

# WILDLIFE REHABILITATORS OF NORTH CAROLINA

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## Message from the President by Cathy Burns

We are starting to work on the 2018 Symposium to be held January 20-21 at NC State College of Veterinary Medicine. We have already made a few plans as well as some changes to how things have been run in the past. Not the least of which being that we are going to be able to take credit cards at our WRNC sales table!!

We are happy to announce that our banquet is going to be held at the University Club right by the school. You can check out the location here: <https://www.ncsuclub.com/>. **Because of this change, when you register for the symposium you will have to check the box for the banquet.** If you don't check the box then you will not have a reservation for the banquet. Please be sure to double and triple check that you have made your Banquet reservation before you send in the registration. This change is in part due to people not showing up for the banquet, yet we still had to pay for the food.

The raffle is going to have a few changes also. The main one being that we are going to a single ticket, instead of the double ticket.

### **You must put your name on the back of the ticket.**

This will eliminate the need to call out numbers because there is no name on the ticket. If there is no name on the back of the ticket, that ticket will be discarded and another ticket will be drawn. We will be selling tickets at the Ice Breaker and on Saturday until 4pm. The cost of the tickets will remain the same. We also have made arrangements for the use of a microphone so we will all be able to hear the name when it is called.

If you would like to be part of the planning and execution for the symposium, please send me an email at [patcatb@aol.com](mailto:patcatb@aol.com) by July 15, 2017.

Please include your phone number and best time to call you. We have plenty of things that need to get done in order to have a successful symposium and it takes many hands to get it done.



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## *Message from the President (continued)*

Last but not least and very important. We are in the planning stages of updating our web site! We are hoping to have it up and running by August. If there is something you would like to see on our web site, please send me an email at [patcatb@aol.com](mailto:patcatb@aol.com) by June 30, 2017.

Please remember to take care of yourself during this very busy time of year. We're all familiar with the hazards presented by the animals we are trying to help, but don't get so caught up in the day to day routine that you forget about the hazards mother nature presents on her own. The heat and humidity alone can drop you in the summer months. You can and do make a difference but you have to take care of yourself so you can be there for the wild-life as well as your families.

Cathy Burns  
WRNC President  
910-324-9967  
[patcatb@aol.com](mailto:patcatb@aol.com)

## *Continuing Ed. for veterinarians and veterinary technicians at Lees-McRae College by Amber McNamara, DVM, CVA*

Lees-McRae College is hosting a one day, RACE-approved symposium, offering 7 hours of CE for veterinarians and veterinary technicians on **Friday, July 28, 8 am to 5:30 pm**. The focus this year is to provide relevant information to veterinary teams that don't primarily see wildlife, but who will likely have cases presented to them or who just want more information.

***Rehabilitators, students and anyone else interested in wildlife rehabilitation are also welcome to attend.***

<http://www.lmc.edu/community/wildlife-medicine-symposium.htm>

## *Wedged Eastern Cottontail Released after Rehabilitation*

*by Amber McNamara, DVM*

Too often, wildlife get themselves stuck in predicaments that don't end well. In the case of a fortunate Eastern Cottontail, getting stuck in a fence was not the end of the line. A Good Samaritan carefully removed the trapped bunny and drove her to meet rehabilitator Savannah Trantham in Asheville. From there, she made her way via a volunteer transporter to the May Wildlife Rehabilitation Center in Banner Elk.

On arrival to the MWRC, the adult female cottontail was notably weak. When attempting to hop, her rear legs would drag behind and she could not pull them up underneath her body. Suspecting soreness and swelling from her hours-long predicament, students at the MWRC administered anti-inflammatory medications. They also treated for numerous fleas and removed approximately 50 variably sized ticks.

The following day, she was sitting upright but remained very dull; she was very sensitive to palpation in her neck area. Her rear leg function was poor. In addition to anti-inflammatory medications, staff added acupuncture to her treatment regimen. Acupuncture is not always successful in adult rabbits, as their high-stress nature can cause extreme anxiety when restrained. With a towel draped over her head, this rabbit remained calm and quiet during the 15-minute treatment.

Within 4 days, the cottontail was more active and earned a transfer to a larger indoor enclosure. Although her strength was somewhat improved, she did not yet have the agility required of a rabbit to maneuver well and avoid predation. Thankfully, she enjoyed her regular offerings of mixed greens, soaked monkey biscuits, veggies, oats, and hay.

Ten days after her admission to the clinic, the rabbit was alert and reacted appropriately when handled. Since powerful and agile function of her hind limbs would be critical to her success in the wild, staff elected to evaluate her briefly in an outdoor enclosure. The slo-motion video feature on smart phones provides an invaluable tool when evaluating such crucial factors. View her pre-release evaluation here:

<https://www.youtube.com/watch?v=scuBBSnrtCI>

Looking strong and nimble, the cottontail was successfully released back to the wild later that same morning, just in time for baby season.



**Photograph by Amber McNamara**



**May Wildlife  
Rehabilitation Center**  
at Lees-McRae College

*The Dan and Dianne May Wildlife Rehabilitation Center is situated adjacent to the Elk River on the campus of Lees-McRae College in Banner Elk, N.C. While serving as a learning laboratory for wildlife biology and rehabilitation students, the Center cares for more than 1,400 injured wild animals per year, including songbirds, raptors, waterfowl, reptiles and small mammals from Western North Carolina.*

- Amber McNamara, DVM

## *Important dates if you're a WRNC member*

Deadline to submit a \$500 Chimney Swift Tower Grant Application: January 5th, 2018

Deadline to submit a \$500 Cage Grant Application: January 5th, 2018

Next WRNC Symposium: Saturday & Sunday, Jan 20th & 21st, 2018 with an Icebreaker on Friday, Jan 19th

## *WRNC Newsletter Schedule*

Do you have a wildlife-related idea you'd like to share with the WRNC membership? You should think about submitting it to the 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 articles, ideas, comments and questions to: [Mengelmann@carolinaraptorcenter.org](mailto:Mengelmann@carolinaraptorcenter.org)

The WRNC newsletter is published four times a year. The deadlines for submissions are:

March 1st      June 1st      September 1st      December 1st.

## *Eagle Trafficking in South Dakota by Maggie Engler*

Today I attended a press conference held by the Dept. of Justice and the USFWS. Fifteen individuals have been indicted on felony charges of conspiracy to commit wildlife trafficking and violations of the Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, and the Lacey Act. These 15 defendants represent 4 states, and over 250 dead birds of a wide range of species. Most of them are eagles, with some hawks and owls. Because of the work using DNA evidence, USFWS can connect 100 of the dead eagles to one individual. Initial court appearances will be May 1 in Rapid City and May 4 in Pierre.

I have put up a detailed post on the FaceBook page for the Black Hills Raptor Center. At the request of our USFWS special agent, I am asking you to all share that post, as widely as you can. The DOJ expects more charges, both with these same people, but also with additional people. More birds are involved, and more states...up to nine states in total. The undercover operation was dubbed Project Dakota Flyer. It was a two year effort. In South Dakota, wildlife crimes are never given the same consideration as other criminal acts. We have been working hard on that, sending letters to the judiciary, both in advance of sentencing and also notes of thanks after sentencing. Hopefully in this situation we will find those with the most egregious counts doing prison time.

Thank you in advance for letting your supporters know about this partial victory for wildlife and raptors. I will count it a full victory when these 15 people are paying fines, restitution, or sitting in prison.

Link to the official press release : <https://www.justice.gov/usao-sd/pr/project-dakota-flyer-nets-15-defendants>

Maggie Engler, Black Hills Raptor Center, Rapid City, SD

## *“Yard Angels!” by Linda Bergman-Althouse*

*as written for “Carolina Salt Magazine”*

We definitely admit our share of opossums at the Outer Banks Wildlife Shelter in Newport, NC, be it injured adults or orphaned babies. Although an adult opossum may be harder and heavier to handle, what’s not to love about a “Mickey-Mouse” baby possum? Recently, several sweet baby possums have made their way to the shelter in the arms of Good Samaritans via their dog or even more tragically as a result of a vehicular hit and run. Just a couple of days ago, a live-trap was presented to the shelter containing a young Momma opossum with a pouch full of babies. The gentleman transporter was trying to catch whatever was killing his chickens. We’re pretty sure she’s not the culprit, but making off with an egg or two would surely be a yummy treat for a her. She’s welcome to raise her babies in our safe haven, and the whole family will be released in as safe a zone as we can find.

The Virginia Opossum, *Didelphis Virginiana*, is one of the more familiar and widespread mammals in the United States, found coast to coast, up into Canada and down into Costa Rica, in fields, thick forests, open woods, brushy wastelands, marshes, parks, residential areas and in the alleys of our large cities. They are generally lumped together in the public’s mind with raccoons, squirrels, rabbits and other wildlife, but an opossum is fundamentally a different breed of animal as singular in its evolutionary history as it is solitary in its habits.



**Photograph by Linda Bergman-Althouse**

Opossums, which have been around since the dinosaur days, socialize only during breeding season. The Virginia Opossum is the only marsupial (pouched mammal) found in the United States. They are commonly found in residential neighborhoods if cover is available. They are very adaptable and will homestead just about anywhere they find a food source. Omnivorous opossums eat a wide variety of foods, including: fruits, berries, insects, crayfish, small mammals, bird eggs, young birds, frogs, earthworms, snakes, lizards, mussels and tadpoles. Occasionally, they will raid poultry yards or gardens to feed on an egg or vegetables and fruits. However, they are more beneficial to humans than not because they feed on many types of yard nuisances, too, such as moles, voles, shrews, insects, snails, slugs and other invertebrates. Having a “Yard Angel” on your property, visiting your garden perhaps, shouldn’t be a problem. This non-aggressive and nondestructive animal will not dig up yards, attack or threaten pets or dig burrows. Opossums are opportunity eaters though, so accessible garbage, the spillover of pet food on your deck, or dead animals in the area will be gone by morning if your Yard Angel is on duty. The description of an opossum differs from person to person. Some perceive them as homely or ugly, but we wildlife rehabilitators at various shelters, think they’re beautiful, every last one of them! Regardless of personal perception, the physical facts cannot be debated or discounted. Virginia Opossums are medium-sized mammals,

## “Yard Angels!” (Continued)

about the size of a large housecat, ranging from 6 to 13 lbs with a body length of 12-20 inches and a tail length up to 15 inches. They usually have whitish-gray fur, but sometimes can be blackish-gray. They have furless, black ears (hence, the “Mickey-Mouse” reference earlier) and a long naked tail. The opossum’s tail is prehensile, which means it can grab onto branches for balance and stability, but doesn’t usually hang by it. The head and throat of Virginia Opossums are white. They also have short legs, and the females have the pouch. Breeding season for opossums starts in late winter. Females can have two or three litters each year and each litter will be up to 13 young. Baby opossums are born much more quickly than other mammals. When they are born, they are about the size of a Honey Bee. Each embryonic baby will carefully crawl up its mother's body to enter her



Photograph by Linda Bergman-Althouse

pouch. Here, it will attach itself to a teat and feed. Baby opossums stay in their mother's pouch for two months. Once they leave the pouch, they will stay awhile longer, clinging to her back as she wanders. A couple other descriptive factoids include their 50 very sharp teeth which is more than any land mammal, their unusual resistance to the venom of poisonous snakes, and they kill thousands of ticks each week (researchers say up to 4,000) inhibiting the spread of tick borne diseases such as Lyme Disease to humans. They are also extremely unlikely to acquire rabies and appear to be resistant to many other viral diseases such as distemper, parvovirus and feline hepatitis. The Opossum has many behavioral adaptations it uses to survive. They are most noted for feigning death or “playing possum” as a last resort when threatened. This reaction seems to be involuntary, and triggered by extreme fear. Opossums, when under serious threat, initially respond ferociously by hissing, screeching, growling, belching and showing its teeth. When those strategies don’t deter the threat they just fall over like a fainting goat and enter a near coma that can last up to four

hours. It lies on its side, mouth and eyes open, tongue hang-

ing out and emits a putrid, green fluid from its anus that effectively repels predators. Nasty, I know, but a possum’s gotta do what a possum’s gotta do! Despite these very effective survival methods, Opossums, like most marsupials, have unusually short life spans for their size and metabolic rate. The Virginia Opossum has a maximum life span in the wild of only about two years. Even in captivity, opossums live only about four to five years. So, it’s very sad at the shelter when we lose one of our program possums due to longevity. An ambassador for opossums once stated during a community meeting, “When left alone, the opossum does not attack pets or other wildlife; he (or she) does not chew your telephone or electric wires, spread disease, dig up your flower bulbs or turn over your trash cans. On the contrary, the opossum does a great service in insect, venomous snake and rodent control. He takes as his pay only what he eats, and maybe a dry place to sleep. The ‘possum tolerates our pets, our cars, prodding sticks, rocks and brooms. ‘Attacks’ by opossums are simply non-

## *“Yard Angels!” (Continued)*

existent. When he gets too close, or accidentally moves into your attic space, he can be easily convinced to move along. If you are lucky enough to have one of these guys come around, you can rest assured he is cleaning up what he can, and will soon move along to help someone else.” This is the message we deliver to school age students and adults who just don’t know how environmentally beneficial and valuable opossums are. Education is key and school children love to see our program opossum’s cute face, especially when eating grapes! Too cute! Wildlife Rehabilitators have a unique relationship with Virginia Opossums and make every effort to pass accurate knowledge to the public so others can get to know Opossums as the “Yard Angels” they truly are!



**Photograph by Linda Bergman-Althouse**

## *Smartphone Technology Helps Sanctuary Volunteers Stay On-top of Tasks* by Alison Castillo

*Possumwood Acres Wildlife Sanctuary, Hubert, NC*

Many wildlife sanctuaries could not function without the work of dedicated volunteers. Often a core of experienced and knowledgeable “regulars” not only take care of animal tasks, but due to demands on time and resources, may end up trying to train new recruits as well. To ensure both the sanctuary and the volunteers get the most out of their experience, it’s important that consistent and accurate information is always on hand. If volunteers aren’t able to find appropriate instructions, they might be left peppering sanctuary staff with questions, or trying to work it out for themselves with well-meaning guesses. A lack of proper instruction for volunteers can lead to a rise in the number of mistakes in animal care and important tasks being overlooked. Mistakes mean more work and frustration for both volunteers and paid staff, even leading to volunteers quitting when they feel overwhelmed and underappreciated. It can be a vicious cycle!

At Possumwood Acres Wildlife Sanctuary in Hubert, NC, we were feeling the strain of providing training and information to a steady stream of new volunteers while keeping up with the demands of our busiest summer season for sick, injured, and orphaned wildlife. There just didn’t seem to be enough hours in the day or enough staff to go around. We needed to get our rehabilitators back to their important tasks, and our animal care staff working efficiently. If you’re working in a wildlife sanctuary, you know that every penny counts. How could we provide our volunteers with animal care instructions with limited funds and still maintain the frantic pace of baby bird and mammal season?

The answer came in the form of a little square you may have seen at your local grocery store, or in advertisements and magazines. QR or “Quick Response” codes (Fig 1) can be scanned by an app on your smartphone and linked to either a document, photograph, or webpage. The free app is available from your service providers app store and allows you to create, link, and save as many QR codes as you would like in just a few seconds.



**Fig 1: Sample QR Code**

We wondered if we could place a QR code on the outside of an animal's enclosure and link it to simple, bulleted instructions for that specific animal. If our volunteers needed a quick reminder, they could simply zap the code with their smartphone, and would instantly be taken to an animal care sheet that told them what or when to feed, how much, and any special care instructions. But would it work? In short - YES, and here’s how we did it using our ambassador crow enclosure as an example.

1. First, we downloaded the free app - there are several to choose from. I personally like the Android app from Microsoft called, QR Generator Gold. It allows me to create or read codes on my smartphone in just a couple of seconds.
2. We created a simple, bulleted set of directions on a Google Document (Fig 2) and used the QR code generator to make and save a code that linked directly to the google document.
3. We printed out the code on a 3” x 5” index card, with CROW written clearly across the top (Fig 3).

## Smartphone Technology (continued)

4. Using self-stick photo lamination sheets (we got ours from Office Depot), we weather-proofed the card and placed it on the door of the crow enclosure using a zip-tie.
5. Finally, we told our volunteers about the codes and encouraged them to use them as a quick reminder.

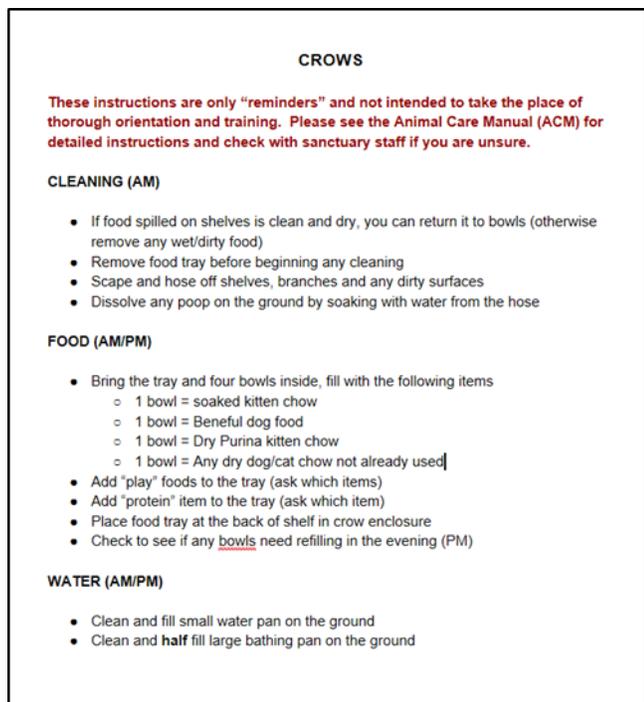


Fig 2: Google Document Bulleted Instructions



Fig 3: Example of index card

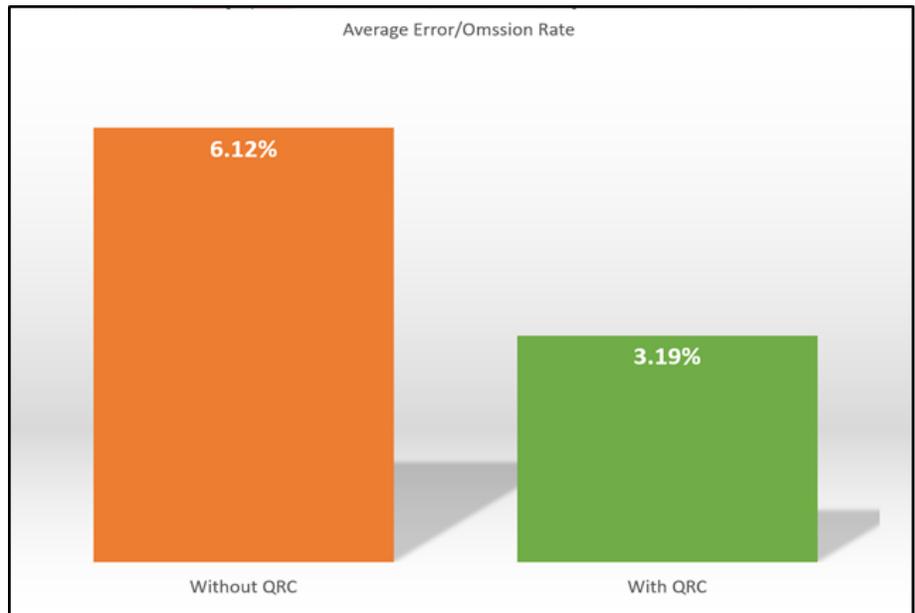
Every day at the sanctuary, by placing initials next to a job, volunteers check off the tasks they have completed on our Task List Work Sheet. When supervisors check the list, they can quickly identify if something is missing or completed incorrectly and therefore know who to retrain. The checklists were the perfect tool for determining whether our QR code idea would work, so for two weeks prior to attaching the QR Codes to our animal ambassador enclosures, we collected our Task List Work Sheets and worked out how many times our volunteers made mistakes or missed jobs. We then calculated what our average error/omission rate was for those 14 days. After we put QR codes on seven of our ambassador animal enclosures; squirrels, crows, waterfowl, opossums, pigeons, goats, and quail (including the enclosures that elicited the most errors and omissions on our Task Check Sheets), we counted the mistakes after the QR codes were deployed and compared the two averages.

Astonishingly, we were able to reduce the number of mistakes or overlooked tasks by 47.88%. (Fig 4) Although this drop is very exciting news, what really has us sold on the system came directly from volunteer feedback.

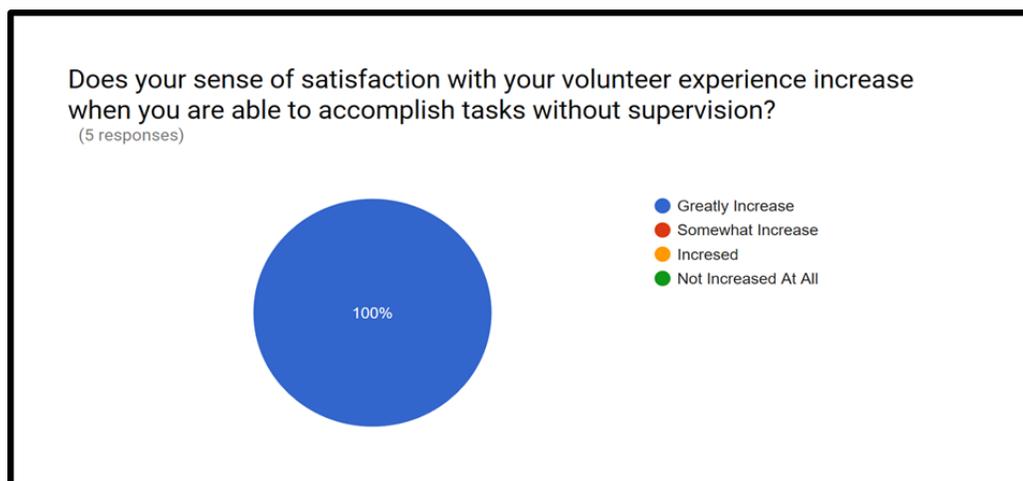
## Smartphone Technology (continued)

We surveyed some of our animal care volunteers and their responses convinced us of the importance of easily accessible instructions. 100% of survey participants stated that they felt stressed, frustrated, and underappreciated when they couldn't find answers to animal care questions. All respondents stated that autonomy and feeling capable was important to their sense of satisfaction when volunteering.

88% felt that technology like QR codes are a valuable tool for communicating instructions at the sanctuary. Surveyed volunteers also provided anecdotal comments and suggestions that have fired up our imagination and got the Possumwood Team thinking about all kinds of wonderful ways to use QR codes. Perhaps self-guided tours for visitors with natural and



**Fig 4: Error Rate without and with QRC**



**Fig 5: Satisfaction response by volunteers**

individual history. Maybe a QR code linked to video of our ambassador animal's wild counterparts. Perhaps we could link to bird calls or information about threats to our native wildlife. The possibilities are endless ... we even thought of linking our charismatic education animals to fundraising so visitors can sponsor them right on the spot!

For wildlife rehabilitators, the beauty of QR codes lies in their flexibility and minimal cost. We spent 99 cents on a packet of index cards and about \$10 for the photo lamination covers. Every rehabber has a stash of zip-ties, or

## *Smartphone Technology (continued)*

some other means of attaching the code to an enclosure. For an investment of about \$11, we were able to dramatically lower the number of mistakes occurring with animal care, reduce the frustration of having to “fix” stuff for our animal care paid staff, and improve the sense of appreciation and satisfaction our volunteers felt through working independently with confidence. It’s a win-win!

Based on the success of the pilot study, the sanctuary has decided to extend the QR codes to all our outdoor enclosures, and are brainstorming with our staff and volunteers about new and creative ways to use codes around the sanctuary. If you would like to learn more about QR Codes and how they might work for you, please contact me at [alisonbcastillo@gmail.com](mailto:alisonbcastillo@gmail.com). The sky’s the limit!

*Author’s Note: Alison serves as the Vice President of Possumwood Acres Wildlife Sanctuary and conducted this project as part the sanctuary’s program evaluation process. The QR code project was created to meet requirements of Alison’s graduate degree studies in the Global Field Program at Miami University, OH.*

## *New T-shirt Colors Will Be Onboard At 2018 WRNC Symposium by Linda Bergman-Althouse*

Last symposium we unveiled our new, crew neck T-Shirt in earthy, CHESTNUT BROWN and it sold very well, but at the same time our older inventory of two blues, Galapagos and Heather Indigo, SOLD OUT!

So . . . along with our remaining Chestnut Brown, we will be introducing KIWI and HEATHER CARDINAL!! The new shirts (green & red) will range in multiple sizes from small to XXL and will be \$12.00 each. The remaining inventory of brown will be \$10.00 each. Our comfy and warm, INDIGO BLUE Sweatshirt will also be available for \$20.00. Check out the bright and happy colors for the new T-Shirts!! They are hot off the press and are available now, just in case you choose to get yours early! If so, contact the WRNC T-Shirt Guru, Linda Bergman-Althouse, at [lbergmanx@gmail.com](mailto:lbergmanx@gmail.com).”



## *What's in the News*

Here is a link to an interesting story about DDT and Osprey with nice pictures, available through Cornell Lab of Ornithology, originally published in “Living Bird” magazine, Spring 2017:

[https://www.allaboutbirds.org/lessons-from-the-osprey-garden/?utm\\_source=Cornell%20Lab%20eNews&utm\\_campaign=2c8a9e4c79-Cornell%20Lab%20eNews%205\\_10\\_2017&utm\\_medium=email&utm\\_term=0\\_47588b5758-2c8a9e4c79-277667125](https://www.allaboutbirds.org/lessons-from-the-osprey-garden/?utm_source=Cornell%20Lab%20eNews&utm_campaign=2c8a9e4c79-Cornell%20Lab%20eNews%205_10_2017&utm_medium=email&utm_term=0_47588b5758-2c8a9e4c79-277667125)

## *Adjustable Wing Wrap*

*by Mathias Engelmann, Carolina Raptor Center*

If you are a bird rehabilitator you know that a figure-8 bandage is part of standard protocol for many wing injuries, including certain fractures. A proper bandage will immobilize the wing without being too tight, which can cause undue strain on the joints. That means it is custom-made for that particular bird and wing.

As the injuries heal and the bird improves, a one-size-fits-most bandage may be appropriate. At Carolina Raptor Center (CRC) we utilize Velcro™ Wing Wraps. The Velcro™ closures allow you to adjust the size somewhat and design fits a little less tight for some mobility to the joints. It is made of durable canvas materials so it can be washed. It is stiff and therefore will not conform to the folded wing shape as well as a custom-made bandage. It is also a lot tougher than gauze or flexible bandage material like Vetrap™ or Coflex™ so it is perfect for the “chewers” among our patients. Barred Owls and Great Horned Owls are notorious for trying to remove bandages even early on during the rehabilitation process. They often require duct tape as reinforcement and “chew tabs” to keep them busy. Velcro bandages are perfect for these patients. Sometimes we also use a Velcro wrap on top of a traditional Fig 8 bandages when a particular bird needs extra support or protection.

Any bird sporting a Velcro wrap still requires physical therapy at the appropriate intervals. It is also important to keep a close eye on the leading edge of the patagium to ensure the bandage does not irritate and injure this delicate tissue.

A few Tips:

- ◆ Always apply tape over the tab, as Velcro may not hold the flap closed on its own.
- ◆ Tape tends not to stick well to certain fabrics such as canvas material. Wrap tape all the way around the wing bandage to hold the flap in place.
- ◆ Take precaution not to cause abrasions on the leading edge of the patagium.
- ◆ Binding can be applied to all cut edges of fabric to prevent unraveling of material.

**Photograph by CRC staff**



## Adjustable Wing Wrap (continued)

Below is the pattern CRC uses and three particular sizes we have on hand. The pattern can be scaled up or down. We do not use the smallest version very much because it is a heavy bandage. On small species it adds quite a bit of weight and probably makes the birds uncomfortable.

### ADJUSTABLE WING WRAPPERS

#### Materials

- Light to medium-weight canvas product, pre-washed
- Binding (to cover all cut edges and prevent unraveling)
- Velcro™ strips, 1-2" wide, assorted lengths

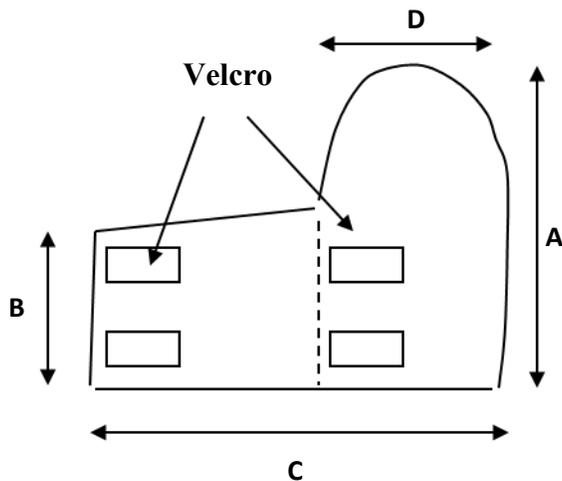
*Exact shape is approximate and can be varied/adjusted to wing shape*



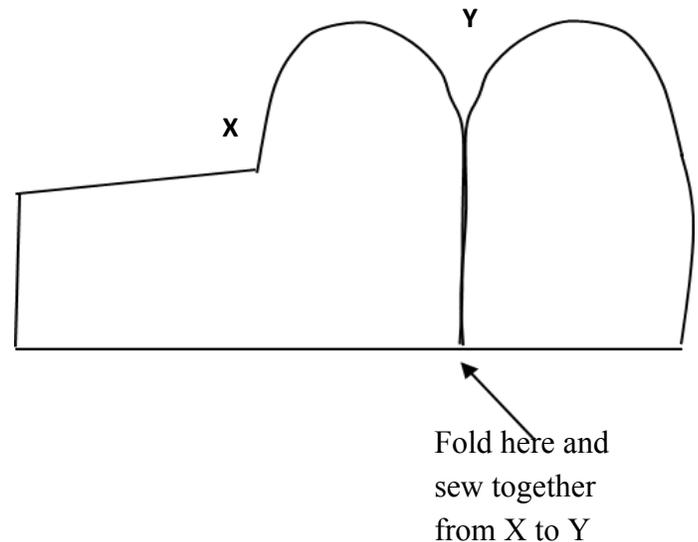
Photograph by CRC staff

### Wing Wrapper Design

Finished Product



Pattern to cut



#### Dimensions

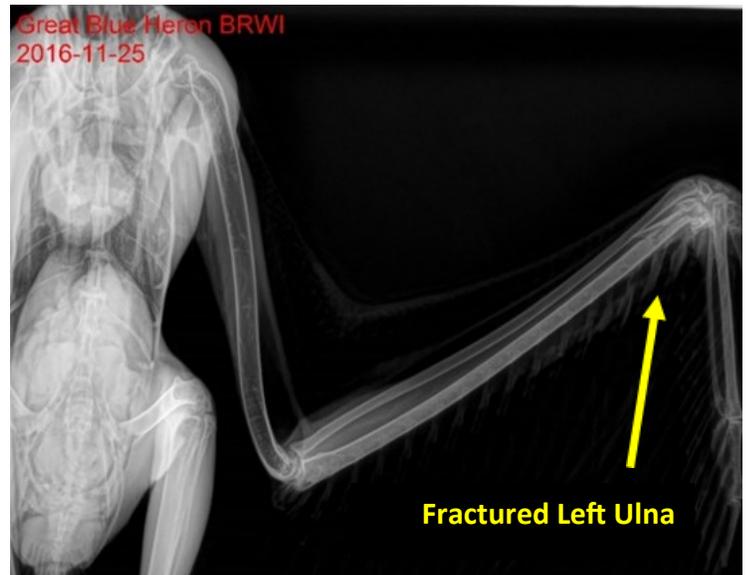
Wrapper size	A	B	C	D
Small	3.5 – 4"	1.5 – 2"	4.5-5"	2"
Medium	5"	2.5 – 3"	7.5"	3"
Large	7"	3-3.5"	11"	4"

## *Injured Great Blue Defies the Odds*

by *Amber McNamara, DVM*

There is an adage in wildlife rehabilitation that “A down Blue is a dead Blue” – referring to the challenges inherent to restoring sick or injured Great Blue Herons back to health. In November, the May Wildlife Rehabilitation Center received an injured Great Blue Heron from Hickory, NC, found “fluttering” in the road near the fire station. Staff identified a fracture in the swollen left wing, and radiographs confirmed the severity and proximity to the wrist joint. Shortly after arrival, LMC wildlife rehabilitation students wrapped the wing with a “figure of 8” bandage and administered pain medications and fluids. Time would tell if the trauma had caused internal injuries.

With damage so near to the joint, diligent physical therapy would be essential for this bird’s recovery. In order to return to robust flight, the healing of the soft tissue would be equally important as the healing of the bone. Given the enormous length of the wing (over a 6-foot wingspan!), coupled with the high-stress nature of this species, staff chose gas anesthesia to facilitate complete range-of-motion exercises. Using a repurposed water bottle as an anesthesia mask, they performed physical therapy approximately once per week to prevent contracture near the injured area.



**Radiograph courtesy of Appalachian New River Veterinary Associates**

Thankfully, the Great Blue was extremely cooperative during her rehabilitation. She was quiet in her cage, left her bandages alone, and was a champion eater. Thanks to the Hump Mountain Trout Farm in Elk Park, NC, she had a bounty of fish to supplement mice and shrimp.

After approximately 5 weeks, the Great Blue was transferred to an outdoor enclosure – big enough to stretch her wings, but not big enough for her to fly. After acing the next recheck, she moved to a 60-foot enclosure. She climbed onto the low perches and began to glide down, exercising the wing with each movement. Regain-

ing her strength (and grace), she was soon seen flying from end to end of this flight enclosure. As soon as her stamina had returned, it was time to think about release!

Lees-McRae Wildlife Biology senior Keenan Freitas returned the Great Blue Heron to Rhodhiss Lake, near



**Photograph by Keri Lu Halverson**

## *Injured Great Blue Defies the Odds (continued)*

where she was injured. As soon as he opened her transport box, she took a few glances around and headed for the sky. She flew across the lake, banked right, and landed near another Great Blue.

View the beautiful release here: <https://www.youtube.com/watch?v=nE2LgW0QgTg>



**May Wildlife  
Rehabilitation Center**  
at Lees-McRae College

*The Dan and Dianne May Wildlife Rehabilitation Center is situated adjacent to the Elk River on the campus of Lees-McRae College in Banner Elk, N.C. While serving as a learning laboratory for wildlife biology and rehabilitation students, the Center cares for more than 1,400 injured wild animals per year, including songbirds, raptors, waterfowl, reptiles and small mammals from Western North Carolina.*

- Amber McNamara, DVM

## *Don't Judge Us by Emilie Nelson*

Just want you guys to know, I'm not mean, not at all. Ok, maybe I can be but there's a definite reason. I love until I can't love anymore. I give every chance in the world. I give until it literally starts to kill me and my health is at risk. It's called being a wildlife rehabber. Don't envy us, our lives are generally shit. We risk losing the person whom we love the most, we don't get to spend time with our families, what used to be our friends disappear because we **literally** don't have time for anyone. We feed and nurture the fuzz buckets, some the slithering, but we all make the sacrifice. So, when you think I'm being cold, I'm not. When someone calls about an animal and they expect us to pick it up, but we can't because we have so many animals and we're the bad person because they don't have time to drop it off... I don't have time, wish I did. We don't sleep. I cram pb&j sandwiches down my throat at 5pm because my body needs some kind of something. Our life isn't all glitter and rainbows, even though the grumpy butts make my heart warm and laugh because they're just dweebs. Please don't judge, most rehabbers work a full time job because someone has to pay for the formula, fruits, veggies and if you think it's bad traveling and packing for 2 kids, packing for 2, 3, 4, 5, 6 species is worse. Even if it's for a couple of hours. I'm honored to be able to have such great people teach me and to have the wealth of knowledge I have only a phone call away. I'm a very lucky woman and I have fantastic support groups many of whom I've never met, and I support tremendously. All of this, we have to earn. Please just think before you snap at us, put us down. We don't get paid, rarely ever thanked, and generally underappreciated. We have worked hard and sacrificed a shit ton more than you can imagine to get these poop filled lives. And I, personally, wouldn't change it for a thing.

*Emilie Nelson is part of NC Wildlife Rehab, a group of rehabilitators operating out of Lincolnton, NC. This comment is reprinted with permission from her FaceBook page.*

## *Report Alligators in NC to the Wildlife Resources Commission*

RALEIGH, N.C. (April 7, 2017) — The N.C. Wildlife Resources Commission is seeking the public’s assistance with a new citizen science project that will help the agency answer the question, “Where do people see alligators in North Carolina?”

Anyone, whether a resident or visitor, who spots an alligator in the wild in North Carolina is asked to upload and share their photos on the project titled “NC Alligators,” which launched today on the free online platform iNaturalist. People can upload their photos via a computer at iNaturalist.org or they can download the free iNaturalist app, which is available for iPhone and Android.

“Submitting an alligator observation is very easy,” said Alicia Davis, a natural resources technician with the Commission and the project curator. “If you see an alligator and can take a picture, you simply upload the photo to iNaturalist and add it to the NC Alligators project.

“If the picture you upload was taken with a smartphone, the iNaturalist platform automatically gathers data on when and where the photo was taken. If you take the picture with a traditional camera, you can drop a pin where you saw the alligator using the Google map on the website.”

Observers should exercise caution and keep a safe distance away when photographing alligators, Davis added.

“It’s easy to get caught up in the excitement of seeing an alligator and get too close, which could be dangerous,” Davis said. “Also, we don’t want people feeding them to get a better picture. Not only is that dangerous for both the observer and the animal, but it is also illegal.”

The Commission launched the “NC Alligators” project to learn more about the distribution of alligators in the state. Currently, alligators have a natural distribution range of about 25 coastal counties in North Carolina, which is the northern extent of the alligator’s range. Previous scientific work has shown that researchers need to monitor alligators so they can better understand how alligator populations respond to habitat changes, such as saltwater intrusion, fluctuation in water levels, and habitat loss.

“Data collected from this project will also help us identify areas with high potential for human-alligator interactions,” Davis said. “We could use this type of information to reduce negative interactions between people and alligators. For example, these observations could help WRC staff decide where to focus educational efforts about alligators.”



**Photograph by Mathias Engelmann**

## *Report Alligators in NC (continued)*

People who want to report observations but do not want to use iNaturalist can send their alligator observations directly to Davis at [Alicia.davis@ncwildlife.org](mailto:Alicia.davis@ncwildlife.org). The email should include:

- A photo of the alligator
- When it was observed (date and time)
- The location where it was found (GPS coordinates are best, but a detailed location description is acceptable)
- Estimation of size class:
  - Hatchling-3 feet
  - 3-6 feet
  - 6-9 feet
  - More than 9 feet
  - Unknown

Other ways the public can help the Commission learn more about alligators in North Carolina are:

Reporting locations of alligator nests.

Providing access to private property for alligator surveys. For more information, contact Davis at [alicia.davis@ncwildlife.org](mailto:alicia.davis@ncwildlife.org) or 919-707-4087.

To learn more about alligators in North Carolina, read the Commission's "Coexisting with Alligators" and American Alligator wildlife profile.

## *The Importance of Proper Nutrition for Nestling Songbirds by Toni O'Neil*

As rehabilitators, the most important care that we can provide and which has the most serious impact on the health of our songbird patients is proper nutrition. We know that these little altricial nestlings are basically still developing once they hatch. (Precocial birds, which spend more time in the egg to develop, can get up and go upon hatching). Our little naked un-feathered bobble-head babies don't do that - they eat, sleep, and poop - and rely on constant protein to aid in the growth and development of all their body systems. This growth occurs at an amazing rate!

Missed feedings or not receiving the correct nutrients will lead to improper development. This becomes apparent when the feathering finally emerges. As you can see from the pictures, these wrens do not have the normal coloration we associate with Carolina Wrens. The white is an indication that there was impairment in proper feather development.

## *The Importance of Proper Nutrition for Nestling Songbirds (continued)*

If we can see this damage on the outside, what other kinds of damages are there on the inside? Poor feathers result in more than just poor flight. Compromised ability to escape predators, greater difficulty in finding adequate food, inability to attract a mate and protect the nest, etc. will not lead to a long and productive life for wrens like these.

This is the second time we have seen white feathers appear in wrens that were admitted in extremely poor shape. Both sets had been discovered in a location where the parents were prevented from caring for them (closed garage and storage unit), in very hot temperatures, and the babies were extremely dehydrated and underweight when we got them. We could not save the tiniest ones from each set that were just too weak, but those that did recover eventually looked like this.

These damaged feathers quickly became frayed and broken; as the birds approached release age, they still remained undersized. We held onto them and did not release them with the other healthy wrens of the same age. Unfortunately these white feathered wrens did not improve and the first set all died. We suspect they could not keep up with stunted organ systems as their body size grew. We'll see what happens with this current group, and whether they make it or not.



**Photograph by Tonya Weil**

## *Bumblefoot Soaking Tub by Barb and Heath Austin*



Note : The edges of the opening will need to be padded to prevent injuries

## *Newsletter Editors*

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Teresa Clowers

Jean Chamberlain

Mathias Engelmann

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