the always-popular Symposium Banquet, a warm and celebratory gathering where attendees can enjoy great food, great company, and the shared passion that unites North Carolina's wildlife community. There is also a keynote speaker, who will be announced at a later date.

Whether you're seeking new knowledge, professional development, or connection with peers, the WRNC Symposium offers something special for all wildlife rehabilitators, whether you are based in North Carolina or are visiting from elsewhere

Join us for a weekend dedicated to supporting, strengthening, and celebrating the work of wildlife rehabilitators across our state!



Photo by John Althouse.



Photo of John Althouse & Karen Bestpitch Wetherell.

A Sneak Peek at This Year's Symposium Raffle

WRITTEN BY TARA FROST

Get ready—this year's symposium raffle is shaping up to be one of our best yet! We're thrilled to share that several generous partners, including Fox Valley, Henry's Healthy Pets, Northwoods Falconry, Baby Warm, Dubia, and many others, have donated high-quality items to support the invaluable work our rehabilitators do every day. Our goal this year was to focus on quality over quantity, curating a selection of items that will truly make a difference in wildlife care. We are incredibly grateful for the continued support from these organizations, and we can't wait for you to see what's in store. So get those raffle tickets ready—you won't want to miss this!



Photo by John Althouse.



Photo by John Althouse.

What's New (and Returning!) in Our Exhibitor Hall

WRITTEN BY TARA FROST

We're excited to introduce a few new faces to our exhibitor lineup this year! Be sure to stop by and meet Dr. Cynthia Post, who will be showcasing portable digital radiology, as well as The Original Bunny Nip Company, joining us for the first time. Of course, no symposium would be complete without our beloved returning exhibitors who show up year after year with expertise, passion, and resources our community has come to rely on. Together, this year's exhibitor hall promises an engaging mix of innovation, education, and must-see offerings.

Ready To Register?

The registration fee for non-members is \$90 for registrations made by January 8 and \$100 after January 8. There is a discount for members. Members need to login to get the reduced fee of \$65.

There is an additional \$5 fee for each lab taken. It is advisable to check the schedule ahead so you will be prepared to select the labs you wish to take when you register. A catered lunch is available on Saturday and Sunday for \$7 per meal. There is a \$15 fee for registrants who wish to attend the banquet.

Click either link below to register.

[Registration for non-members \(\\$90\)](#)

[Registration for members \(\\$65\)](#)

Interested In The WRNC Mentorship Program?

The WRNC Mentor Committee has completed several forms to assist Mentors and Apprentices on their journey. If you are a WRNC member, you can access these forms here: <https://ncwildliferehab.org/mentoring>.

If you are interested in becoming a WRNC Certified Mentor, please send an email to info.wrnc@gmail.com to make sure you are in our database. All WRNC members have access to the mentor/apprentice paperwork. You must login to WRNC and then from the Mentorship Program page select Members and then select Mentoring. On the WRNC home screen there are three (3) documents available to anyone: Is Wildlife Rehabilitation for You?, WRNC Mentor Requirements, and WRNC Code of Ethics.



Photo by John Althouse.



Photo by Linda Bergman-Althouse.

*Reminder:
New T-Shirts Will Be On
Sale At The 2026 WRNC
Symposium!*

'John Althouse' Short-sleeved T-shirt in Garnet.

'Liz Bradford' Crewneck Sweatshirt in Charcoal.

They will be offered for \$20.00 (sweatshirt) and \$12.00 (T-shirt) in all sizes (Small to 3XL).

Become A WRNC Member

By becoming a member of WRNC, you can enjoy exclusive perks!

WRNC offers multiple grants to assist wildlife rehabilitators across North Carolina. Members have the ability to apply for grants to help fund a pre-release enclosure, a chimney swift tower, or emergency relief. WRNC members may also enjoy reduced symposium registration fees and access to our newsletter archive.

Membership is only \$15.

The membership year runs from May 1 to April 30. This timeframe remains the same, regardless of when registration is completed.

[Join here](#)



Photo by John Althouse.

“Meet the Purple Gallinule!”

AS WRITTEN FOR 'CAROLINA SALT MAGAZINE' BY LINDA BERGMAN-ALTHOUSE

As we ring in the holiday season, we might as well go with a festive color like purple! This bird may very well be a new one for you. So, let me introduce the rarely seen in North Carolina, Purple Gallinule. The Purple Gallinule, also known as a Water Hen, is a beautifully colored, wetlands bird found mostly in southern Florida and the tropics. American gallinules usually winter in Argentina or Brazil, but singles are known to stray off course occasionally, especially when migrating after breeding season. Purple Gallinules are one of the most frequent American marsh birds to wander and despite appearing very clumsy in flight, can find themselves as far away as South Africa. Who knows how or why that happens? Maybe a visit to see their larger species, cousin the Swamp Hen, was in order. In North Carolina, the Clapper Rail is close kin. Even knowing their propensity to roam, it was still a surprise to admit an injured Purple Gallinule to the Outer Banks Wildlife Shelter and just as unexpected for the Good Samaritan caller to know the identity of the bird she found walking on a road in Emerald Isle. To be totally honest, the transporter did volunteer at the shelter in Newport, NC years ago, before her work schedule became too tight, and we do train them well! A paved road is not natural habitat, so she knew as soon as she saw the gangly but gorgeous bird limping along that the PG was in trouble and quickly assessed the gallinule had probably been clipped by a car. After an examination at the shelter revealed a fractured femur, our evaluation and theory were the same.

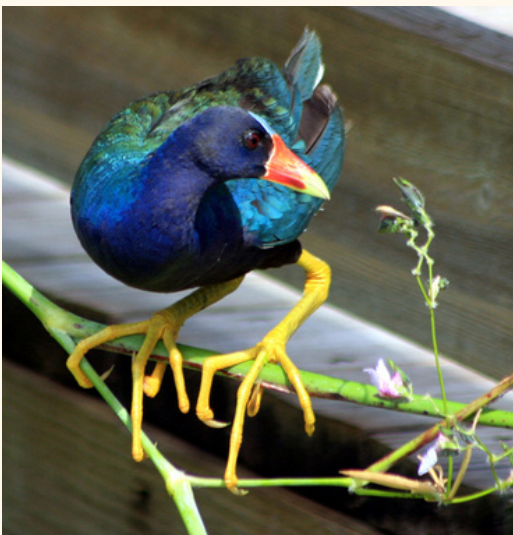


Photo is Public Domain.

Photo is Public Domain.



Where you would see this magnificent, multi-colored bird of the rail family is walking on top of floating vegetation or awkwardly high stepping through dense shrubs rather than on a roadway. Extensive wetlands with still or slow-moving shallow water, lots of dense marsh cover with plant life buoyed by water describes their habitat best. This slight of weight bird with extremely long toes can stand on floating lily pads without sinking. The unusual Purple Gallinule swims on the surface of water like a duck but walks on floating plants like a chicken. Although they are called “Purple” G’s, they are such a rainbow of colors, one might think they are more parrot than rail. Purple is the dominant adult color, but you will also see a green back, red triangular bill tipped with yellow, a fleshy plate of light blue on their forehead, white under the tail, bright yellow legs (one of the reasons they are locally known as Yellow-Legged Gallinules) and big yellow, non-webbed feet and long toes which they not only use for sprinting but to hold their food while eating. Those toes are also capable of the manual dexterity it takes to flip over lily pads to find prey underneath or to climb bushes or trees to find food. Both sexes of adults sport the same stunning plumage and physical appearance.

“Meet the Purple Gallinule!”

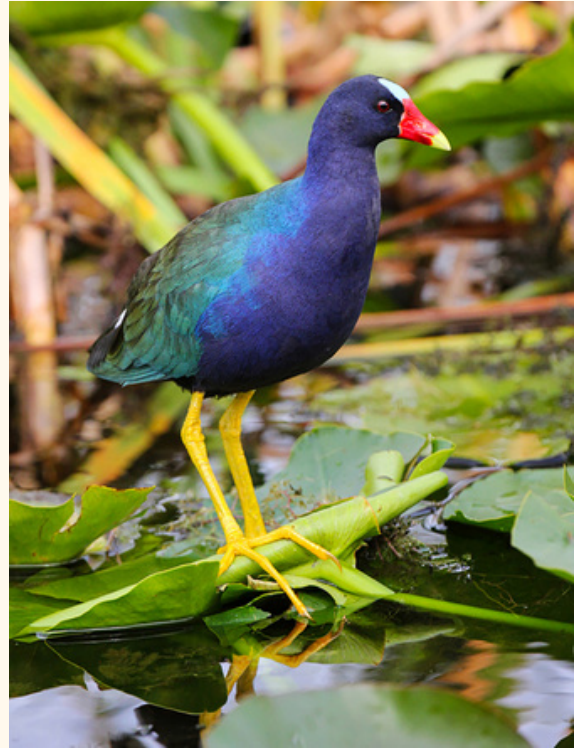
AS WRITTEN FOR ‘CAROLINA SALT MAGAZINE’ BY LINDA BERGMAN-ALTHOUSE

Downy chicks are black, and as juveniles, they turn a buffy tan with some dull colorations just starting to vividly bloom. Adults measure 10-15 inches in length, span 20-24 inches across their wings, and weigh between 5-10 ounces, with females averaging the fuller weight. Gallinules fly only short distances and let their legs dangle rather than hold them straight as an arrow like egrets or herons do. Purple Gallinules are omnivorous, therefore, along with consuming a wide variety of plants, seeds and fruits; insects, frogs, snails, spiders, earthworms, eggs and fish round out their diet. Clambering noisily through marshes and waterside trees while squawking, cackling, and using their guttural grunts, the Purple Gallinule will flick its short tail anxiously as it forages for food. With its strong legs and long toes, the PG runs about on open shorelines aggressively in search of provisions (not quite the secretive and stealth hunter his cousin, the Clapper Rail, is). Purple Gallinules are the most inquisitive of the rail family, almost to the point of being inappropriately curious, which can get them into trouble. They appear bold and eager, rather than cautious, when exploring something new in their environment with seemingly no regard for their own safety. During breeding season, which can be any time in the tropics but only Spring and Summer in North America, both Purple Gallinule parents build their bulky nest, comprised of cattails, grasses and sedges, anchored firmly to floating structures in a marsh at water level or 1 to 3 feet above it. Between 5 and 10 tan eggs with brown spots will be laid and incubated by both parents for 22-25 days.



Photo is Public Domain.

Photo is Public Domain.



After hatching, the young will be fed by the parents and assisted by other gallinules, sometimes as many as 8. It is believed that these feeding helpers are previous offspring and that assistance is needed because the parents have a second nest of eggs or hatchlings they must attend to. Juvenile gallinules of less than 10 weeks of age have been known to feed baby chicks. The youngsters start to eat on their own after 7-10 days and are capable of flight around the 9th week. A Purple Gallinule's longevity is up to 22 years, as long as it can stay alert and outwit boas in the tropics and alligators and turtles in North America. Although this species is not considered globally threatened, their numbers have decreased due to aerial spraying of pesticides and wetland loss in the United States as well as in South and Central America. If you ever come across a brilliantly colored Purple Gallinule that looks a little more like a Disney character than wildlife, you are not hallucinating!! They do exist, but not usually here. The one you are seeing is probably migrating or was just in the mood to roam!

Monitoring the Eastern Hellbender

Population of NC

WRITTEN BY KELLI JOHNSON

Severe flooding during Hurricane Helene had a significant impact on many of North Carolina's native species. One of those species, the Eastern hellbender (*Cryptobranchus a. alleganiensis*), also known as the "snot otter" or "lasagna lizard" and North America's largest salamander, was potentially greatly affected. Ongoing surveys are being performed to help determine the true impact of Helene on these gentle giants. Hellbenders are a fully aquatic species of salamander that rely on fast-moving streams and rivers for survival. They use large beds of rock within those waterways to hide and to raise their young.



Photo is Public Domain.



Photo is Public Domain.

In the months of September and October, male hellbenders are preparing nests for females to lay their eggs in. The males will then fertilize those eggs and stay with the eggs until they hatch around 45-80 days later. The males then continue to stay with the young larvae until they reach sexual maturity at around 5-8 months. In September 2024, Hurricane Helene swept through Western North Carolina with historic flooding, raising water levels in streams and rivers, the surges of flooding washing away entire river and rock beds that so many species call home. This was during prime breeding season for the Eastern hellbender, so there is great concern that many of these nests were washed away, with very little time left for them to be rebuilt and for eggs to be fertilized within such a short breeding season.

Did you know...

- "CRYPTOBRANCHUS" MEANS "SECRET GILL."
- HELLBENDERS EXISTED MORE THAN 160 MILLION YEARS AGO, ACCORDING TO FOSSIL RECORDS.



Photo is Public Domain.

Monitoring the Eastern Hellbender Population of NC

WRITTEN BY KELLI JOHNSON

The New River Conservancy (NRC) performs an annual week-long survey to monitor hellbender populations in New River State Park, located in Ashe and Allegheny counties. However, in 2025, the NRC expanded their survey from one week to four weeks. Through July and August of 2025, the New River Conservancy (NRC) conducted surveys within New River State Park. According to Joe Johnson, Director of Ops and Programs for NRC, "The population in the South Fork appears to be healthy. We are seeing males and females, adults and sub-adults in areas we have historically found them". Finding hellbenders in areas where they are previously known to breed and reside is a great sign-it means that the population was not decimated during this natural disaster.



Photo is Public Domain.



Photo is Public Domain.

A healthy hellbender population is also an indicator of great water quality, as hellbenders are extremely sensitive to less than pristine water conditions and pollution. Hellbender sightings are increasingly rare, but reporting those sightings is one way that you can help to monitor their population. Should you see a hellbender out in the wild, please report your sighting along with an exact location to Lori Williams, a Wildlife Diversity Biologist with the NCWRC, by emailing her at lori.williams@ncwildlife.org. You can also help the eastern hellbender by respecting their natural habitat. Do not move rocks in rivers and streams or engage in activities such as "rock stacking". Removing rocks from rivers and streams takes away vital habitat and, if there does happen to be a nest of eggs there, they will wash away if their protective rock covers are moved. The eastern hellbender is proposed for federal endangered status throughout its home range which covers several states in the Appalachias, from southwestern New York down to central Missouri, including areas of Western North Carolina, Pennsylvania, Virginia, West Virginia, Ohio, and Indiana.



“The Bookshelf”

COMPILED BY LINDA BERGMAN-ALTHOUSE AND LINNEA MINK

We're switching up “The Bookshelf” for this issue! Since some people prefer getting their entertainment and information from audio or visual media rather than traditional books, we're expanding our recommendations to include podcasts and documentaries you can enjoy on the go or at home. Both the featured podcast and documentary are engaging, informative, and offer wonderful insight into the diverse perspectives of wildlife rehabilitators.

Wildlife Rehabilitation: From Rescue To Release

HOSTED BY GAIL BUHL

A podcast by wildlife rehabilitators for wildlife rehabilitators.

This podcast is dedicated to licensed wildlife rehabilitators and the veterinarians who support them. Each episode tackles topics about the rescue, care, management, reconditioning and release of wildlife found in North America - diving deep into each topic. Our aim is to give rehabilitators practical information they can use, because they're already going to great lengths to rescue and nurse animals back to health.

Available on Spotify and other streaming services.



All That Breathes

DIRECTED BY SHAUNAK SEN

A documentary following two brothers who work to rehabilitate Black Kites in New Delhi.

In one of the world's most populated cities, cows, rats, monkeys, frogs, and hogs jostle cheek-by-jowl with people. Here, two brothers fall in love with a bird -- the black kite. From their makeshift bird hospital in their tiny basement, the "kite brothers" care for thousands of these mesmerizing creatures that drop daily from New Delhi's smog-choked skies. As environmental toxicity and civil unrest escalate, the relationship between this Muslim family and the neglected kite forms a poetic chronicle of the city's collapsing ecology and rising social tensions.

Available for streaming on MAX and Amazon Prime.

Torpor, Hibernation, Brumation: Forms Of Wintertime Dormancy

WRITTEN BY LINNEA MINK

Wild animals have evolved various strategies to survive periods of low food availability or cold temperatures. In the natural world, winter is a season of scarcity and challenge. Cold temperatures reduce food availability, make hunting or foraging more difficult, and increase the energetic costs of maintaining body heat. To survive these harsh conditions, different species have evolved a variety of dormancy strategies that allow them to conserve energy when resources are low. Some animals enter short bouts of torpor to cope with a single cold night, while others hibernate for weeks or months, shutting down much of their metabolism entirely. Reptiles are known to undergo the brumation process, which describes the prolonged hypometabolic state of ectotherms. Each of these strategies represents a finely tuned physiological adaptation, shaped by evolution to maximize survival while minimizing the energy demands of life in a season when every calorie counts.

Torpor is a short-term, reversible state of reduced metabolic activity that allows animals to conserve energy through resource scarcity or low temperatures. It is typically seen in small mammals and some birds, such as hummingbirds, bats, and certain rodents. Torpor allows animals to survive cold nights or short-term food shortages without expending unnecessary energy. During torpor, an animal's body temperature may drop dramatically, breathing and heart rate slow, and movement becomes minimal. Unlike longer forms of dormancy, torpor is often used repeatedly, sometimes on a daily basis, as a flexible energy-saving mechanism. Animals emerge from torpor quickly when the environment warms or food becomes available, oftentimes only lasting through a night.

Photo by Linnea Mink.



Photo by Linnea Mink.

Hibernation is a more prolonged form of dormancy, typically lasting weeks or months. Many small mammals, including ground squirrels, chipmunks, hedgehogs, and some bats, rely on hibernation to survive the long winters when food is scarce. During hibernation, body temperature, heart rate, and metabolic activity drop dramatically, and the gastrointestinal tract becomes largely inactive. Hibernating animals survive without eating by metabolizing fat stores accumulated in the weeks leading up to winter. Periodically, many hibernators arouse briefly to maintain physiological function, though this consumes substantial energy. Hibernation is a finely tuned adaptation: it allows animals to persist in climates that would otherwise be uninhabitable and demonstrates how evolution has shaped metabolic control to suit environmental pressures.

Fun Facts

- A HUMMINGBIRD'S BODY TEMPERATURE CAN DROP ALMOST 50 DEGREES FAHRENHEIT IN A TORPID STATE.
- HIBERNATING BIG BROWN BATS HAVE BEEN SHOWN TO REDUCE THEIR BREATHING RATES TO JUST ONE BREATH EVERY TWO HOURS.
- EASTERN CHIPMUNKS ARE KNOWN TO REDUCE THEIR HEART RATE FROM 350 BEATS PER MINUTE TO A MERE FOUR BEATS PER MINUTE WHILE IN TORPOR.

Torpor, Hibernation, Brumation: Forms Of Wintertime Dormancy

WRITTEN BY LINNEA MINK

Brumation is the reptilian equivalent of winter dormancy and differs in several key ways from mammalian hibernation. Because reptiles are ectothermic, their metabolic rate is governed by environmental temperature. During brumation, reptiles such as snakes, lizards, turtles, and tortoises become very sluggish, stop feeding, and may spend weeks or months hidden in burrows, crevices, or underwater. Unlike hibernating mammals, brumating reptiles do not enter a sleep-like state but remain responsive to environmental cues, occasionally waking to drink water. Survival during brumation relies on fat reserves and the ability to dramatically reduce energy expenditure, a strategy made possible by the cold-blooded physiology of reptiles.

Photo by Miranda Torkelson.

All three strategies illustrate how animals have evolved to balance energy expenditure with environmental challenges. In each case, the gastrointestinal tract becomes largely inactive, and energy is supplied from stored fat or glycogen, allowing survival without food for extended periods. While torpor is a short-term, flexible response to daily challenges, hibernation and brumation are seasonal adaptations that enable life to persist through harsh winters or cold months. These dormancy strategies highlight the remarkable physiological diversity of the animal kingdom and the ingenious ways organisms have adapted to survive in environments that would otherwise be inhospitable.



Understanding hibernation, torpor, and brumation is crucial for wildlife rehabilitators because these natural dormant states dramatically change an animal's physiology and behavior. Many species become slow, cool, and minimally responsive during colder months, which can easily mimic signs of illness or trauma. Recognizing the difference prevents unnecessary treatments and helps rehabilitators avoid stressing an animal that is simply following its normal seasonal cycle. During these periods, metabolism, heart rate, breathing, digestion, and immune function all slow down. These changes directly affect how animals should be handled and cared for in a rehabilitation setting. For example, animals in torpor or brumation cannot safely process food the way they do when fully active, and warming them too quickly can cause metabolic shock. Even routine handling can force them to burn precious energy reserves that they rely on to survive winter. Understanding these physiological shifts helps rehabilitators adjust feeding schedules, temperature management, fluid therapy, and medication plans appropriately.

Dormancy cycles also play a major role in long-term recovery and release decisions. Many species require a normal seasonal slowdown to maintain healthy hormone levels, body condition, and reproductive rhythms. Knowing when a species typically enters and exits these states allows rehabilitators to plan safe overwintering strategies and avoid releasing animals at a time when they would not be able to find food or regulate their bodies properly. Overall, a strong understanding of hibernation, torpor, and brumation allows rehabilitators to interpret behavior accurately, provide species-appropriate care, reduce unnecessary stress, and make informed decisions about timing of treatment and release—all of which contribute to better outcomes for the wildlife in their care.

Quinto's Comedy Corner

COMPILED BY LINDA BERGMAN-ALTHOUSE

QUINTO SAYS: YOU might be a WILDLIFE REHABILITATOR

If you keep mealworms in your fridge and nobody questions it anymore.

If a "quiet night" means only three feedings.

If your social life consists of arguing with raccoons about boundaries.

If you've ever been called a "crazy animal person" and taken it as a compliment.



WRNC Newsletter Editor & Copy Editors

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Linda Bergman-Althouse	C-Editor
Jean Chamberlain	C-Editor
Carla Johnson	C-Editor
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Photo By John Althouse.

WRNC Newsletter Schedule

The WRNC newsletter is published quarterly.

March 1

June 1

September 1

December 1

Do you have a wildlife-related idea you would like to share with the WRNC membership? Please submit it to our editors for consideration. How about a relevant article you found somewhere? Send us a link so we can ask for permission to reprint it. Email all articles, ideas, comments, and questions to linneam01@gmail.com.