

Wildlife Rehabilitators of North Carolina, Inc.

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President's Message . . . Spring brings a quite common and repetitive call to our wildlife shelters and independent rehabbers: "I found a baby something!" Seasoned wildlife rehabilitators know the best place for that baby is with its Momma (or Daddy), if possible. Reuniting and renesting are crucial aspects of wildlife rehabilitation that prioritize the well-being and survival of wild animals. There are many important reasons why reuniting or renesting is imperative to the wildlife we care so much about, as well as the importance to us personally, financially, and professionally. If we can reunite wild infants with their parents or renest them in their original habitat, they will benefit from natural parental care. This natural bond is crucial to survival as parents provide food, protection and teach them essential, species-specific life skills such as avoiding predators and understanding social cues. We may be able to feed them adequately, but that socialization issue is a kicker! We also want to reunite or



by Linda Bergman-Althouse

renest to prevent imprinting. We know that birds can imprint on the first thing they see when their eyes open, so without contact with their own species, they may imprint on us, making it difficult for them to survive in the wild. Reuniting with their own kind and in their natural environment reduces stress levels that would potentially be increased in a rehabilitation setting. We all know how stress can have detrimental effects on an animal's health and ability to adapt to the wild, so minimizing stress is essential for successful rehabilitation. The stress wild infants endure with their natural parents is inherently by design. Reuniting and renesting also contribute to the conservation of wildlife populations by maintaining genetic diversity and ensuring the continuation of natural behaviors. Ensuring healthy populations of wild animals is essential for ecosystem balance and resilience. Also, returning animals to the wild is often more cost-effective and resource-efficient, which wildlife couldn't give two hoots about, but it should matter to every wildlife rehabilitator, who if I guess right, is pinching some pennies to make all those second chances happen. Long-term care costs money! So, reuniting or renesting allows us to allocate our resources to other animals in need of care. Overall, reuniting and renesting are vital components of wildlife rehabilitation efforts, as they prioritize the welfare and long-term survival of individual animals while also contributing to the health and sustainability of ecosystems. Of course, we know it's not always possible, but reuniting or renesting should be at the top of our thought list when that call comes in!

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“Terrific” Turnout for the 2024 Annual WRNC Symposium! by Jean Chamberlain, Symposium Chair

The 2024 WRNC Symposium was terrific! The attendance in 2023 of 216 participants was good, but we beat that soundly this year with almost 300 in attendance. We set records in sales, too. More books were sold than ever before, more than \$3,000 worth. We sold over 70 t-shirts and sweatshirts. The raffle gets bigger and better every year, this year bringing in well over \$3,000 to support our grant programs. We also had some terrific new speakers and included many new vets speaking on advanced topics. Beginners were treated to brand new classes on the Natural History of Small Mammals and on Applying for the Apprentice permit and a revised Intro to Wildlife Rehab class. We welcomed Linda Bowen and Traci Keller back to teach RVS classes on bats and bobcats, respectively. Ruby Davis taught the raccoon and skunk classes and as before, they did an outstanding job. Reptile folks had four classes to choose from including two presented by vets. Raptor rehabilitators had two presentations: one on Welfare and Placement and the other on Raptor Behavior and Training. Renee Schott presented Curious, Creepy & Common Cases in Wildlife Rehab all the way from California (via Zoom). I must not forget to mention our new Opossum Wheel workshop. It was a resounding success and so enjoyable. Twenty folks now have a large wheel for their opossums to exercise on. We've had many requests to offer it next year. Todd Katzner, US Geological Survey, presented “Avian influenza and the threat to California Condors at the banquet.” He told us how the Carolina Raptor Center helped confirm that the newly developed avian influenza vaccine could be safely used for the condors. We are pleased that 96.6% of the respondents said the symposium was “good or excellent.” We will use your survey suggestions to work to make symposium 2025 even better. We are always looking for ideas for new speakers. Please email me at jchamberlain1@windstream.net if you have a suggestion. Hope to see everyone again next year for the 23rd annual WRNC Symposium. It will be held on January 25th and 26th. The 2024 Symposium photo album can be found at this link: <https://bit.ly/3uG8rZV>



“True Passion Has a Habit of Coming Back!” (unknown)

2024 WRNC Symposium Pictures! Go here: <https://bit.ly/3uG8rZV>



Mentor Program Update!

Tonya Weil & Rebekah Kriston, Mentor Committee Co-Chairs

Please keep an eye out for the new WRNC website! Once the new site launches, there will be a Mentor tab. Here, WRNC members will find forms and information to utilize and access the mentorship program. We will also have an area for wildlife rehabilitators who are approved WRNC Mentors which will be helpful for all wildlife apprentices pursuing the NC Wildlife rehabilitation license process. Also, for those of you who would like to become an approved Mentor please email us at info.WRNC@gmail.com for more information.



**Become a
WRNC Wildlife
Rehabilitation
Mentor**

If you're a licensed rehabilitator in North Carolina and are ready to take on the training of the next generation of wildlife rehabilitators, then being a WRNC Wildlife Rehabilitation Mentor might be right for you!

Visit our website or scan the QR code for more information!



Photo by John Althouse

“Mentor: Learning from Someone Who Wants You to Grow!” (unknown)

2024 Symposium Raffle “THANK YOU’s!”

by Kathy Pedrick, WRNC Fundraiser Chair & Board Member

How huge was our WRNC 2024 Symposium Raffle? – SO HUGE! It truly was bigger and better, growing in quality and quantity every year! Some lucky girl, even took home a winning incubator! THANK YOU SO MUCH to all our raffle donors! Our attendees stuffed the bins with colorful raffle tickets trying their best to win valuable gift certificates, wonderful goodie baskets, wildlife art, mammal boxes (especially that squirrel mansion), bird houses & seed, puppy pads, the sought after red blender and so much more that you all donated for our POPULAR and MEGA-FUN raffle! You are the BEST!



<u>Alice Sanders</u>	<u>Fiber Dream Santas</u>	<u>NWRA</u>
<u>Animal Help Now</u>	<u>Fox Valley Animal Nutrition, Inc.</u>	<u>Oxbow Animal Health</u>
<u>Asheville Museum</u>	<u>Friends of the WNC Nature Center</u>	<u>Pet Smart in Morganton</u>
<u>Attractions Dining & Value Guide</u>	<u>Gardener’s Supply Company</u>	<u>Pet Supplies Plus in Boone</u>
<u>Auntie MM’s Custom Boutique</u>	<u>Grandfather Mountain</u>	<u>Print Globe</u>
<u>Bird Food Store</u>	<u>Honest Med</u>	<u>Revival Animal Health</u>
<u>Brinsea Incubators</u>	<u>Josh’s Frogs</u>	<u>Rodent Pro</u>
<u>Build-A-Bear</u>	<u>Lemur Center</u>	<u>ShopPixie Treasures</u>
<u>Bulk Syringes</u>	<u>Linda Bergman-Althouse</u>	<u>Squirrel Store</u>
<u>Burton and Burton</u>	<u>Mazuri Exotic Animal Nutrition</u>	<u>Squishmallows</u>
<u>Carolina Raptor Center</u>	<u>Midwest Home for Pets</u>	<u>Target - local store</u>
<u>Chewy</u>	<u>NC Aquariums</u>	<u>The Butterfrog Fantasy</u>
<u>Deer Track Wildlife Rescue</u>	<u>Network for Good</u>	<u>The Human Society of the United States</u>
<u>Douglas</u>	<u>North Carolina Zoological Society</u>	<u>Wild Republic</u>
<u>EmerAid System for Exotics</u>	<u>Northeast Fleece</u>	<u>Wildlife Rescue Nests</u>
<u>Woodruff Family</u>	<u>ZooMed Laboratories</u>	

2024 Symposium Raffle “THANK YOU’s!”

by Kathy Pedrick, WRNC Fundraiser Chair & Board Member

HAPPY RAFFLE WINNERS!!



Raffle Photos by Linda Bergman-Althouse

“News From the WRNC VSLs!”

by Emily Haupt and Caroline Deihl, WRNC Veterinary Student Liaisons

In case we didn't meet at the symposium, we are Caroline and Emily, the Junior Veterinary Student Liaisons! There have been some great wildlife happenings at the North Carolina State University College of Veterinary Medicine recently. We just attended a presentation by the Wildlife Rehabilitator Coordinator and Registered Veterinary Technician, Halley Buckanoff, from the North Carolina Zoo. We learned all about what the Wildlife Rehabilitation Center does for management of native North Carolina wildlife populations. It was fascinating to hear about the biohazard precautions they must take with all species, especially since they are a licensed rabies vector species facility. We also recently traveled with the Aquatics Team to the Center for Marine Sciences and Technology (CMAST) in Morehead City, NC where we were given the opportunity to practice clinical skills on sea turtles and perform necropsies. We were thrilled to learn from Dr. Harms and hear about his fruitful career in zoological and aquatic wildlife medicine. We feel extremely fortunate to have these unique, hands-on experiences surrounding wildlife medicine early on in our academic careers! Closer to home, our very own Turtle Rescue Team has started off the 2024 year with a bang by introducing our new naming theme, “Plants,” and with the January 7, 2024 intake of our first turtle “Thyme,” injured by a bulldozer. As of today, we’ve had 14 intakes thus far and are preparing for a busy turtle season. Our local community has already stepped up to help by bringing in fresh produce for turtle salads, newspapers for enclosures, making purchases on our Amazon Wishlist, and sending in online donations. We are so grateful for the continued support and love we receive for these special creatures and are looking forward to saving more turtle lives this year! Lastly, the incoming Doctor of Veterinary Medicine (DVM) Class of 2028 had their big welcome visit to NC State this past weekend, so the College of Veterinary Medicine (CVM) is gearing up for their largest class of first year students ever! We plan to spread the word about Wildlife Rehabilitators of North Carolina (WRNC) early on in their first semester and help more students get connected and involved with the symposium (and hopefully wildlife rehabilitation, too)! It is so great to be part of WRNC and to have helped facilitate the annual wildlife rehabilitation symposium during January, 2024. That’s all for now! Feel free to reach out to us with any questions.



“North Carolina’s Mountain Stingray!”

by Linda Bergman-Althouse, WRNC Bd Member

Charlotte, a displaced stingray, the size of a serving platter, has spent much of her life gliding around the confines of a storefront aquarium in North Carolina’s Appalachian Mountains. She’s 2,300 miles from her natural habitat under the waves off southern California, and although she hasn’t shared a tank with a male of her species in at least eight years, she is pregnant with as many as four pups and will give birth shortly. Charlotte currently lives in a 2,200 gallon tank, nearly the size of a construction dumpster, that she shares with five small sharks. An interspecies hook-up has been ruled out, because a stingray, although not cloning themselves, has a natural ability to fuse an egg with another cell triggering cell division, leading to the creation of an embryo. So, nature has found a way! The cell fusing with the egg is known as a polar body. They are produced when a female creates an egg that usually isn’t used. Why it happens is a mystery. The aquarium staff in Hendersonville noticed Charlotte was “blowing up like a biscuit” and worried they were over-feeding her or that she had developed a tumor, but an ultra-sound revealed the pregnancy. Now, over-feeding her is good because she has more mouths to feed! The plan is to get a tank twice the size of the current one to accommodate Charlotte’s off-spring. Yes, folks it’s happening right here in the Blue Ridge Mountains in rural North Carolina (thousands of miles from her ocean), a Stingray named Charlotte is having babies!



Photo by Aquarium & Shark Lab Staff

Echoes of Yesterday, Visions of Tomorrow

by Toni O'Neil, Executive Director, Possumwood Acres Wildlife Sanctuary

I was looking up pictures in my computer photo archives recently and noticed something that I had not thought about in quite a while. Looking back at those 20+ years' worth of pictures, which are just a sampling of the many animals we've cared for at Possumwood Acres in Hubert, NC, I began to recognize and remember rehab patterns and cycles. Our shelter is currently in the Dovekie part of February. They are washing up on the same beaches at the same time of year, just as they have for the past so many years. This recollection piqued my interest, so I started cruising through the archives and noticing other trends or changes at Possumwood in fledgling admissions and their causes. The majority species used to be baby robins, and now it is baby mockingbirds. I could see how the number of cat attacks seemed to stay the same; unfortunately, there were no declines from people keeping their pet cats indoors, and no shortage of feral cat colony related admissions, either. Another major point I observed were the changes in the seasonal times for baby mammals and baby birds. The beginning of baby season began starting sooner and sooner over the years, and the



Dovekie photo by Possumwood Acres Staff

endings for baby season seemed to continue longer and longer. Baby bunnies just never seemed to stop coming in at all! More often than not, baby Mourning Doves are the last baby of the year and have been for many years. So, it seems they



photo by Linda Bergman-Althouse

have not wised up yet or have never realized when it was time to stop the egg laying process. By the way, what do you call the pinkie squirrel admitted in December? Is it your last Fall baby or your first Spring baby, or does it really matter? You are now back to an every two to three hour feeding schedule when you thought you were finally free and could rest! Those relaxing, post baby season days seem to be long gone when we could focus on cleaning up the grounds and buildings, repairing cages, stocking up on much needed supplies and getting ready for the next round of patients. Now, we stay busy year-round! Have others noticed any trends or patterns like this? Would you like to share your observations and stories with us (lbergmanx@gmail.com), and let me know I'm not the only one who longs for the good old days?

ATTN: WRNC MEMBERSHIP COMMUNITY! DON'T FORGET to pay your **"ANNUAL WRNC MEMBERSHIP DUES"** of \$15.00. Remember, a change was made in 2019 so our membership runs concurrently with the fiscal year, which is May 1st through April 30th of the next year. We used to pay our dues at symposium time, so now we forget and don't realize WE'VE EXPIRED until we need some information from the membership archives on our website and the YELLOW BAR POPS UP and says, "Your account has expired. Please renew your account to gain access to this content." GO HERE: <https://ncwildliferehab.org> and click on MEMBERS to renew your account!

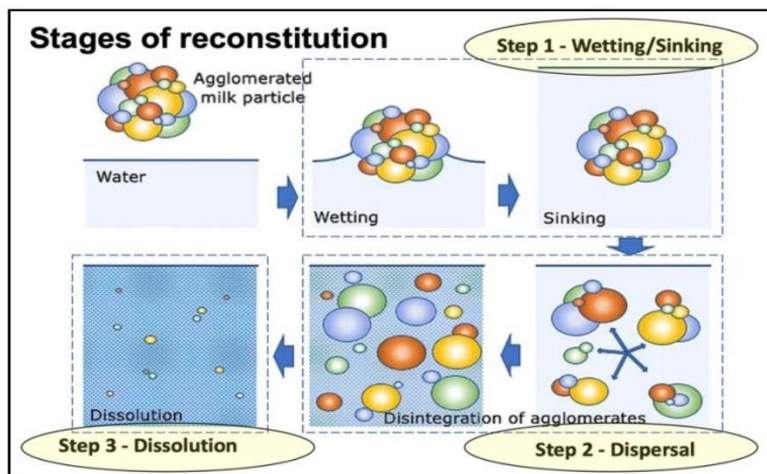
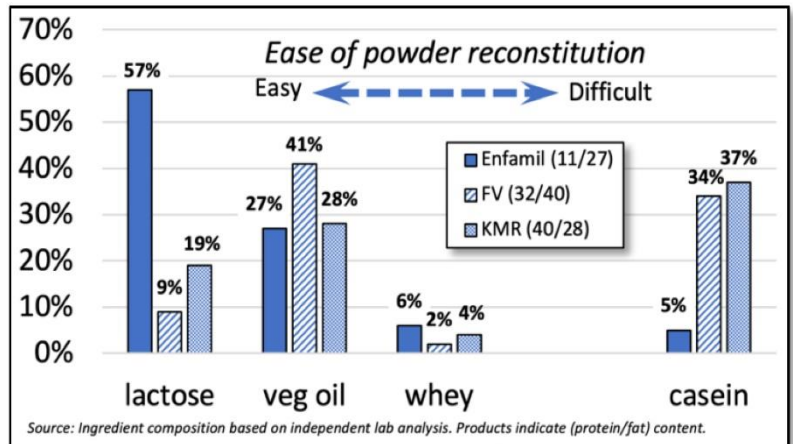
“Milk Powders for Human Babies & Other Mammals Reconstitute Differently!”

by Allan Casey, WildAgain Wildlife Rehabilitation, Evergreen, Colorado

People familiar with preparing powdered infant milk formula (IF) for human babies often expect other milk powders to mix the same – quickly and easily. However, livestock and domestic pet milk replacers (MRs) used with animal species are very different. Differences include: their intended use (including species), product design, nutritional formulations, and processing methods. All of these factors directly affect powder reconstitution characteristics and efficiency. This article identifies and explains one of the major obstacles which is casein protein reconstitution. It also provides links to other resources that provide some easy steps used in formula preparation to overcome these hurdles. Following these steps

results in a more completely reconstituted, nutritious and digestible substitute wildlife milk formula. **Why is casein an issue?** Let's start with a quick review of common ingredients used in powdered milk products: skim or nonfat milk, vegetable oil (added in since the butterfat has been removed), lactose, milk proteins (casein and whey), and vitamin and mineral supplements. Lactose, vegetable oil and whey proteins reconstitute quickly and completely. However, casein proteins reconstitute more slowly. This is due to several factors that include a complex molecular structure,

as well as transformations that take place during milk processing and the drying process. It is essential that they are effectively reconstituted to be able to be digested and utilized in the GI tract. The complex casein molecules contain many vital proteins and minerals (i.e., calcium and phosphorus). With key nutritional and biological properties, they affect development, growth, and health in the short-term, as well as long-term. Consider the accompanying chart that compares the primary ingredients between a popular IF (Enfamil®) and two commonly used MR's (Fox Valley 32/40 and KMR®). It is quickly apparent that the IF has 6x the amount of lactose (easily dissolved sugars) than casein, while the MR's have about 7x the amount of casein (difficult to reconstitute) than lactose. Those differences alone account for much of the superior reconstitution of IF's over MR's. Other factors that contribute to the ease of IF reconstitution include: the use of high quality, food grade ingredients; extensive industry research and development targeted to constant improvements in human IF formulations and manufacturing (including certain lactose-coating of casein proteins to enhance reconstitution); and added attention to packaging with a shorter shelf life (18 months vs 24 months for most MRs). **MR product directions**



basically say to 'mix, stir and feed.' Why doesn't that work? Any powdered milk product must undergo the documented stages of reconstitution during its preparation prior to feeding. Otherwise, it will likely still contain residual dry powder, which is unsuitable for feeding. The accompanying diagram depicts these stages of taking a dry milk particle through the process to final hydration. Most IF products with low concentration of casein (5%) progress through these steps very quickly and are generally considered 'instant mix' products. Conversely, since the MR's can have a 7x higher casein content, they progress much more slowly. Many manufacturers market the

“Milk Powders for Human Babies & Other Mammals Reconstitute Differently!” (cont.)

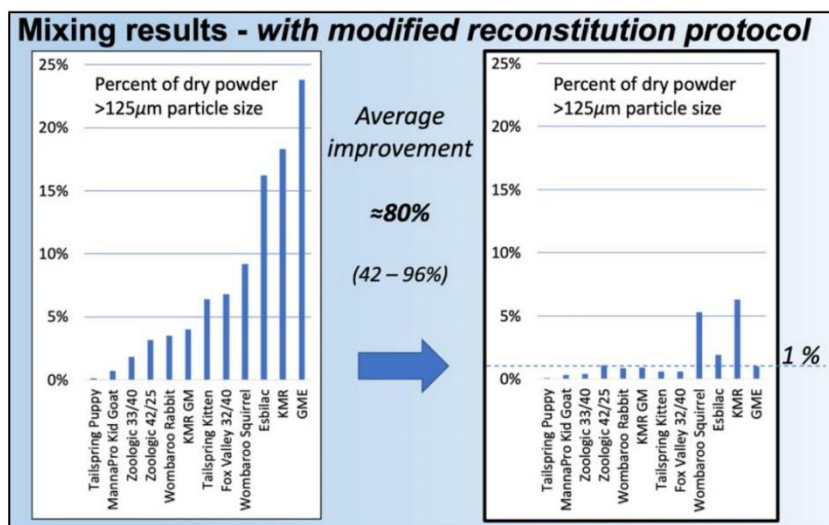
by Allan Casey, WildAgain Wildlife Rehabilitation, Evergreen, Colorado

products as ‘instant mix,’ as they likely believe consumers expect and want easy and fast preparation. Fortunately, at each of the 3 required stages, steps can be taken to improve casein reconstitution as follows (and are further discussed and demonstrated on the Mixing Guide page): **Step 1 – Wetting and sinking.** High casein content powders generally form a surface film as the dry milk particles contact the water, often inhibiting wetting and sinking of the powder. Studies show best performance using 110-120°F water and allowing 5 minutes to wet and sink in order to minimize development of the surface film. Some MR powders will completely sink, whereas other powders may still partially float on the surface. Another simple step to promote wetting and sinking is to increase the surface area where the powder comes into contact with the water. This can be easily done by using a larger diameter mixing container to allow more of the powder to spread over a larger surface area of the water. **Step 2 – Dispersal.** Since the powder must become fully wet prior to full hydration/reconstitution, any powder that remains floating must be pushed below the surface to assist with wetting. A hand whisk can accomplish this, and also serves well to then mix the powder in the water. Studies show the best water temperature is still in the 110-120°F range, and that slow mixing speeds are ideal (around ≈ 100-200 rpm, or brisk hand whisking). Interestingly, faster speeds (i.e., high speed mixers, immersion blenders) can cause clumping that works against desired dispersal. **Step 3 – Dissolution.** Studies show that dissolution (hydration) of larger casein powder particles only begins to occur at around 30 minutes and continues over the next several hours. WildAgain’s testing suggests best results after about an 8-hour resting period in the refrigerator at 40°F. Storage conditions of powdered MR can also impact reconstitution. Unknown to many users, casein solubility is also affected by storage time and temperature of milk powders. One published study showed

that solubility (dissolution) of casein can decrease quickly when MR’s are stored unopened at higher temperatures. Even at only 2 months after manufacture, the study indicated that the solubility reduced 90% when stored at 95°F and decreased 50% at 86°F. While there was no initial decline during 2 months when stored at room temperature (68°F), after 7 months of unopened storage at room temperature, solubility showed a 50% drop. This suggests that storing at refrigerator (40°F) or freezer (0°F) temperatures will slow the decline in solubility, though this was not specifically tested in the study. Therefore, buying any of the MR products as fresh as possible is preferred, since longer storage time can interfere with solubility. **Why is milk powder and casein reconstitution so important?** Unlike the ‘instant-mix’ IF products, the MR products require additional special handling. As mentioned previously, incomplete reconstitution will result in feeding dry powder to young animals with developing GI systems. This can lead to digestive issues and compromise animal health, growth, and development. Additionally, 2/3 of the calcium and phosphorus in milk is bound up in the casein molecule as calcium phosphate and requires full hydration to be accessible. The easy-to follow steps outlined in the Mixing Guide can result in an average of 80% improvement in solubility (ranging from 42% - 96% depending on specific MR product) as shown in the accompanying set of charts and videos at <https://www.ewildagain.org/formula-mixing-guide>.

Author: Allan Casey has been a licensed wildlife rehabber since 1986. He co-founded WildAgain Wildlife Rehab in Colorado and the organization’s website www.Ewildagain.org.

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“Ballerina Birds!”

as written for ‘Carolina Salt Magazine’ by Linda Bergman-Althouse



Big Bird has landed!! An elegant and exotic Mute Swan found grounded in Morehead City unable to stand, appearing sickly and underweight was recently admitted to The Outer Banks Wildlife Shelter in Newport. With no injuries evident during examination, the staff theorized toxicity and started flushing her system to rid her of possible poisons or lead ingestion. Time will tell if the efforts win the race against organ damage. She is still weak, but eats very well, which is always a good sign. The admission of a Mute Swan is atypical to the shelter because they are not native here. They are commonplace in Europe and Asia, and a few were imported to northern regions of the United States during the 18th century. Their American population has grown in the last few years though and although rare to see Mute Swans this far south, it is believed that because they are not migratory, developers or landowners are bringing them in to decorate ponds and lakes, which is probably not the best thing to do, but it is happening. If a few have made it here on their own, that is a major feat for one of the heaviest flying birds on the planet! Male Mute Swans, known as Cobs, typically weigh between 23 to 27 pounds, and females weigh in at a little

less. The only waterfowl heavier than the Mute Swan is the Trumpeter Swan. The beautiful, adult Mute Swan can tower four feet high, cover 56 to 62 inches of length in ground space and their wingspan is an impressive 79 to 94 inches! Their bill is vibrant orange with a black base and sports a bulging black knob on the base. A Mute Swan is easily recognizable with its long neck curved into an S and its snowy-white plumage. Sometimes under-feathering presents in orange or brown, but that is stain caused by iron and tannins in the water. These gorgeous, giant water birds are written into fairy tales, romanticized because a pair of Swans, who mate for life, create a “lover’s heart” as their heads touch when they greet or during mating and are represented in ballets during dance. As a child, this author always referred to beautiful swans as ‘Ballerina Birds’ after experiencing “Swan Lake.” Mute Swans feed on aquatic plants, exclusively on submerged aquatic vegetation, such as reed head grass and widgeon grass, as well as fish, frogs, and insects. It is estimated that the adult male Mute Swan eats up to nine pounds of aquatic vegetation every day and for that reason alone, their presence is controversial. That voracious appetite can easily disturb local ecosystems and displace native wildlife species. They feed on underwater plants by plunging their long neck into the water. Our Mute Swan at the shelter is currently putting away quite the haul of greens and trout chow. Mute Swans nest on large mounds they build in the middle of a shallow lake or pond. They reuse the same nest each year, restoring or rebuilding as needed. Male and female swans share the care of the nest. Although Mute Swans appear very statuesque and dignified, they are strongly territorial and become fiercely aggressive when defending their nest. They have been known to attack people who venture into their nesting area by biting and jabbing with the bony spurs on their wings. So, if you catch a glimpse of a Mute Swan and choose to go bold by moving in to get a closer look, be careful. If you hear a hissing or grunting sound and see the Swan’s wings half raised, that is a threat display, and they will be coming after you! The female Mute Swan, called the Pen, lays four to eight greenish brown eggs and the hatchlings, called cygnets,



“Ballerina Birds!” (cont.)

as written for ‘Carolina Salt Magazine’ by Linda Bergman-Althouse

are ash gray, brown born within 35 to 38 days. Their bill is grayish rather than orange for the first year. Once the cygnets fledge, it is not uncommon to see the whole family looking for food. In about three months after hatching, they are adult size but do not match adult coloring. Within 6 to 7 months the youngsters develop the famous white plumage and the long neck that helps them reach through the water to snatch the aquatic food they enjoy. The young start



pairing at age one and become sexually mature at age two but usually don’t reproduce until age three or four. Mute Swans spend most of their time floating on the water, and in our North Carolina coastal area you may find them in city park ponds, rivers, lakes, coastal bays, wetlands, marshes, streams, slow flowing areas, large freshwater areas, and estuaries. Although they do grunt when making a threat, they are generally silent waterfowl. The most familiar sound associated with the Mute Swan is the ‘whooshing’ of their wings in

flight because it takes extreme effort to take off from the water. Adult Mute Swans don’t have many natural enemies, other than the Fox, who have been known to attack, but because the Mute Swan is so big, fierce, and agile for a bird that size, the fox doesn’t always win! There are threats greater to the swan than predators. Pollution, lead poisoning, swallowing discarded fishing hooks and fishing line entanglements are extremely dangerous encounters for Mute Swans. Also, if they take flight, collisions with overhead power lines have been known to occur. Their longevity in the wild is only five to six years but in domestication, up to 25 years. Please keep in mind that it is unlawful for anyone to release Mute Swans into the public waters of North Carolina, but they can be maintained on privately controlled waters that do not have access to public waters, but then you must ensure the Mute Swans understand that they must stay put, and therein lies the challenge. The shelter staff is working hard to help our big, beautiful girl recover so she can return to her Mute Swan mate, as well as goose and swan friends in her neighborhood pond that does not reach public NC water!



photos by Linda Bergman-Althouse & Public Domain

“The swan, like the soul of the poet, by the dull world is ill understood.” *Henrich Heine*

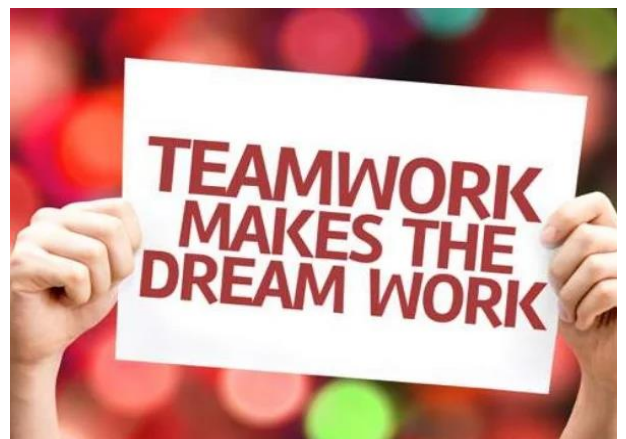
Coast Guard Releases Rehabilitated Sea Turtles!

by The Jacksonville Daily News Staff and NC Aquariums



Crew members from the USCG Cutter Richard Snyder prepare to release two juvenile Kemp's Ridley Sea Turtles into warm water. The North Carolina Aquariums were thrilled recently to release a large number of formerly cold-stunned sea turtles from December and January stranding events and thankfully were assisted by U.S. Coast Guard Stations Hatteras Inlet and Fort Macon. On January 30th, Station Hatteras Inlet released 22 rehabilitated sea turtles from the Sea Turtle Assistance & Rehabilitation (STAR) Center at the N.C. Aquarium on Roanoke Island. These recovered patients were small, juvenile Kemp's Ridley and Green species. On February 12th, U.S. Coast Guard Cutter Richard Snyder released 59 turtles as part of their cruise from Station Fort

Macon. The healthy turtles were transported to Station Fort Macon thanks to the help of volunteers from the Network for Endangered Sea Turtles (N.E.S.T.) and the Karen Beasley Sea Turtle Rescue and Rehabilitation Center (KBSTRRC), along with biologists from the North Carolina Wildlife Resources Commission (NCWRC). Rehabilitated turtles from both the N.C. Aquariums and KBSTRRC were released. The 59 sea turtles released Monday, February 19th, included North Carolina's most common species: Loggerhead, Green and Kemp's Ridley. Most of these turtles were brought to rehabilitation centers due to cold-stunning, which occurs when the water temperature drops quickly before the turtles can migrate to warmer water. This condition primarily affects juveniles of their species. The releases made room in the aquarium facilities as they continue to rehabilitate cold-stunned turtles. Presently, the NC Aquariums are caring for 62 cold-stunned patients with 41 at the STAR Center, 15 at the NC Aquarium at Pine Knoll Shores and six at the NC Aquarium at Fort Fisher. Sea turtles strand on North Carolina beaches throughout the year, so if you find a stranded sea turtle in North Carolina, call 252-241-7367 or your local stranding response team.

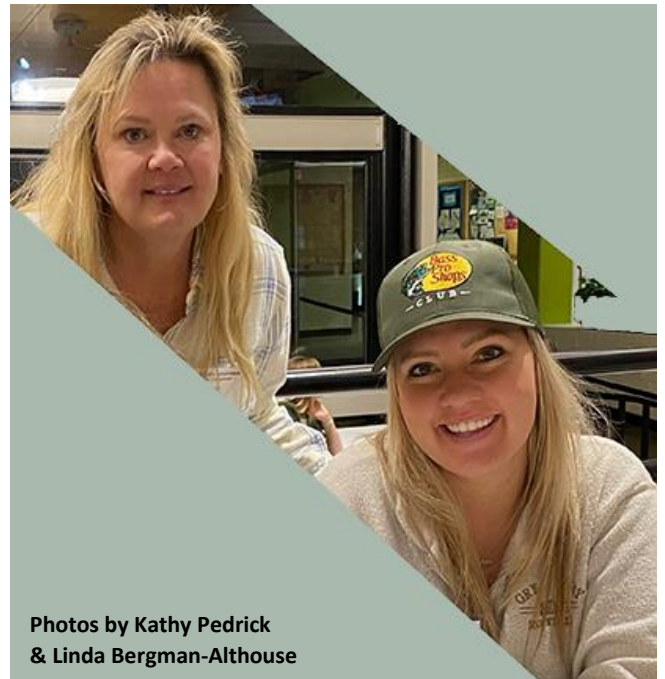


Photos by USCG Cutter Richard Snyder Staff This article was originally published in the Jacksonville Daily News on February 11, 2024 and appears here with permission under a CC BY-ND 4.0 license.

“Passing the Torch from Mother to Daughter”

by Kathy Pedrick, Founder of Deer Track Wildlife Rescue of Denver & WRNC Bd Member

Hello, my name is Kathy Pedrick. I grew up in Flemington, New Jersey and worked as a dental assistant after graduating from college. My love for animals came at a young age when I used to rescue small kittens and tiny mice. I volunteered at a veterinarian's office for Dr. Reynolds; he was an old-time farm vet who would see domestic animals, as well as wildlife. One afternoon, Dr. Reynolds asked me to take home some orphaned kittens, and of course, I said yes! He said, “raise them, and we'll re-home them.” Dr. Reynolds would take injured and orphaned animals and do whatever medical procedures needed to be done, and I would take the orphaned or injured babies, raise them, and release them. It was nice working that closely with a veterinarian because the animals always got the care they needed. After relocating to North Carolina with my husband, Brian, I quickly realized the laws in North Carolina were different than in New Jersey, so I had to obtain a small mammal rehabilitation license, and then a Rabies Vector Species (RVS) license, which allows me to rehab any orphaned and injured



Photos by Kathy Pedrick
& Linda Bergman-Althouse

animals that possibly could carry the rabies virus. I fulfilled the requirements for my small mammals' license and started caring for squirrels, bunnies, opossums, and mice. I would always bring these babies home and inside where my kids could see what I was doing. My daughter, Tiffine, would help, as my assistant, as best she could. I decided to get my RVS license which allowed me to rescue and care for raccoons, foxes, skunks, beavers, and bats. I loved being able to give needed care for these babies by providing nutrition, wound treatment, and housing for the little ones. As Tiffine got older she started to get more involved with wildlife. She graduated from Western Carolina College with a marketing and business degree, is self-employed and definitely took rehabbing to a new level. She has obtained her small mammal certification, her RVS

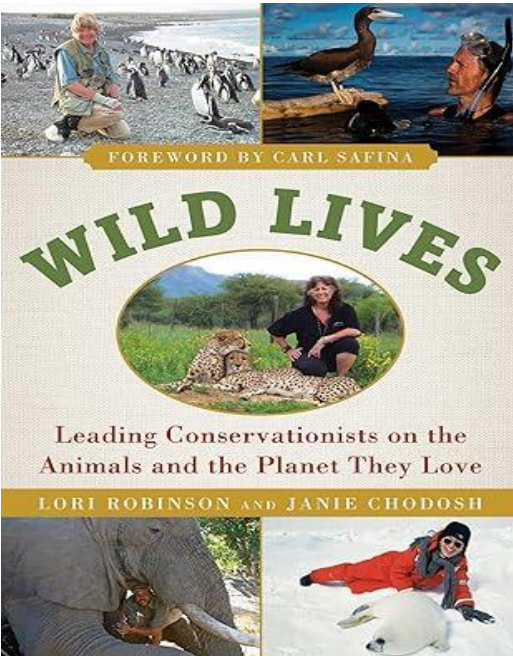


certification and has worked along with me through many late nights taking in wildlife and removing fly-strike maggots, warbles, bathing animals, administering wound care, providing all night feedings, cleaning and preparing cages, and designing new raccoon activities to keep their little and mischievous hands busy. She would feed, change bedding, and treat wounds as much as she could with all the small animals. Helping with baby raccoons ignited a passion in her for those sweet and tiny trash pandas, and this is where her love for wildlife grew immensely. Just looking into the soulful eyes of a raccoon put her on the fast track to earning her RVS license. Tiffine began working under me, and she was all in from there. Tiffine will drive anywhere to collect an orphaned or injured baby, will climb trees, and make raccoon noises (which she is very good at) to get babies to come down, never leaving one behind. Tiffine will spend days and nights feeding these little ones and playing with them to make sure they feel loved while they are on the track for eventual release to the wild. I am

so proud of her commitment and passion for all wildlife and glad she found her niche animal. It's not often mothers and daughters find the same passion and being able to join “wildlife rehab forces” with her has been amazing! As I pass the torch, I wish nothing but the best for her and the wild animals in her charge for I know if they are injured or orphaned, they will be in the best hands with Tiffine. I wish her the best with her future wildlife rehabilitation endeavors!

Wild Lives: Leading Conservationists on the Animals and the Planet They Love

by Lori Robinson & Janie Chodosh



Today we are faced with the alarming possibility that as many as 50 percent of species alive will become extinct within this century. This statistic is so staggering that scientists have begun to refer to the twenty-first century as the “sixth extinction.” But while this is alarming, all hope is not lost; conservation experts across the globe are working tirelessly to preserve our planet for future generations. In *Wild Lives*, twenty of these pioneers share their stories via exclusive interviews. Coming from different countries, diverse cultures, and a variety of socioeconomic backgrounds and specializing in different species, all these conservationists have an important characteristic in common: they have committed their lives to saving our planet and the majestic species that call it home. Passionate and inspiring, *Wild Lives* is an important and timely reminder of the beauty and fragility of our world and the obligation that every person has towards preserving it.

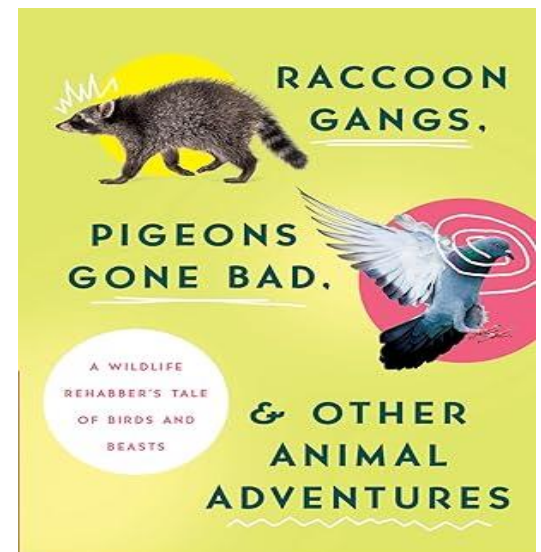
“This book is for all the wild ones with whom we share our planet and to all those dedicated to saving them.”

Check it out here: <https://bit.ly/491hlug> 4.5 stars.

Raccoon Gangs, Pigeons Gone Bad, and Other Animal Adventures: A Wildlife Rehabber's Tale of Birds and Beasts

by Trish Ann Konieczny

Trish Ann Konieczny didn't always dream of being a wildlife rehabilitator, but that changed as soon as four orphaned raccoons fell out of a tree, into her yard and into her heart. Since the Raccoon Gang first dropped in, her life has been energized by a passion to share God's love for all creatures by rescuing birds and beasts alike. Now Trish shares her most unique encounters with her needy new friends and how they've each provided a window into the animal kingdom God has created for us to care for and enjoy. You'll find enchanting stories from her time at Lion's Den Rehab, like those of **Spark**: an abandoned baby squirrel nursed back to health and eventual freedom, **George**: a homely, headstrong pigeon who loved rehab so much he wouldn't leave, and **Bunny**: an adorable but high-risk rescue rabbit determined to survive and thrive. Filled with heartwarming antics and up-close looks at life in animal rescue, this book will delight every lover of furry and feathered babies—and reveal incredible insights into our relationship with God's magnificent creation.



Check it out here: <https://amzn.to/48mYzC9> 4.9 stars.

HEY THERE! Reading is a **STAYCATION** where you can visit someone else's world or find those like-minded people to whom you can relate! “**The BOOKSHELF**” is a feature to highlight **recommended books** that you may enjoy. If you have a book recommendation, please email lbergmanx@gmail.com with your personal addition to “**The BOOKSHELF**.”

“A Squirrel’s World”

as written for ‘Carolina Salt Magazine’ by Linda Bergman-Althouse



They just keep coming in and surprisingly, without being blown and tossed by a hurricane or tropical storm. Infant squirrel admits are status quo after heavy rain and big wind activity, but the number of displaced and orphaned squirrels has not remained within routine breeding seasons and might need to be chalked up to a wet summer, possibly weakening nest structures or causing trees to fall. At most wildlife shelters, infant squirrels in every developmental stage, from pinky to fully furred, can be found in containers or chew proof enclosures throughout the facility and also in the personal care and homes of staffers or volunteers. Squirrels are familiar to almost everyone and are the second-most fed and watched wild animals, after birds. Most of us enjoy their antics and find them entertaining and if I may go so far, lovable. There are more than 200 squirrel species living all over the world, except Australia. In Eastern North Carolina, we are blessed with Eastern Grays, Fox, and Flying Squirrels. Most wildlife rehabilitators have great fondness for raising young squirrels to release, because, although messy and capable of fast and furious squirrel behaviors in adolescence, they are the easiest and usually, the hardest of all babies to rear. You don’t have to coax a baby squirrel to drink its formula from a syringe. The problem is getting the syringe full and the nipple in front of their face fast enough! When we

keep their tummies full and give them comfy, warm places to sleep, they are content, and we’d like to think happy, although their facial expressions never change much. Most of the squirrels coming in during the second breeding season of the year are Eastern Grays. They can start breeding at five and a half months, but usually breed for the first time at age one. The first litter of naked, toothless, and blind babies is usually born in February to March and the second in June to July, but those time frames have become overlapped or extended in recent years, so nature is not playing by our rules. Normally, two to six young are born in each litter. The gestation period is about 44 days; the young are weaned at seven weeks and leave the nest after 10 weeks. However, in the second breeding season youngsters will spend the winter with their mother.



Eastern gray squirrels build a nest known as a "drey" in the forks of trees, consisting mainly of dry leaves and twigs. Males and females may share the same nest or drey for short times during the breeding season or during frigid winter spells to keep warm. Unfortunately, they have been known to also nest in attics or exterior walls of a house, where they are deemed pests by homeowners. In addition, squirrels may inhabit a permanent tree den hollowed out in the trunk or a large branch of a tree, which, of course, is more preferred by humans. Eastern Gray Squirrels are members of the Rodent family and spend most of their lives in trees. They grow 17 to 20 inches long and have grayish-brown fur, except for their bellies which appear white or very pale. The bushy tail, used for thermal regulation and to sign an alarm by vigorously tail flicking, often has silvery-tipped hairs at the end. The squirrel's greatest tool may be its tail, which it also uses for balance, shade from the sun as an umbrella, a blanket and as a rudder when swimming. They have incredible balance and rarely fall from trees. They also run headfirst down a tree trunk, which happens rarely, if ever, with other animals. Communication among

“A Squirrel’s World (cont.)

as written for ‘Carolina Salt Magazine’ by Linda Bergman-Althouse

Eastern Gray Squirrels involves both posturing and vocalizations which include a squeak similar to that of a mouse, a low-pitched rumbling noise, a chatter and a raspy “mehr mehr” sound. Eastern Gray Squirrels sport four fingers on the front feet and five on the hind feet. Their bounding stride can measure two to three feet when at full speed. Their diet includes: acorns, Hickory Nuts, walnuts, Beechnuts, Maple (buds, bark, and samaras,) Yellow Poplar blossoms, American Hornbeam seeds, apples, fungi, Black Cherry, Flowering Dogwood, grapes, sedges, grasses, American Holly, mushrooms, insects



(adults and larvae), bird eggs, amphibians, and if hungry enough, might snatch a baby bird or frog. Squirrels have four front teeth that never stop growing but stay short due to constant wear and daily grinding they receive by constant gnawing. They chew and gnaw on everything as soon as they can. Bones, antlers, and turtle shells are preferred choices, likely because they provide a source of minerals sparse in their normal diet, as well as satisfy the need to grind. Squirrels are clever problem solvers and can figure most challenges out, such as a squirrel proof bird feeder. It might take a few tries to successfully raid that feeder, but in most cases, it will eventually be a win for the squirrel. The Eastern Gray Squirrel is a scatter-hoarder that hides or buries food in numerous small caches for later recovery. Each squirrel is estimated to make several thousand caches each season. Squirrels have accurate spatial memory for the locations of these caches and use distant and nearby landmarks to retrieve them. Smell is used only when the squirrel is within a few inches of the cache. Eastern gray squirrels are more active during the early and late hours of the day and tend to avoid the heat in the

middle of a summer day and do not hibernate as some folks think. Predators include humans, hawks, weasels, raccoons,

domestic and feral cats, snakes, owls, and dogs, so they have reason to employ defensive tactics such as freezing in place and zigzag running at warp speed! Eastern Grays can live to be 20 years old in captivity, but in the wild may live up to 5 -12 years if they stay healthy, rely on their good senses of vision, smell, and hearing, and can outmaneuver the many predators trying to take them out! Although some people have a love-hate relationship with squirrels, we can’t ignore their great value to our ecosystem. Squirrels help control plant populations by eating many seeds, fruits, and insect populations. They are a good means of seed and nut dispersal, and therefore help reforest trees and other plants. They are highly intelligent and fascinating to watch. Of course, they can get into a little mischief, but because they are so cute and lively, most of us just deal with it and have fun trying to outsmart them, which is not easy!



Photos by Linda & John Althouse

Quinto's Comedy Corner by Linda Bergman-Althouse

QUINTO SAYS: YOU might be a WILDLIFE REHABILITATOR -

IF . . . you know what Australians call a lazy kangaroo. (a pouch potato!)

IF . . . you heard the one about the man walking a penguin on a leash. A passing lady walking her dog said, "Hey, that penguin is a wild animal. You need to take it to the zoo." The man thought for a moment and said, "You are absolutely right. I'll take him now." The next day she saw the man again, and he was still walking the penguin on a leash. She said, "I thought you were taking that penguin to the zoo!" He replied, "I did, and he loved it. Now, we're going to the movies."

IF . . . you know how to organize a party for a bunch of squirrels?
(just throw nuts!)



Photo by John Althouse

Quinto wishes everyone a HAPPY & SUCCESSFUL BABY SEASON!!

WRNC MEMBERSHIP! If you have a one-liner that describes the unique life and double-down passion of a Wildlife Rehabilitator (**tell it like it is!**) and you would like to share with **QUINTO** for his column, please send it to lbergmanx@gmail.com

WRNC Newsletter Schedule

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 **Linda Bergman-Althouse** at lbergmanx@gmail.com **Thank you!**

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

March 1st

June 1st

September 1st

December 1st

WRNC Newsletter Editor & Copy Editors

Linda Bergman-Althouse	Editor	Carla Johnson	C-Editor
Jean Chamberlain	C-Editor	Ann Rogers	C-Editor

