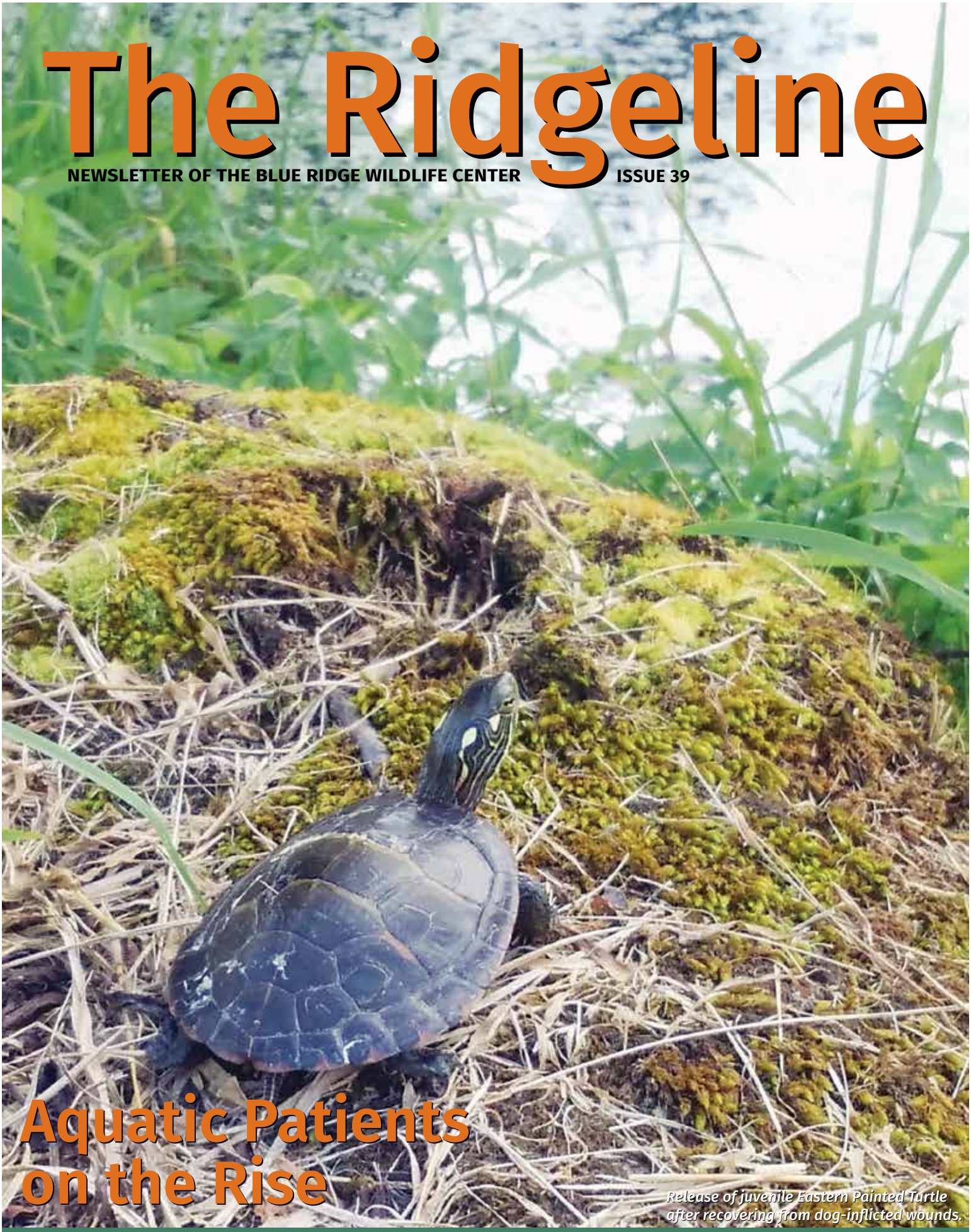
The Ridgeline

NEWSLETTER OF THE BLUE RIDGE WILDLIFE CENTER ISSUE 39

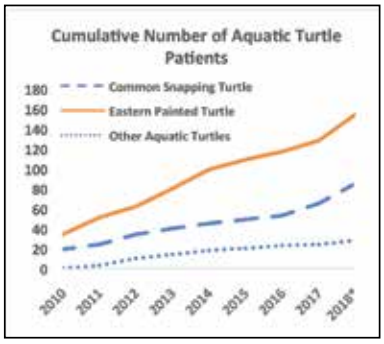


Aquatic Patients on the Rise

Release of juvenile Eastern Painted Turtle after recovering from dog-inflicted wounds.

Expanding Our Impact

It has been a very exciting and busy year for BRWC. Patient admissions to the hospital are up 18% compared to the same time last year! We have seen the greatest increase in aquatic turtles—including some species we haven't seen before.



Requests for our education programs show a similar growth trend. The success of our education and outreach programs is critical to protecting wildlife. It means that more people are aware of our hospital and know who to call when they come upon wildlife in need of care. More importantly, they know how to prevent human-wildlife conflicts and they know that there are resources available for wildlife in need.

We are growing quickly in all aspects of our mission! With this mission growth comes growth in our expenses to fund the important work we do.

The mission of BRWC is to care for native wildlife by integrating veterinary medicine, rehabilitation, education, and research.

We had a successful gala in late September, raising much needed funds for our critical work. See page 10 for a review of that wonderful event. We have a few other opportunities lined up for you to help us with our work:

- **#GivingTuesday** – on November 27 we hope to raise funds to address the increase in our aquatic patients—both turtles and waterfowl. Dr. Riley's article on page 3 provides detail on why these species need our attention and how you can help;
- **Combined Federal Campaign** – if you are federal employee, you can support our growth by selecting BRWC as a recipient of your periodic payroll deduction (CFC #54098); and
- **End of year gift** – please consider giving a gift in December. There are still tax advantages for doing so, including gifts of appreciated stock. For stock gifts, please call BRWC for more information and consult with your tax advisor. Please look for a mailing in December.

Again, it is an exciting year—and we could not be where we are today without your support. Our wildlife patients are so fortunate to have you on their side! The children who sit in awe when they meet our wildlife ambassadors are learning to care for all creatures great and small. What they learn will help to keep our wildlife safe for generations to come—and that is awesome!

Thank you for all you do for BRWC and our native wildlife!

Hillary

BLUE RIDGE Wildlife Center

Cover photo by Amy Ulland.

The Ridgeline

Published by
Blue Ridge Wildlife Center
106 Island Farm Lane | Boyce, Virginia 22620

Wildlife Hotline: 540-837-9000
E-mail: info@blueridgewildlifectr.org
Web: www.blueridgewildlifectr.org

Blue Ridge Wildlife Center is a 501(c)3 organization caring for native wildlife by integrating veterinary medicine, rehabilitation, education, and research.

BRWC is located in Boyce, Virginia on the Burwell van—Lennap Foundation's property on Island Farm Lane.

The Center relies on private donations exclusively. It receives no funding from federal, state, or local governments. Contributions are tax-deductible.

Follow our wildlife stories on Facebook, Twitter, and Instagram

Designed by Dara Bailey Design

Aquatic Turtle Patients

Article and photos by Jennifer Riley, DVM

This year we have admitted a large number of aquatic turtle patients for care—over 50 so far! In general, we receive more Eastern Box Turtles than all of the aquatic species combined. Though this was true again this year (over 100 to date), the ever-increasing number of aquatic turtles creates some unique challenges.

Snapping Turtle patient prior to fish hook removal.

Why They Need Care

Aquatic turtles, like box turtles, are commonly admitted to the Center as victims of vehicle strikes. Over 75% of our aquatic turtles (and over 90% of snapping turtles specifically) come in for this reason. Please keep this in mind while driving and look out for "rocks" in the road between March and October that may actually be turtles! As humans continue to encroach on wild areas, these turtles will be required to cross roads that didn't exist when they were born. As we humans are the ones creating this problem, it is up to us to do everything in our power to prevent collisions and help these turtles when they are injured. We have discussed fracture repair in turtles in previous issues so we will not go into detail here, but the vast majority of these patients do extremely well and are released within a few months.

Aquatic turtles that are not victims of vehicle strikes are admitted for a variety of other reasons. Dog attacks and hook and/or fishing line injuries make up the remainder of the cases with less than 1% of aquatic turtles admitted for natural causes, such as illness. Due to their habitats, lawnmower injuries are significantly less common in our aquatic patients, but they do occasionally occur.

What Aquatic Species Do We See?

The most common species of aquatic turtle that is admitted for care is the Eastern Painted Turtle. These omnivorous turtles are found almost everywhere in Virginia and are typically seen basking on logs in ponds or lakes.

Common Snapping Turtles are the next most frequently seen species at the Center. Snapping turtles are omnivorous and opportunistic eaters. They primarily feed on invertebrates and small fish or amphibians as well as duckweed and algae, but play an important role in scavenging dead animals and, more rarely, have been found to take mammals or birds. Given their abundance in nature, we suspect the relatively low numbers we see are due to their size and behavior on land—understandably, many people are far too scared to approach these turtles. We do not recommend that untrained individuals attempt to handle these turtles as they have the potential to be dangerous. Please call the Center for advice if you find a snapping turtle that needs help!

Eastern Painted Turtle patient with hooks placed to repair carapace fracture.

Snapping Turtle enjoying celery greens.

Wood Turtle released after treatment for carapace fracture.

Though they are listed as threatened in the state of Virginia, Wood Turtles are the third most common aquatic species we treat. Though their population is struggling, Wood Turtles that live in Virginia are found only in the counties near us—in the Northwestern portion of the state. These turtles are most often found in streams and creeks, but can occupy many types of habitats. Like the other aquatic turtles, these animals are largely opportunistic and forage for plant and animal matter.

This year we also took in some less commonly seen turtle species, including an Eastern Musk Turtle and a Northern Red-bellied Cooter. The former are abundant but rarely seen as they spend almost all their time in lakes, ponds, and streams, hiding in crevices and foraging through the substrate on the bottom for invertebrates and other foods. Northern Red-bellied Cooters are herbivorous as adults, though the juveniles are omnivores. These cooters are primarily found in the coastal plain and eastern shore, but there are some in our area as well!

There are many more aquatic turtle species in Virginia—visit the Virginia Herpetological Society's website at http://www.virginiaherpetologicalsociety.com/ for more information.

The Challenge of Working with Aquatic Turtles in Rehabilitation

Every species is different, but in general, the aquatic turtles are more expensive and labor-intensive than our box turtle patients. Why?

Time in care

Did you know that our average turtle patient spends 90 days in care? This is significantly longer than the average hospital stay for mammals or birds. It is in part due to the fact that turtle fractures take longer to heal than avian or mammalian fractures. For a small number of cases, time in care is further increased due to the fact that reptiles cannot be released legally in Virginia between October 1st and May 1st. Turtles that are not cleared for release by the end of September, providing time to acclimate before inclement weather, must overwinter with us at the Center.

Critical Care

While our box turtle patients get dishes of water to use for soaking and their enclosures can be cleaned quickly once per day, aquatic turtles require significantly more time. Their tubs must be drained, fully cleaned, and reset one to three times per day!

Turtles that are being "dry docked" (kept out of the water for some period of time as their initial injuries heal) require frequent checks and bedding changes. As snapping turtles are quite heavy, they need significant padding to prevent pressure sores on their plastrons (lower shells). Since their behavior and stress levels rely heavily on them being in water, the goal is always to treat these wounds quickly and get patients back into water as soon as possible.

A bandaged Eastern Painted Turtle being "dry docked" while its wounds heal.

A feeding tube ensures that this Snapping Turtle receives proper nutrition while in care.

Aquatic turtles are also some of our most expensive patients to feed. Though some food items are donated, many are not. These turtles are often picky eaters and need to be given a greater variety of food items before we find something they will eat willingly. Once they begin to eat on their own, they require foods like fresh greens, fish, mice, and other items.

For those that will not eat on their own, feeding tubes must be placed surgically, typically while the patient is already under anesthesia for wound care or fracture repair. Specialty tube feeding diets are not

Eastern Musk Turtle ready for release after healing from a bridge (between carapace and plastron) fracture.

Northern Red-bellied Cooter Turtle highlighting carapace abrasions caused by a vehicle strike.

In addition to the food items mentioned, we often use live invertebrates or specialty diets to encourage younger aquatic turtles to eat.

inexpensive and add a significant cost to turtle care, but they help us ensure that these animals get proper nutrition which is essential for healing. Feeding tubes also allow us to get oral medications to patients while keeping our staff safe. We can continue to offer food as the patient is able to eat with the tube in place.

Medications

Medications can be expensive for some of our aquatic turtles, especially the snapping turtles! As drugs are dosed based on weight, a medication that may be reasonably priced for a 400 gram box turtle can be quite expensive for a 10+ kilogram snapping turtle. Between anesthetic medications for surgery, pain medications, and antibiotics, the drug cost alone for a typical snapping turtle patient can easily exceed $50. Once you include the costs of surgical supplies, x-rays, wound care materials, etc, just the medical cost per patient can quickly become hundreds of dollars.

Water

Frequent water changes for tubs and enclosures, in addition to taking significant staff and volunteer time, also significantly increase our water usage. Though

Snapping Turtle in tub.

filters are used for turtles where possible, many tub enclosures must be completely changed out. Water quality is extremely important for injured turtles. Especially when there are open fractures or wounds involved, keeping the water in these tubs clean becomes essential. Water (mixed with betadine) is also used as a medical soak for many of these patients.

Special Caging

When we planned and built our new hospital over three years ago, we were seeing less than a dozen aquatic turtle patients per year and significantly fewer snapping turtles. As a result, the only built-in bath tubs in our hospital are in our specialized waterfowl room and only a few specialty tubs in our reptile room are large enough to provide a reasonable temporary enclosure for a large snapping turtle.

Looking Ahead

We are hopeful that the significant increase in aquatic turtles is due to greater awareness in the community. More people know that our Center treats injured turtles and they are making sure these turtles come in for proper care. We expect that the number of admitted aquatic turtles will continue to increase.

We are hoping to build more appropriate facilities over the next year so that we can provide the best care possible for our aquatic patients.

We will be raising funds through our 2018 Giving Tuesday (11/27/18) campaign to upgrade and augment our current aquatic facilities. Please see the inset below for more information and follow our Facebook page for more details as Giving Tuesday approaches! ■

#GivingTuesday Help Us Reach our $15,000 Goal

Giving Tuesday is a global day dedicated to charitable giving. Last year, nearly $300 million was raised by all Giving Tuesday campaigns. The Center's 2017 Giving Tuesday campaign, #GiveAChance, raised over $12,000 (between donations and generous matches) which funded our medical supply budget for 2018. This year, on November 27, 2018, we hope to do even better with our campaign #WetAndWild.

#WetAndWild will raise funds to expand and improve our rehabilitation facilities and medical services for our aquatic patients. As discussed elsewhere in this issue, our aquatic turtle intakes have been increasing significantly and we need improved and increased housing options to provide the best welfare for these turtles. We also need outdoor caging for our aquatic avian patients including ducks, geese, loons, gulls, and others.

Online donations made on 11/27/18 through our Facebook page, starting at 8:00am, will automatically go toward our $15,000 goal and will be matched by Paypal and Facebook, until their matching funds are exhausted. As always, Facebook charges no fee to donate, so we will get 100% of your donation and any matches. If you are not comfortable donating through Facebook, please consider donating on 11/27/18 via our website, by calling the Center directly with credit card information, or by check mailed to the Center.

One of the most important aspects of Giving Tuesday is awareness! Get your family, friends, and local businesses involved in this amazing tradition. Post on social media to let your friends know you are supporting BRWC and encourage them to do the same!

Rehab ✚ Corner Interesting Cases

By Jessica Andersen




Common Ravens
(Corvus corax)

We have received an increasing number of birds in the past few months due to West Nile Virus (WNV). This has also caused an increase in a species frequently affected by the virus: Common Ravens! The ravens admitted this summer had classic signs of WNV. Two of these birds also presented with mange, likely due to the debilitation caused by the virus which prevented them from preening and keeping external parasites under control. One of these birds has already been released and others have moved to outdoor enclosures.

Above, left to right: **Common Ravens with WNV and mange; Common Raven versus American Crow - size comparison.** *Photos by Dr. Jen Riley*

Double-crested Cormorant
(Phalacrocorax auritus)

Another uncommon patient we received was this Double-crested Cormorant that was found on a person's balcony in Arlington, VA. This bird seemed unphased by human activity and was easily caught by an animal control officer. These diving birds are often seen along river banks or on logs sunning themselves and preening. They dive down in the water to catch fish, as opposed to floating on the top like dabbling ducks. Due to its neurologic issues, this patient was tested for WNV. The results showed that this bird was actively suffering from the virus. Most WNV cases we treat are in raptors and corvids, but any animal can be a victim to mosquito bites. WNV has been found in multiple birds species as well as horses and humans.

Photo by Arlington Animal Control Officer Karina Swetnam

American Toad
(Anaxyrus americanus)

This American Toad made a surprising recovery after it was found with a wound. The wound had gone into the toad's coelom (body cavity) allowing intestines to be pushed out of the body through the laceration. When briefly handled to get an intake weight on this patient, the toad was able to pull its exposed and surprisingly undamaged organs back into the cavity. In cases like these, where there has been an opening into the body cavity, the prognosis is poor. The wound cannot be flushed easily and the chances of developing fatal infections are high. Since the exposed material appeared healthy, Dr. Riley surgically repaired the main laceration and five more superficial lacerations. The toad was placed on antibiotics and pain medications and closely monitored. After a couple weeks, no signs of internal infection nor any other health issues surfaced, and it was released back where it was found, bright, alert, and ready to go!

Photo by by Dr. Jen Riley

Purple Martin

(Progne subis)

This fledgling Purple Martin was found alone after its colony had departed for their annual migration towards South America. Purple Martins are a favorite backyard bird, prompting people to erect elaborate housing structures for them. Their mass migration can cause issues for rehabilitators as they race against the migratory clock to get birds released before the colonies have all gone. Without a colony, a single bird would not likely be able to make the journey. This bird may have been a late fledgling, but with a couple of weeks of feedings and care, it was ready to go with a different colony found in Boyce, Virginia that had not yet departed!

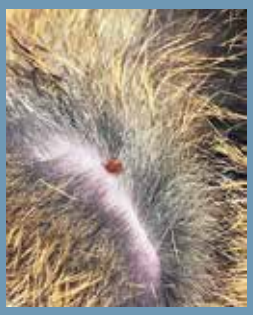
Photo by Jessica Andersen

Northern Long-Eared Bat

(Myotis septentrionalis)

We received two Northern Long-Eared Bats after a homeowner found them in a mason jar on their deck. One bat was healthy and able to fly on intake, so it was released that same day. The second bat however was weak and underweight. During the summer, high temperatures can cause bats to overheat and fall from their roosts. As the bats cool down in the evening they can sometimes recover on their own, warranting their same-day release. Other bats require fluid therapy and may have been weak before becoming overheated, which is most likely what happened to the second bat, causing him to stay in care. *Photo by by Dr. Jen Riley*

Tick Surveillance Study at BRWC



This native rabbit tick is often confused for the longhorned tick. This was one of the ticks collected for the study.

This September, BRWC collected the FIRST exotic Asian Longhorned Tick found on ANY bird in North America! This tick was found on a Red-tailed Hawk from Page County, VA. The hawk did well in care and has been released.

Many people think of a wildlife hospital as a place to get treatment for individual animals. While this is accurate, a wildlife hospital's role in environmental and public health is often overlooked. Many important diseases that impact humans and domestic animals/livestock, are initially found in wildlife. Given the numbers of wild animals that come through our doors each year (and the doors of wildlife hospitals across the United States), we become a first line of defense against new and emerging diseases.

For the past few months, BRWC has been working with the Southeastern Cooperative Wildlife Disease Study (SCWDS) on a tick survey, looking for the invasive Asian Longhorned Tick (*Haemaphysalis longicornis)* in wildlife.

This invasive tick is suspected to serve as a vector for multiple tick-borne diseases, though its ability to act as a vector has not been sufficiently studied. It was first discovered in the U.S. on a farm in NJ in 2017, but has likely been here since 2010. Since the 2017 finding, researchers have confirmed this tick in many states including NY, CT, PA, MD, WV, NC, AR, and of course, VA. It has now been found on a variety of mammals, including humans.

Our first batch of samples had some fascinating results! We got confirmation of the tick on hosts such as Red and Gray Foxes, a groundhog, and a striped skunk, often in previously undocumented counties in VA. Though this was interesting, the much more important find was documentation of the tick on a Red-tailed Hawk. This is the first time the tick has been found on a bird in North America.

The hawk that was carrying the exotic tick came to the Center down, weak, and unable to fly. Our veterinary staff collected ticks from this hawk as it had a higher than expected burden of tiny, unidentifiable tick nymphs around the eyes. Working on a suspicion of WNV based on the clinical signs, this bird was treated with supportive care. Within a few weeks, this hawk recovered fully and was released back in Rileyville, VA.

Having a host that can fly has important implications for this tick's ability to extend its range. We are excited to continue collecting samples for this study and hopefully we will continue to gain more new information about this invasive tick!

The hawk on the left was the Red-tailed Hawk whose samples came back positive for the exotic tick.

West Nile Virus

By Jennifer Riley, DVM

West Nile Virus (WNV) was introduced into the United States in 1999 through New York City and has made its way across our continent. Though this mosquito-borne disease can affect mammals, birds are the primary host and since its introduction, WNV has had a damaging impact on many bird species.

Who is affected by WNV?

This virus primarily causes signs in members of the Corvid family (crows, ravens, jays, etc), but is also commonly seen in raptors (hawks, owls, eagles, etc).

Mammals can become infected with WNV and horses make up the vast majority of non-human cases. Luckily, there is a vaccine available for horses.

What signs do we see with WNV?

Birds infected with WNV exhibit signs related to encephalitis (brain swelling) such as incoordination, tremors, weak muscle tone, and apparent blindness.

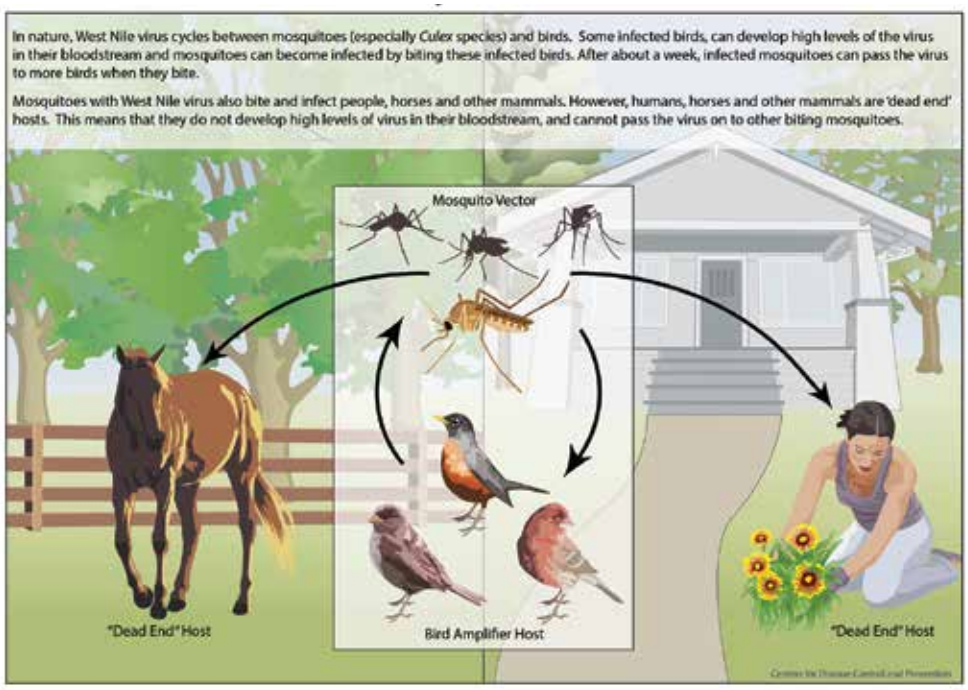
Most mammals infected with WNV show no signs, but some will develop flu-like illness including stiffness, fever, and lack of appetite.

How and when is WNV transmitted?

Culex species of mosquitoes transmit this virus from one bird to another or from an infected bird to a mammal or other dead end host. Though direct spread from bird to bird may occur through oral secretions, feces, or ingestion of prey, vector-borne transmission is much more prevalent.

As mosquitoes are the vector of this virus, most cases are seen in the summer and early fall. Temperature and rainfall greatly affect mosquito populations and as a result, we see changes in our WNV case numbers with the changing weather.

West Nile Virus Transmission Cycle



WNV at Blue Ridge Wildlife Center

Due to the cost of testing, most cases of WNV at the Center are suspected, not confirmed, based on the signs we see. However, we do send blood out to confirm some cases (those involving unusual species, atypical signs, abnormal time of year, etc). Most years, we see 6-12 suspected or confirmed WNV cases, typically in late summer. In 2018, we have seen over 30 cases, including one confirmed case in a Double-crested Cormorant—a species in which we do not typically see this disease. Most of the patients admitted were corvids, including many crows and ravens. The next most commonly affected species were Red-tailed Hawks and Great Horned Owls. Unlike previous years, many of these cases were admitted to the Center as early as June!

Great Horned Owl WNV patient. *Photo by Dr. Jen Riley*

Sign vs. Symptom

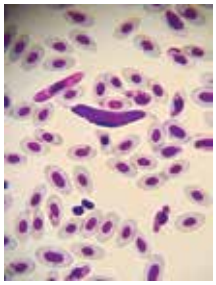
The terms "sign" and "symptom" are often used interchangeably, but they do not mean the same thing. Who observes the condition is one important distinction between the two terms. Symptoms are generally subjective things noticed by the patient whereas signs are objective conditions that someone else can observe.




Some of our WNV patients (left to right): **Double-crested Cormorant; Red-shouldered Hawk; Red-tailed Hawk; American Crow.** *Photos by by Dr. Jen Riley*

The increase in WNV patients can be attributed to the increased temperatures and rainfall that we had this year. The conditions allowed for successful mosquito reproduction and therefore more vectors to spread the disease.

There is no medication to treat WNV and these patients are given supportive care while they are here so that they can fight the virus in a safe environment. Supportive care includes things like tube feedings, subcutaneous or intravenous fluids, and warmth as needed.



Many of these patients are also injured (encephalitis can make a bird easy prey or more likely to get hit by a car or attacked by a predator) and require surgery or other care. Nearly all of our WNV patients this year were also suffering from blood parasites, which required medication and in some cases blood transfusions in addition to supportive care.

Even with this intensive care, birds that come to the Center with WNV do not have a good prognosis for recovery and release. Only about 20% of these birds will be released back to the wild. Birds that come in with mild signs, have a fair prognosis. However, for birds that come to the Center in the final stages of the disease (tremors and seizures), prognosis is far worse. Despite the challenges, the 20% or so that we are able to rehabilitate and release make the significant amount of time and money spent on these cases worthwhile.

In many cases with WNV, the encephalitis had progressed too far causing permanent brain damage or blindness. Though they may survive in care, these birds are unable to hunt or defend themselves in the wild and, in most cases, must be euthanized for humane reasons. Survivors that have good function (can eat on their own, move around well, and are not completely blind) can sometimes do well as wildlife ambassadors as was the case with our Red-tailed Hawk, Briar, who is a previous WNV patient with permanent vision deficits.

Luckily, there are ways you can help to prevent WNV from impacting birds, pets, and yourselves. Controlling the mosquito population and taking basic precautions can save lives!

Please keep in mind that very few mosquitoes carry WNV and when humans are bitten by an infected mosquito, less than 1% of those individuals will ever develop signs of the infection. Don't panic! But please do what you can to help control our local mosquito population for yourselves and our native wildlife. ■

Center: ***Leukocytozoon*** **and** ***Haemoproteus*** **(blood parasites) seen in a Great Horned Owl patient.**

Left: **This Red-shouldered Hawk was a WNV case that was found, treated, and released.**
Photo by Michael Oak.

Prevention

- **Control mosquito populations.**

  - Dump standing water at least once a week from items such as bird baths, buckets, toys, and planters.

  - Remove and dispose of large items that collect water, such as tires.

  - Larvicides can be used in areas where standing water cannot be dumped such as septic tanks, pool covers, and gutters. When used according to label instructions, larvicides are safe for the environment, pets, and people.

- **Wear long-sleeved, light-colored clothing when outside during mosquito season. Consider treating clothing/gear with permethrin.**

- **Apply insect repellant when outdoors in high-mosquito areas. Be sure to reapply as directed and apply repellant OVER sunscreen if using both products.**

- **Repair holes in your home's window and doors screens.**

- **Consider getting your horse vaccinated.**

- **There is NO evidence that you can get WNV from handling an infected bird. However, there are many zoonotic diseases that birds carry. Always wear gloves if handling a live or dead wild bird for any reason.**

BORN TO BE WILDlife Gala

BORN to be WILDlife! was the theme of this year's annual Blue Ridge Wildlife Center Gala, organized by Lisa Goshen and Beatrice von Gontard, co-chairs, and their able committee of volunteers. The rains finally stopped and cleared the way for the beautiful September 29th Saturday evening at a magnificent location in Clarke County: Locksley Manor, home of Danielle and Ronald M. Bradley. Guests were greeted on the veranda and escorted on a red carpet through the stately manor house to the back gardens where the festivities were held.

The goal of the gala and the night's auction was to fund annual operations and four key education programs.

By every measure, the evening was a huge success with enthusiastic bidding on four learning excursions, including a guided river/flora/fauna canoe trip donated by **Greg Ellison**; an exploratory outing on Oxbow Farm donated by **Beatrice and Adie von Gontard**; a discussion of Shenandoah River ecology, catered lunch, and bird walk held at Cool Springs, sponsored by **George Ohrstrom** and **The Downstream Project**, and a trip down the Chesapeake Bay on Captain **Russ McKelway**'s 44' sailboat. The items also included golfing at **Creighton Farms**' Jack Nicklaus signature golf course and four wonderful, whimsical, wildlife watercolors by **Jimmie Emmett**. In a final flurry of hands, guests also generously gave $365 to support the Center for being open 365 days a year!

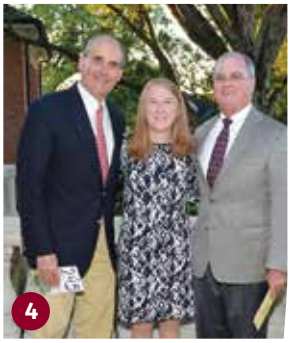
Raggs & the All Stars provided music throughout the evening and, after the auction was over, motivated guests to dance the night away!

We are so grateful to all the corporate sponsors, patrons, and ticket holders who supported the event with their generous bidding and donations. And special thanks to Danielle and Ronald Bradley for hosting the lovely evening's activities! ■

Our gracious hosts—Danielle and Ron Bradley.

A huge thank you to our 2018 Gala sponsors for their support in helping our native wildlife!

Annandale Millwork and Allied Systems / Frogale Lumber, Arentz Landscaping, Bank of Clarke County, BB&T / The Paul J. and Martha N. Rees Charitable Trust, Bonhams, Buhl Electric, Goldman Sachs, Hall Mechanical, Kysela Wines, Lupe Vea, Powhatan School, Russell B. McKelway, MD, Shenandoah University, Sheridan-MacMahon Realtors, Trex, Valley Proteins, Yount Hyde & Barbour



Gala photos by Gary Sousa, sousasportspics.com

From the top:
(1) Sandra and Ted Guarriello; (2) Tressa Reuling with one of her magical table decorations; (3) Andy Ferrari, Wendy Smith, Michael Smith; (4) Russ McKelway, Sharon and Mitch Moore; (5) Andrew Stifler, Katherine McLeod, Nicky Perry, and Michael McGowan; (6) View of the tent; (7) Margit Royal and Jerry Wolford; (8) Jessica Andersen and Grillz, the Red-tailed Hawk; (9) Patricia Robinson, Susan Smith, Matt Sheedy and Vicky Bendure; (10) Tressa Reuling and Barbara Ferrari; (11) Lisa and Zohar Ben-Dov; (12) Heather Shank-Givens with Gryphon, a Black Vulture; (13) Dance, dance, dance; (14) David and Debra Norman.

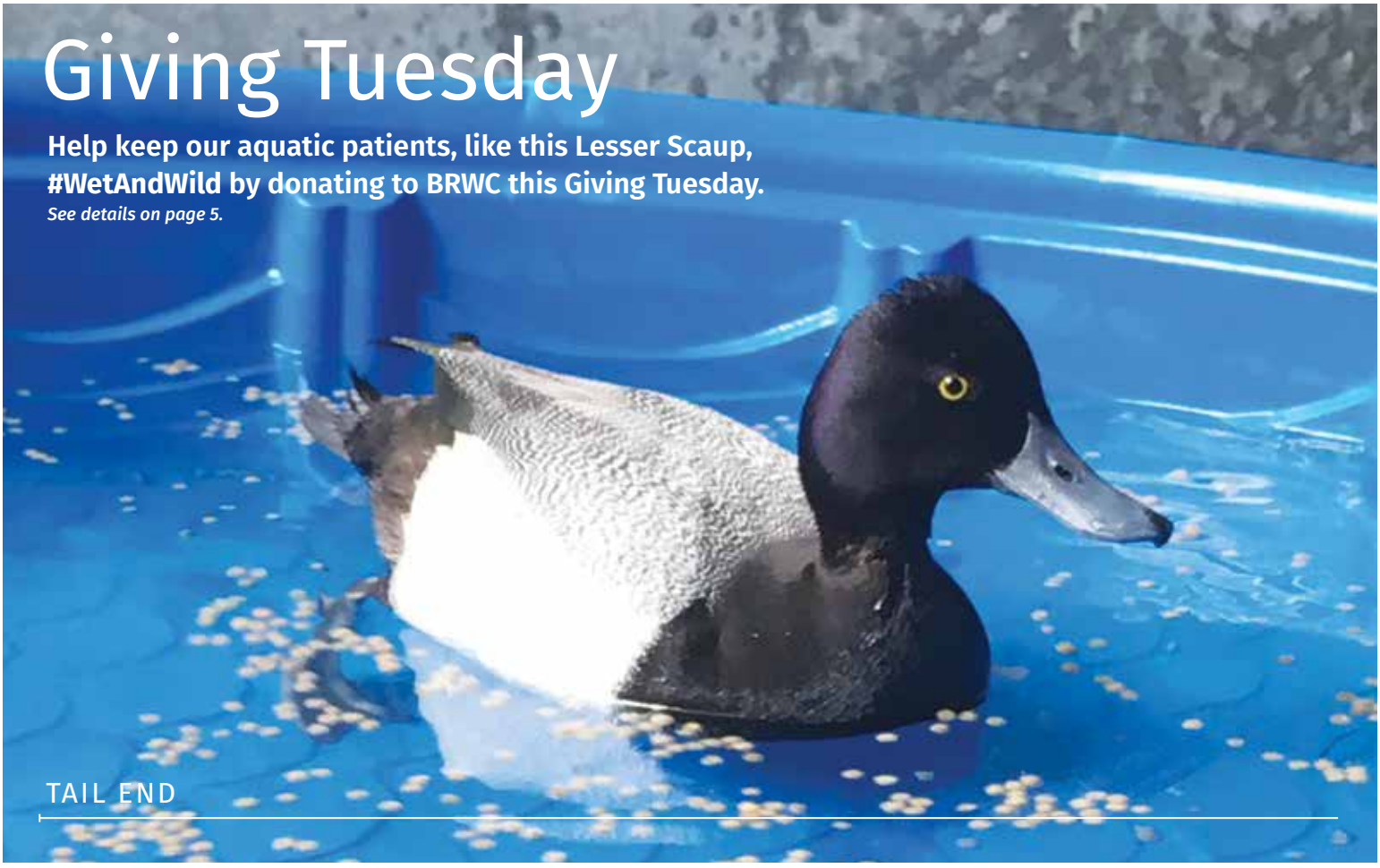
BLUE RIDGE
Wildlife Center
106 Island Farm Lane
Boyce, Virginia | 22620

Non Profit Org.
U.S. Postage
PAID
Winchester, VA
Permit #188

Social Media

If you enjoyed the stories found in this newsletter, don't forget to like our Facebook page (**https://www.facebook.com/BlueRidgeWildlifeCtr/**) where we share stories about the Center, interesting patients, and educational information. You can also find us on Instagram **@BlueRidgeWildlifeCtr** for more pictures and videos about our patients and daily life at the Center.

BRWC HOTLINE: 540.837.9000 | www.blueridgewildlifectr.org | info@blueridgewildlifectr.org



Giving Tuesday

Help keep our aquatic patients, like this Lesser Scaup, #WetAndWild by donating to BRWC this Giving Tuesday.

See details on page 5.

TAIL END