2023 Annual Review

An Annual Publication of the Mercer County Wildlife Center

A DAY IN THE LIFE OF A WILDLIFE REHABILITATOR

Nurturing Nature with Compassion and Collaboration



The Early Start

The day begins with a sense of anticipation and purpose for the wildlife rehabilitation team—comprised of staff, volunteers, and veterinarians. Even before the sun graces the horizon, the team gathers to review the day's agenda, recognizing the unpredictability that comes with caring for wildlife.

Morning Rounds

Armed with steaming cups of coffee, the team enters the clinic for the morning rounds. Each enclosure at the center tells a unique story. Here, young squirrels are nestled in warm receiving blankets, and tiny songbirds chirp softly in incubators. As the rehabilitator checks on their charges, volunteers assist with feeding, cleaning, and monitoring. Meanwhile, the veterinarian examines animals with complex medical needs, ensuring a comprehensive approach to care.

what's inside

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BY KIMBERLY DAWES

Have you ever wondered what goes on behind the doors at the wildlife center?

Let me just start by saying that there is no such thing as a typical day when it comes to wildlife rehabilitation. Like any hospital – our day is dictated by the unexpected. I have taken liberties with this article attempting to show a full comprehensive day of a wildlife rehabilitator, a guardian of the wild, supported by a team of passionate volunteers and skilled veterinarians.

O)	Follow us on Instagram @ Mercercoparks
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What Can I Do?

Eastern Painted Turtle

Observations

Doppelgangers in the Food Web

Sarcoptic Mange Treatment in Red Fox

Patient Log







Office Supplies

Forever stamps – rolls or sheets Copy paper: 8 1/2" x 11" Liquid Paper

Animal Care and Handling

Laundry detergent

(perfume and dye free, any brand) Bleach

Trash bags (13 & 38 gallon size) Food storage bags (gallon size) Pet carriers – medium size only Paper towels Receiving blankets Heating pads (no auto shut-off)

OTHER SUPPLIES

Pens Surge protector strips Scrub brushes

Animal Food

Gerber's jarred baby food: chicken -2.5 oz. Gerber's jarred baby food: beef -2.5 oz. Pedialyte Wild bird seed

Medical Supplies

Fr feeding tubes: 3-1/2, 5 & 8 Gauze Pads: 4"x4" & 2"x2" Latex exam gloves: medium and large Tegaderm (any size)

PLEASE NOTE
WHERE BRAND NAMES ARE
SPECIFIED WE CANNOT ACCEPT
SUBSTITUTES

Dear Friends,

There has never been a more exciting time to be part of the Mercer County Wildlife Center. Our Wildlife Center is a unique, modern facility that not only allows greater possibilities for treatment and rehabilitation of injured and displaced wildlife, but new opportunities to engage and teach the public about nature. This facility is one of the only sites of its kind in all of New Jersey.

Over the past 40 years, the Mercer County Wildlife Center has provided an invaluable service to County residents and to our surrounding communities. Each year, our staff and volunteers accept and treat an average of 3,000 birds, mammals and reptiles at the facility and handle more than 15,000 telephone inquiries from the public. As Acting Executive Director of the Mercer County Park Commission, I am grateful for the number of our residents who, in the past, have chosen to volunteer their time in the effort to aid the native wildlife of the area, and I am equally thankful for the many businesses, organizations, veterinarians and others who donate a variety of goods and services.

The Outdoor Education Environment, which was officially opened to the public in 2016, has educated thousands of citizens, of all ages, about the various wildlife that are in our own backyards: the bald eagle, Virginia opossum and peregrine falcon, to name a few. I encourage you to visit during operating hours for a free, self-guided tour.

Please consider giving back in any way you can, whether through volunteerism, donating supplies or dollars, or simply telling a friend. Thank you again for your generous support of Mercer County Wildlife Center and the County of Mercer. Best wishes in the year ahead.

Sincerely,

Joseph A. Pizza

Jul - Puzza

Acting Executive Director

Mercer County Park Commission



HOW WE GET IT DONE ...

2023 VOLUNTEERS



MERCER COUNTY PARK COMMISSION

President: Amber Forrester, Esq. Vice President: Marissa Davis Sharon Shinkle-Gardner Eleanor Horne Andrew Koontz Antonio Martinez, Esq. Kelly A. Mooij, Esq. James J. Schulz, Jr. Walter D. Smith Counsel: R. David Blake, Esq.

STAFF

Diane Nickerson, Director Jane Rakos-Yates, Deputy Director Nicole Golden, Rehabilitation Manager Kristi Schollenberger, Clinic Supervisor

WILDLIFE CENTER FRIENDS BOARD OF DIRECTORS

Sharon Lauchaire, President JillAnn Murphy, Treasurer/ Executive Director Linda Proefrock

VOLUNTEER VETERINARIANS

Peter Batts, MRCVS Jerome M. Glickstein, VMD L. Paul Lanctot, VMD Erica A. Miller, DVM Chandler Navara, VMD Paul Wagner, VMD Jason Wilson, DVM

ART DIRECTOR/EDITOR: Jami Arbizu

Clinic **Supervisors**

Reece Buckley Carlene Chianese Shelby Coulton Samantha Cruz Kimberly Dawes Jack Dreger Lisa Hewitt Adrianna Manchen Megan Morici

Volunteers

Ross Amico Bonnie Baker-Casally Kathy Bascio Cathy Beans Bob Bowden Jennifer Brady Michelle Brewer Daniel Buckley Susan Buckley Lisa Butterfield Kevin Buynie Nina Cally Sarah Carey Soledad Cepeda Michael Christensen Liz Compton

Ronnie Daldos Maureen Danovski Julie Doerr Ashley Emmel Kim Eschbach Lyla Escobar Sue Faigier Colleen Ferrante Janet Forgrieve Stephanie Foy Emily Frascella Deb Freedman Susan Gallagher Marie Hendricks Peg Hanna Juanita Hummel Meghan Hyde Lois Keats Carrie Klakowicz Joanne Klempner Andrea Kollath Ellen Kubala Elizabeth Kuziel Cheryl Lappetito Bevan Levy Michele Mariano Lynn McCullough Susan Michniewski Linda Mooney Betty Moran

Beth Morpeth Wendy Most Stephanie North Sarah Outerbridge **Geoffrey Peters** Adrienne Pitrelli Janice Ouilla-Bud Shari Rexroad Tim Richards Sussi Riggleman Marilyn Sanders Annie Scrupski Lvnne Scymanski Dave Sedmak Jodi Specter Earl Stannard **Taylor Sternotti** Aggie Szilagyi Theresa Tandaric Jovce Tatsch Margaret Taylor-Ulizio Diane Turner William Wall Barbara Warfel Kathy Williams Mary Wood **Brad Zeller** Sharon Zimmerman

Spring/Summer/Fall Interns

Clara Gutkind Anne LeMorvan Maya Kubanoff Mackenzie Leung Rilev Lona Sara Mannuzza Montana Pell Isabella Richardson Julia Sheehan

Kutztown University McGill University Penn State - Abington **Rutgers University** Stockton University The College of New Jersey West Carolina University Vermont University Delaware Valley University



Mercer County Wildlife Center is owned by the County of Mercer and operated and maintained by the Mercer County Park Commission. Joseph A. Pizza, Acting Executive Director www.mercercountyparks.org



A Note from the President

The Wildlife Center Friends supports the critical work of the Mercer County Wildlife Center. We are fortunate to have the Wildlife Center, its expert staff, and its dedicated volunteers who not only provide care and rehabilitation to injured and orphaned wildlife, but also provide education and awareness that teaches us all how to coexist with and protect our natural habitat and its inhabitants. Once again, the Board of Directors of Wildlife Center Friends recognizes and thanks the staff, volunteers, veterinarians, interns, and donors who allow this special work to happen.

While the non-profit board may not always be that visible, the dollars that it raises fill critical gaps for patient care and fund special projects including salaries for interns, support for the enrichment program, Eyes on Eagles, volunteer recruitment, support and management and staff education.

The Board could not provide this assistance without the assistance of several very special people and its new Executive Director JillAnn Bartels. In 2023, the Board started a search for a new executive director only to find that we already had her in our board member and Treasurer. Fortunately, she will serve in both capacities as we look to expand the board. In addition, Board member Linda Pruefrock is an incredible asset to the Board, always asking tough questions and looking at the details and fine print. We are very grateful for their service to Board, the Center and animals we all care about.

I also want to thank several people who help the Board produce fundraising materials, social media content, volunteer recruitment and manage donations; Kim Dawes and Tara Kamp. And a special shout out to Shelby Coulton who assisted with various Board functions and has accepted a full-time position several months ago. We know that she will remain connected to the Center.

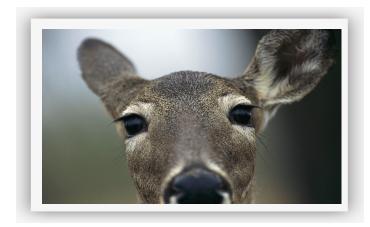
Finally, if you have not noticed, Wildlife Center Friends has expanded our social media presence to promote outreach and education. Posts include interesting facts, information about wildlife care, supply needs for the center, and wonderful wildlife images - many provided to us by wildlife photographer Eric Sambol. Please follow us at Facebook: https://www.facebook.com/WildlifeCenterFriends and/or Instagram: https://www.instagram.com/wildlifecenterfriendsinc/# and share the content with your friends so that we can expand the reach of our important messages.

Sharon Lauchaire

President, Wildlife Center Friends

OBSERVATIONS

BY DIANE NICKERSON



The year 2023 started off with all of the protocols that we had put into place for our "new normal" living in a Covid world topped off by highly pathogenic avian influenza (HPAI). We were becoming more comfortable and cautiously optimistic. We settled into our new rhythm and, as always, continued our work.

During 2023, MCWC treated 2,519 new patients, encompassing 118 species, released 54% back into the wild for a second chance. Looking back at our caseload for 2023, some rather unusual cases passed through our There were new species, genetic abnormalities, toxins, and human interference. Be sure to check out the patient log on page 9 to find out about all of the interesting patients. The year became a rebuilding year for our small army of volunteers. Currently, 75 are actively We are incrementally working volunteering. our way back to a full complement of 150 volunteers! Look for the article by Sarah Outerbridge about being a new volunteer on page 18. Julia Sheehan submitted an article about her college intern experience. They both shine a light for us on the wonder of working with wildlife for the first time! As staff, we tend quite as awed as we once were. It is good to be reminded how very lucky we are on a daily basis. And, Kim Dawes gives a

behind the scenes look at a day in the life of the center on page 1.

Staff member Adriana "Arie' Machen takes a look at some of our smaller invertebrates (page 14) and Nicole Golden added some information on one of our native species, the eastern painted turtle (*Chrysemys picta*), for this publication (page 24). Jane Rakos-Yates shares information on one of the more common afflictions of red fox (*Vulpes vulpes*) (page 19). Kristi Schollenberger offers some tips on living with our wild neighbors on page 22.

The *Eyes on Eagles* program, a collaboration between the Wildlife Center Friends, the Mercer County Park Commission, Conserve Wildlife Foundation, and PSE&G resumed in 2023. Each of the two nests in our parks produced a single chick. Due to HPAI still being a factor in the area, neither of the nestlings were pulled for health checks and banding. Hopefully, these practices will resume in 2024. Check the Park Commission website for updates https://www.mercercounty.org/home/showpublisheddocument/29089

All of our education ambassadors were removed from programming in March of 2020 due to cessation of programming caused by Covid. During late 2022 and all of 2023, a concerted effort to re-train all of the education ambassadors was undertaken. It is a slow process. We have begun the resumption of outreach education programming on a limited basis. A reminder that the Outdoor Education Environment, adjacent to our building, remains open. The hours are Wednesday through

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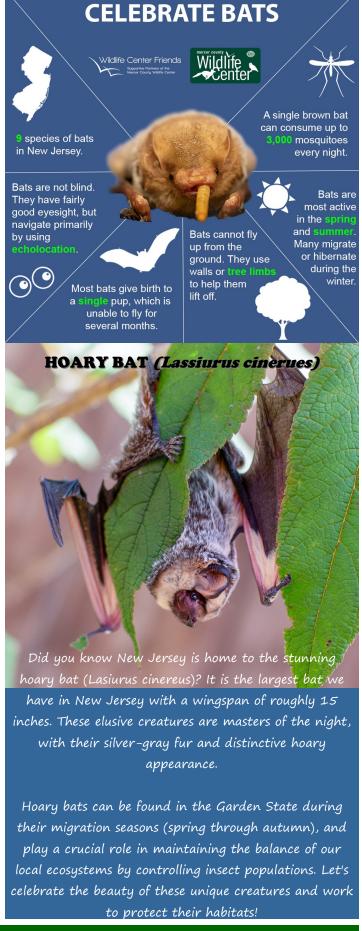
Sunday, 10:00am to 4:00pm in the fall and winter months and until 5:00pm in the spring and summer months. The education ambassadors are on display in this area. Admission is free.

This is where I normally thank all of our volunteers for their service throughout the year. We are slowly working our way back to prepandemic numbers of volunteers. Our volunteers show up week after week, month after month, and many, year after year. For the 2023 season seventy five hearty souls jumped in to work with the patients and staff to keep the center operational. We cannot thank them enough for their continued efforts.

Finally, thanks to you, our members. We spoke to over 15,000 of you this year by telephone, trying to answer your questions and concerns about your wild neighbors. We hope you will continue along our journey with us in the years ahead.

We continue to be here to serve you because you care enough to be there to support us.





A DAY IN THE LIFE... (CONT.)

(Continued from page 1)

Nutritious Care

Feeding time becomes a collaborative effort. Volunteers prepare specialized diets with precision, under the guidance of the staff. It is a synchronized dance where each participant plays a crucial role, contributing to the well-being of animals on the road to recovery.

Intensive Care and Compassion

For animals requiring intensive care, the combined efforts of staff and veterinarians come into play. Medications are administered, bandages are changed, and physical therapy is conducted, creating a holistic approach to rehabilitation.

Community Engagement

In the afternoon, some staff must shift their focus to education and outreach. Some lead tours of our outdoor education area for visiting school groups, teaching children about the importance of wildlife conservation. Some give presentations at local events to raise awareness about the center's work. These activities not only spread awareness about wildlife conservation but also foster a sense of community involvement in the rehabilitation process.

Emergency Response

Wildlife emergencies do not follow a schedule. Throughout the day, many calls come in from concerned citizens and animal control officers reporting injured or displaced infant animals. Rehabilitators must provide support in answering questions, educating concerned callers, and coordinating appointments; all while ensuring swift and effective responses.

Evening Check-Ins

As the day winds down, the team comes together for a final check of the clinic. Volunteers ensure that each enclosure is fed and clean and comfortable. Many loads of laundry have been washed, dried, folded and put away. Many dishes have been cleaned. The center has been stocked with all the supplies needed to do this again tomorrow. The collaboration of feeding and cleaning lasts into the evening, providing a sense of security for the animals under their watchful care.

Wildlife Release: A Moment of Triumph

The crescendo of the day reaches its peak with the culmination of a triumphant moment—wildlife release. Animals are ready for release once they have undergone rehabilitation and then pre-release conditioning in our outdoor enclosures and can do all the behaviors required to survive in the wild: find food, avoid predators and identify a mate. Our veterinarian has assessed which animals can be released and returned to their natural habitat, marking the fruition of the team's efforts, and providing a profound sense of fulfillment for all involved.

Reflection and Dedication

As the team disperses, there is a moment for reflection. Challenges are met with collective resilience, and successes are shared among the team. The interconnected efforts of staff, volunteers, and veterinarians creates a tapestry of care, shaping the narrative of wildlife conservation.

Conclusion

A day in the life of a wildlife rehabilitator is a symphony of compassion, collaboration, and unwavering dedication. It is a role that requires expertise, empathy, and resilience. From rehabilitators and volunteers to veterinarians, each member plays a crucial role in preserving our wildlife. Their work is a testament to the power of human kindness and the enduring bond between humans and the wild creatures with whom we share this planet.



PATIENT LOG

MCWC TREATED 2,519 ANIMALS DURING 2023

Welcome to the 2023 Patient Log. The past year brought us new species, new challenges with species we have treated before, and a number of firsts. Find out about some of the more interesting cases that passed through our doors during 2023. The year brought 2,519 new patients. Happily, we were able to treat and return 54% of those patients to their native wild habitats.

June was a month filled with raptor species that are listed as endangered species in New Jersey. It began by "raining" falcons along the Delaware River. The first group included four fledgling peregrine falcons (Falco peregrinus) that fell from three different nests under bridges along



the river. Three of them arrived between May 29th and June 3rd; the fourth arrived later, on the 21st of June.

Normally, when these young birds leave the nest (or fledge), they are capable of flight. Their parents continue to hunt for them while they develop skills to catch prey on their own. Unfortunately, this group decided to leave home early. Fortunately, the group of volunteers and staff from New Jersey Fish and Wildlife (NJFW) keep close tabs on these nests. All were noted missing almost immediately and were picked up before they could get in any more trouble.

They arrived at the center one after the other. They were all mildly dehydrated, a little thin, and a few had blood in their mouths from the unceremonious landing on the pavements below. However, all were in relatively good condition. Supportive therapy was provided and they were moved to the outdoor pre-release conditioning flight enclosure. Within two weeks, we had three "bird rockets" in the enclosure. Arrangements were made with Kathy Clark from NJFW to transport the birds to a release site where their parents would be able to continue their care.

On June 12th, the first three arrivals were released without incident. The release site was monitored and adults appeared in short time to take over the care of the fledglings. The fourth bird was transferred to our colleagues in Delaware at Tri-State Bird Rescue and Research (TRBRR). It was a little younger than the others and needed more time. Thankfully, TSBRR had their own little colony of peregrine fledglings.

After a couple of weeks of exercise and conditioning at TSBRR it was also released without incident on June 30th.

Case numbers 23-889 and 23-897, bald eagle (*Haliaeetus leucocephalus*) nestlings arrived on June 3 and June 4, respectively. Both were nestlings that were found on the ground after their nest collapsed at Carnegie Lake in West Windsor. The bald eagle parents were observed in a tree near the collapsed nest. A plan was put in place to build a new nest at the same location. The bald eagle nestlings were treated at the Wildlife Center while a plan was developed.

On June 11, under the direction of volunteer tree climber and expert eagle nest builder, John Heilferty (retired chief of NJFW), the new nest was built. In the meantime, the nestlings were at the center getting final

duffle bags and sent up ropes to their new nest. That evening, the parents were viewed at the nest with their young. The best results for the young always involves returning them back to their parents.

Both of the eagle nests in our Mercer County parks produced young this year. There were twins in the Mercer Meadows nest and a singlet in the golf course nest at Mercer Lake. Case number 23-1601 arrived on July 29th from the nest at Mercer Oaks Golf Course. The fledgling bald eagle was found on the ground, unable to fly. The employees at the course gave chase in a golf cart until eagle nest watch volunteer, Kevin Buynie, arrived to capture and transport the wayward youngster.

An examination and radiographs revealed a small fracture of the left radius – on a bird,



checkups. Once that was done, they were weighed, measurements were taken, and state and federal identification bands were fitted onto each leg.

Then, it was time for transport back to the nest location. One by one, the nestlings were misted with water. Misting the feathers to dampen them acts as a deterrent to attempting flight until the feathers dry – we did not want them back on the ground, again. They were individually secured in

the smaller bone between the elbow and the wrist - most likely a result of falling from the nest. Since the fracture was not displaced, no corrective surgery was needed. The wing was wrapped to its body to stabilize the fracture. The fracture healed in a few weeks, and the bird began physical therapy and flight conditioning.

On August 16^{th,} following a final checkup, which included weight, measurements, and fitting with state and federal identification

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bands, it was returned to a location close to the nest. The release went well. The bird flew out over the lake, did a large circle to survey the area, came back, made a low pass by the release team, and landed on a power tower near the nest location. There it waited for its parents to return.

A first-time species arrived on September 17th from a client in Mays Landing, NJ. The marbled salamander (Ambystoma opacum) was assigned number case 23-2144. The patient had been discovered trapped in a pool filter.

The marbled salamander is a stout, black and white banded salamander. They are found in the eastern United States, from southern New England to northern Florida and west to Illinois and Texas. Their

An examination revealed a skin laceration on its back from its encounter with the filter basket. Amphibians generally heal quickly. This one was true to form and was released on October 11th with enough time to go into hibernation.



This year also brought us an invasion of Southern flying squirrels (Glaucomys volans). Not since the year of a dozen fox kits has there been such a "cuteness overload."



Between the months of April and November, eighteen were presented for care. Most of them were neonate and infant flying squirrels.

In the wild, they are nocturnal cavity nesters and have a specific habitat. In a rehabilitation setting, they require specific feeding, housing, and husbandry. Their daily care was intense. Weighing in between 8 and 25g on arrival, getting enough nutrition into them was a challenge until they became accustomed to nursing from the foreign objects that most definitely were not their mothers.

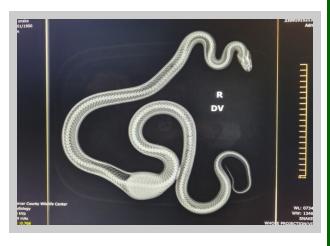
Next came the weaning process. Once they became accustomed to nursing on the strange items, they were even more reluctant to give them up for solid food. But, persistence finally paid off. Soon, there were little blurs running around the enclosures. The next task was to make sure that they did not escape during daily feedings and cleaning.

Finally, they were ready to go. At around twelve weeks of age, each litter was provided with a nest box. They were returned to their sites of origin and, with the resident's permission, were released.

On September 19th, all the way from Sewell,

NJ, case number 23-2164 was presented to us for care. The client had found the black rat snake (*Pantherophis obsoletus*) under her chicken coop. It had swallowed a wooden egg.

Wooden and ceramic eggs are used to encourage chickens to lay eggs When snakes raid the continuously. chicken coop for eggs, they cannot discern real eggs from wooden or ceramic varieties. The snakes are unable to digest the imposters and their gastrointestinal become blocked. tracts Without intervention, a painful death follows.



The only solution to this problem is a surgical one. Surgery was performed on September 22nd, by a new volunteer veterinarian, Chandler Navara, VMD. The stomach was located and incised and a wooden egg was milked out through the opening. Thankfully, there was no long-term damage from the foreign object encountered. After the surgery, the patient was fasted for two weeks.

Sutures were removed on October 13th. Solid foods were introduced and the waiting game began. The test of the surgical success was the ability of the snake to digest and process food and then produce feces. Following five weeks of

(Continued on page 12)

recovery, on October 30th, the client picked up the snake to release it under her chicken coop, where it has been taking care of a rodent problem for years. She is hoping it will continue to do so for years to come. No more wooden eggs in that coop!

The final cases of note arrived on October 5th in the form of two fledgling black vultures (*Coragyps atratus*) who were assigned case numbers 23-2289 and 23-2290. They had been observed on the

susceptible, the decision was made to not bring them into the building and risk infection of other patients. They were placed in an outside aviary and fed last each day.

Two weeks later, though they were eating, one became very lethargic. Having passed a suitable quarantine period, they were brought inside and weighed. Despite getting nutritious meals for two weeks, both had lost a considerable amount of weight. Radiographs revealed foreign objects in their digestive tracts. Pieces of wire



ground for five days by a homeowner. Prior to those days, they had been nesting in the barn with their parents. There had not been any parents observed since they had moved out of the barn, so the local animal control officer brought them to the Center.

Upon being admitted, they were both very quiet, thin, and dehydrated. They were fragile, so the choice was made to avoid anesthesia and therefore not take radiographs immediately. A regimen of fluids and small easily digestible meals was started. Also, as the Center was still dealing with highly pathogenic avian influenza (HPAI) in the area, and vultures are very

fencing, nails and staples. Apparently, without parents to feed them, they had been picking up anything on the ground that caught their attention. Surgery was scheduled for two days later.

Unfortunately, the smaller of the two died prior to surgery. The larger fledgling did very well. All metal pieces were removed and, over the course of the next four weeks, the surgical sight healed nicely. On November 11^{th,} it was successfully released into a local flock of black vultures.

Until next year!

INTERN ARTICLE

BY JULIA SHEEHAN

Throughout my entire life I have been passionately devoted to animals and their well-being. My passion for animals, combined with my desire to learn about their behavior, and physiology, led me to pursue a bachelor's degree in biology with a concentration in zoology.

This past summer I participated in the wildlife technician internship program at the Mercer County Wildlife Center. Each day brought new challenges and opportunities to grow, and I am grateful for the hands-on experience that has enriched my knowledge of wildlife rehabilitation. As a wildlife technician I cared for a wide range of species, including mammals, birds, and reptiles that needed medical care due to being sick, injured, or displaced. My responsibilities encompassed daily husbandry tasks such as cleaning enclosures, preparing diets, feeding, providing enrichment, and administering medications. Additionally, I had the privilege of bottlefeeding infant racoons, squirrels, deer, and foxes.

A large portion of my position included daily record keeping monitoring the day-to-day health progress of each animal to ensure their health was improving. Also, to observe if any animals had a sudden decline in their health and needed further medical attention.

One of the most rewarding parts of this internship was providing enrichment to ensure animals would gain the capabilities to survive on their own in the wild. One way we provided enrichment for the raccoons was making "popsicles" to stimulate playful





behavior and help guide them to finding food sources in the water once they leave the rehabilitation center.

I would have to say the best part about this internship was taking care of animals from a very young age and then being able to release them back into the wild to spend the rest of their lives. It was a beautiful, yet nerve wracking moment to go on one of the raccoon releases and watch them eagerly explore their new home. Seeing them confidently enter the water and skillfully climb up a tree filled me with a sense of accomplishment and joy knowing they have a second chance in the wild.

I also want to express my gratitude for the incredible support and collaboration among staff, volunteers, and supporters, which serve as the backbone of this organization; I am grateful to have been a part of such a dedicated and caring community.

This internship gave me valuable hands-on experience working with animals that I will carry into my professional career. I hope to one day own a wildlife sanctuary and take care of animals that cannot be released back into the wild. As I reflect on my time at the Mercer County Wildlife Center, I leave with a deepened appreciation for wildlife and a commitment to continue supporting conservation efforts. This internship has been a steppingstone in my journey, and I am excited to apply the knowledge and skills I have gained in future endeavors. Thank You!

DOPPELGANGERS IN THE FOOD WEB

BY ADRIANA MANCHEN

I have always been a bit uncomfortable when someone tells me they know or met someone that looks just like me. I often wonder what they look like, what they sound like, and just in general, what are they like.

As people, we see big differences between each human. Take for example Tina Turner and David Bowie. Two completely different people, right? However, this differentiation of individuals does not seem to happen as easily when it comes to other animal species. We tend to think most eastern gray squirrels look alike or that all American robins look the same. These are just two examples, but they are the way we tend to see species other than our own.

Often, as humans, we have a hard time even differentiating between species. Take for example the southern and northern flying squirrel or any of the warblers that migrate through our area each year. This becomes especially problematic when one of the species in question is the target of a campaign against its existence, such as is the case with many invasive species. The problem is further compounded when the non-invasive of the two similar species is a food source for our native wildlife, which happens to be the case for many of the native invertebrates that have lookalike invasive species in the area.



This year we had a beautiful female yellow garden spider take up residence right outside of our staff entry door here at the center. If you have not had the chance to see one, they are stunningly big with yellow, brown, and black markings. Everyone (even those that fear spiders) admired her while she hung out in the garden bed before



she laid her egg sac in the middle of the fall. This was the first time since my arrival in the Garden State that I had seen one of these and was so happy to see her here. I thought to myself, "hey maybe I will start seeing more of these gals!" My excitement was short lived though. Sometime in mid-November I saw an article in my Google feed that the Joro spider (found in Asia) might be the next big invasive in New Jersey (Wallace, 2023). This spider has apparently spread across the southeast and is now starting to go up the mid-Atlantic states (DeLetter, 2023). I had never heard of the Joro spider, but upon first glance, it looks very much like our native yellow garden spider. They are both orb weavers after all. The biggest difference can be found on the abdomen of the female Joro, which is reddish in appearance. This is where my worry set in.

I understand that the invasive creatures, including invertebrates, wreak havoc on the environment and local native populations of animals. Public service announcements against invasive species are reaching the people and the public is listening. Sadly, there are assaults carried out that end up destroying natives rather than the intended invasive. It is true that humans (including myself) are disconnected from the natural world and we do not recognize many of the species with which we share our spaces. In the end, the native lookalikes end up paying the ultimate price – they are accidentally killed being mistaken for the invasive or they are outcompeted by the invasive if there are limited resources.

(Continued on page 15)

It is important to know about invasive species; however, it is also important to educate the public about the native plants and animals that can be easily mistaken for the invasive species. In a perfect world all warnings of invasives would include a list of native lookalikes and an identification key. It could help eliminate confusion, eliminate unnecessary culling, and maintain a healthy population of native creatures (especially invertebrates) that all the other native animals, such as songbirds, depend on to survive.

The following is a short (and very incomplete) list and pictures of some invertebrates in our area that are unlucky enough to have invasive doppelgangers from other areas in the world that are causing problems in our area.





Six-spotted tiger beetle

Emerald ash borer

The native six-spotted tiger beetle and the invasive emerald ash borer (EAB)

Did you know that we have native insects in our area that are just as metallic and brilliant in color as the invasive EAB? I am kind of embarrassed to say this, but I knew about the EAB long before the six-spotted tiger beetle. Unfortunately, the tiger beetle bears a striking resemblance to the borer devastating swaths of forest and causing billions of dollars' worth of damage (Kovacs et al., 2010).

The native Carolina mantis and the invasive Chinese mantis and European mantis

This one seems to cause a lot of confusion. It seems like everyone loves a praying mantis so it is no wonder people are thrilled when they see one. Unfortunately, we are often encountering the non-native Chinese and European mantids.

Carolina mantids tend to be mottled gray, brown, or green in color and are on the smaller side (about 2 inches). Since they sometimes are green, one must look at the combination of color, size, and wing size (wings are only present in the adult phase). Here is a comparison that might help with identification (Neff, 2017; Orr n.d.).

Carolina mantis:

Small (around 2 inches)
Wings cover about 2/3 of the abdomen
Face plate is more rectangular
Lack large spot on the inside of front legs
Has an oblong egg case

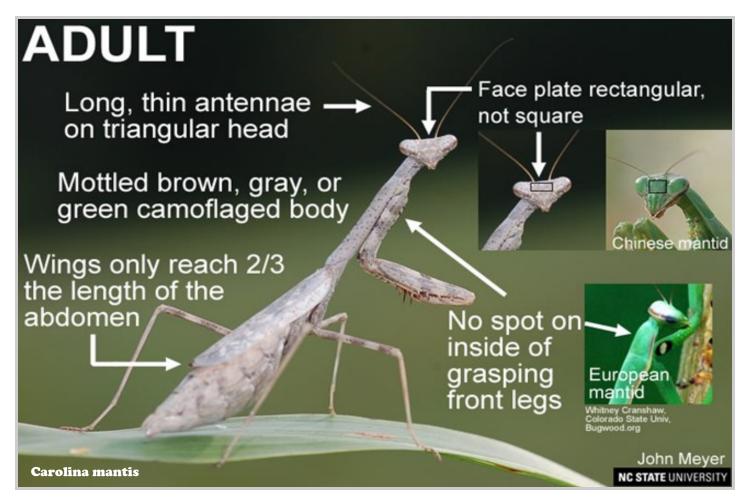
Chinese mantis:

Very large when fully mature Wings cover all of the abdomen Face plate is squarer Has a cube-like egg case

European mantis:

Has a large spot on the inside of front legs Has an oblong egg case

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The native cicada killer and the invasive Asian giant hornet (murder hornet) and European hornet

A few years ago, the news outlets exploded with a series of stories about Asian giant hornets, also known as "murder hornets." An alarm was sounded that they were now being found in North America on Vancouver Island and in Washington state. These stories caused total panic and people were freaking out when our native cicada killers became active in the late summer. Unfortunately for our native cicada killers, they look very similar to the invasive Asian giant hornet and the European hornet. Our native cicada killers are for the most part only interested in cicadas and are generally harmless to people. I get a kick out of watching them make their nest holes. They resemble little powerlifters when digging out their burrows with their back legs.

The non-native but beneficial earthworm (multiple species) and the Asian jumping worm.

Every now and then there are "good" non-native species. This tends to be the case with most earthworm species in our area, but not the Asian jumping worm, which is a type of earthworm. Earthworms are not indigenous, but we welcome them because most of the time they do wonders for soil. Jumping worms however cause a great deal of destruction to the topsoil, stripping it of all its nutrients when they feed. (Mitchell, 2022). For a gardener, farmer, and conservationist, they are a total nightmare.

Other natives with invasive lookalikes include the milkweed beetle (sometimes mistaken for the spotted lantern fly (SLF)), the white-spotted Sawyer beetle (often mistaken as the Asian longhorned beetle), and the rough stink bug and spined soldier bug (regularly mistaken for the brown marmorated sting bug), just to name a few (Spears, 2015). Actually, the number of natives confused as the SLF (New Jersey Department of Agriculture, n.d.) alone is surprising considering how much press it has received, but I guess it is because the nymphs look so different from the adults. If you are interested in finding out who else gets confused for the SLF, please check out https://www.nj.gov/agriculture/divisions/pi/prog/pests-diseases/spotted-lanternfly/about/.

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It is only fair to mention that some of our native wildlife has caused a great deal of frustration and destruction in areas of the world that have evolved without their presence. While they are essential to our ecosystems here, they have become invasive and a nuisance elsewhere. One such example is the common raccoon invasive in Japan and parts of Europe. As we all here can attest, they are smart, adaptable, and resourceful — I can just imagine what chaos they have caused in the areas not prepared to handle this wily animal.

With the exception of mealworms (*Tenebrio molitor*), we seldom think about the importance of invertebrates during our work here at the wildlife center. Our native invertebrates however do play a key role in the survival of the animal species that come through our doors every day. I feel a little bit like I am preaching to the choir here, but it is indeed a food web and all the players (sometimes especially the tiniest) are vital to its success.

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Photo Credits:

Joro spider

Photo take from:

https://www.usatoday.com/story/news/nation/2023/11/03/joro-spiders-study-spreading-us-states/71435278007/

Yellow garden spider

Photo taken from:

https://birdwatchinghq.com/common-spiders-in-new-jersey/

Six-spotted tiger beetle

Photo taken from:

https://www.in.gov/dnr/kids/animals/insects/six-spotted-green-tiger-beetle/

Emerald ash borer

Photo taken from:

https://extension.usu.edu/pests/research/invasive-insect-lookalikes

Carolina mantis

Photo take from:

https://entomology.ces.ncsu.edu/biological-control-information-center/beneficial-predators/carolina-mantid/#:~:text=Carolina%20mantids%20have% 20a%20face,gray%2C%20brown%20or%20green% 20color



Don't get paid, not because they are worthless, but because they are PRICELESS!

1st Year Volunteer

BY SARAH OUTERBRIDGE

Tuesdays 4pm - 8pm

When life's circumstances put me on a new path in life, I realized that with the changing current, I was given an opportunity to step into a path of self-discovery. The journey was not easy, but it made me realize what mattered to me in this new phase of life.

I remember, one day when I was sitting outside in my yard, I had this overwhelming feeling of happiness, simply from watching the birds fly, eat from the feeder, and call to one another. The squirrels were scurrying after each other, the rabbits were collecting some ground covering for their nests, and I thought to myself, "Wouldn't it be great to spend time being surrounded by nature's beautiful creatures?"

I discussed my thoughts and feelings with my son and daughter, and they suggested that I look into volunteering at the local wildlife center. In the past, I would call the Mercer County Wildlife Center to ask questions; like if I should take in a bird I found or what to do about injured animals in the neighborhood. Their guidance was always helpful. The center is open seven days a week, including holidays, and staffed with the most caring and dedicated people who work tirelessly to the needs of our local wildlife.

I reached out to the volunteer coordinator, Kim Dawes, who informed me what the volunteer's role would be at the center. She was very upfront about the volunteer position. It meant commitment to the shifts, even if scheduled on a holiday. I was told there would be a lot of laundry, cleaning, and washing of the animal's food dishes. That said, I was



still very interested and excited to do my part in helping the animals and the center.

The first few weeks after I started, I was absolutely exhausted. I would finish my work day at 3:15 pm and then rush over to the wildlife center to begin my 4pm - 8pm volunteer shift. Although I was physically and mentally exhausted, I had so many moments of pure joy. I knew what I was doing was making a difference and I was right where I wanted to be!

By the middle of June, a month since I had started, I found my groove, breezed through my tasks, and knew my way around the site much better. I loved my Tuesday shift! I even made myself available to fill in on other shifts when needed. It is true what they say, that when you love what you do, it does not feel like work. The staff are very knowledgeable and helped me so much along the way. I have grown so much in a few short months and found my happiness at the wildlife center. As I reflect on what this volunteer position has meant to me, I think about how it has developed me as a person, and how proud I am of myself for committing to something that matters so deeply to me. There was no monetary reward, but a whole lot of spiritual reward! The first year of experience was guite humbling and taught me what resilience means.

Nothing was as humbling as watching a constipated raccoon relieve himself everywhere, and yes, I mean

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everywhere. I learned patience and determination when I had to feed baby squirrels. The squirrels would take their time eating and if they did not suck properly from the feeding syringe, the chances of aspiration became higher and put their health in danger. I also learned that the fawns needed to be carried in a way so as not to scare them. You were also not supposed to talk to the animals, but the fawns made it almost impossible. So, I would talk to them - telepathically. The animals were delicate like newborns, humorous and threw tantrums like toddlers, mostly the raccoons! These experiences are just some of the few examples of what volunteering was like for me.

The Mercer County Wildlife Center is more than just a county office. It is a life-saving, temporary home for the young, displaced, and weak wildlife. I feel lucky to have had this opportunity. I am looking forward to starting the volunteer season, again, in the Spring of 2024. This time, I will be better at navigating the walk-in refrigerator for raw dog food and will not stand there for five minutes moving things around! I truly hope more people commit to helping the Mercer County Wildlife Center. Monetary donations, gifting supplies, volunteering their own time, and even just becoming more aware of the threats to wildlife would mean so much to me, but also to what the center represents.

I leave you with this quote from Muhammad Ali, "Service to others is the rent you pay for your room here on Earth".

SARCOPTIC MANGE TREATMENT IN RED FOX

BY JANE RAKOS-YATES

Sarcoptic mange has increasingly become the scourge of red fox (*Vulpes vulpes*) populations in New Jersey. Red fox populations have increased because they have adapted well to human dominated landscapes. The Wildlife Center receives over 300 telephone calls and inquiries, annually, from residents concerned about a red fox with

A photomicrograph of the scabies mite, Sarcoptes scabei. They are microscopic and cannot be seen with the naked eye.

mange in their neighborhood. This article will discuss sarcoptic mange in red fox, mange treatments, and the Wildlife Center's mange protocols.

There are many more foxes, but increasingly there is less habitat to support them. Because there is less habitat, red foxes are often forced to share space and territory with other red foxes. A typical territory for a single red fox is two to five square miles. Sharing or overlapping territories can lead to increased transmission of sarcoptic mange.

Sarcoptic mange is a skin disease caused by a small parasitic mite (Sarcoptes scabiei), several thousand of which may burrow into a single squarecentimeter of skin. Female mites burrow into the skin where they may live for up to a month. As the mite burrows, body tissue, fluids and debris (mite feces) are deposited on the surface of the fox's skin forming an intensely itchy crust that causes the fox to scratch frequently. Scratching causes hair-loss and small abrasions, which can then become infected. With the loss of fur, the fox can easily become dehydrated during the summer months or hypothermic during the winter months. The fox becomes disoriented and will often be out during the day. Conjunctivitis is also apparent in severe cases, giving the fox a 'crusty-faced' appearance. Changes in behavior occur and the infected fox becomes less and less active. Weight loss and organ damage are often evident and, if left untreated, death typically follows in four to six months.

Residents often ask if they can treat the fox. The internet does provide information about "wild treatment" of mange in foxes using bait laced with anti-parasitic medications. The Wildlife Center is unable to provide residents with medications for treatment. The Center always recommends trapping the fox and transporting it to the Center or another licensed wildlife rehabilitation facility.

The Center does not endorse residents treating foxes in the environment for the following reasons:

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Red fox with sarcoptic mange before treatment Red fox after two months of rehabilitation

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- **1.** It is illegal in New Jersey, and most states, for the public to treat wildlife in the **environment**. Licensed wildlife rehabilitators and veterinarians have training and knowledge to effectively treat mange in wildlife. Check out the link: https://dep.nj.gov/njfw/hunting/new-jersey-game-code, section 7:25-5.22 on page 52.
- **2.** Potential to cause more harm than good. Anti-parasitic medication dosage is based on weight, and could harm or have no effect if the proper amount is not given.
- **3.** Potential to harm or kill other animals if the target species (fox) does not eat the bait. Anti-parasitic medications can be toxic to cats, dogs, and other wildlife.
- **4.** Successive treatments of anti-parasitic medications must be administered at specific intervals. The anti-parasitic medication only kills the adult mites; it does not kill the eggs. Eggs hatch every two to ten days. Repeated treatments are needed to also kill the newly hatched eggs. If the fox starts to feel better after the first dose, it may not return for the successive doses and the mange will return.
- **5.** Baiting the fox in the wild with repeated treatments creates a new problem, habituation. The fox will become accustomed to a yard, or a person providing the food and will continue to appear in their yard during the day after treatment. This could

cause fear issues in the neighborhood, which may end with the fox being shot.

6. Usually, a fox with mange is observed when it is out during the day and is in the mid-to-severe stage of the infection. At this stage, the fox becomes disoriented, emaciated, and dehydrated. It has secondary infections from scratching and scrapes. At this point, the fox is close to organ failure. It will likely not survive with only anti-parasitic medication. It also needs supportive care which includes antibiotics, fluid therapy, and proper nutrition. Radiographs are also recommended to rule out other possible injuries. Even if you treat the fox with anti-parasitic medication, there is a good chance it will still die from infection, dehydration, or hypothermia.

Unfortunately, the Wildlife Center does not have the resources to physically assist residents in the trapping process, but provides sound advice for trapping the fox. The Wildlife Center has limited traps to loan (with a deposit), or referral to a supplier. Some animal control jurisdictions may help the resident, but most do not because of limited resources. The Center does suggest, however, for the residents to inform their local animal control about their trapping plans in case other residents are doing the same.

If you see a red fox with sarcoptic mange in your area, please call the Wildlife Center and our qualified staff will provide you with suggestions to trap the fox and transport it for treatment. The fox will be released back to its origin location after it is fully recovered. Thank you for caring about wildlife!



REHABILITATING WILDLIFE IS NO EASY TASK. BUT THE REWARDING RESULTS MAKE IT ALL WORTH IT!

Join our efforts to SAVE WILD by volunteering at the Mercer County Wildlife Center!

You must be eighteen (18) years old to volunteer. If you would like to attend our new volunteer orientation, please email mcwcvolunteers@gmail.com

PRE-REGISTRATION IS REQUIRED TO ATTEND. We look forward to hearing from you!

Mercer County Wildlife Center - 1748 River Road, Titusville, NJ 08560 (609)303-0552

WHAT CAN I DO? Part 2

BY KRISTI SCHOLLENBERGER

As human development continues to encroach into native habitat, conflict with wildlife will also continue to increase. There are a few easy steps we can all take to be better neighbors to our native wildlife.

Slow Down:

Vehicle collisions account for the deaths of thousands of animals every year. New Jersey is home to 71 species of reptiles and amphibians and when winter ends they are all on the move. The amphibians are the first to herald the arrival of spring. Starting anywhere from late February to early April, when temperature and rain conditions are just right, amphibians leave their winter burrows and migrate to the vernal pools where they breed. The journey may be no more than a few hundred yards but most often involves crossing roads. This is treacherous for small, slow-moving animals that migrate in the dark. Just one car can squash dozens of frogs, salamanders and toads.

May through July is prime migration for turtles. From musk turtles to Eastern box turtles, females are all starting the trek from their winter grounds to their nesting grounds. Vehicle collision is a predominant reason for turtle intake at wildlife rehabilitation centers. Always remember



when helping a turtle cross a road, never pick them up by the tail and always move them in the direction they are going.

Summer brings a wave of young mammals. As they venture out into

the world from their dens, burrows and nests, cars are a major obstacle to their survival. As the hours of daylight become shorter and we move into autumn, white-tailed deer become more active. Mating occurs from October to December and there is a marked spike in collisions during this time. Slowing down, even a little bit, can provide the extra time needed to allow wild-life to get out of the road without injury.



Fishing Gear:

Birds, turtles, snakes and mammals are all at risk from improperly discarded fishing gear. Nets left behind can drown turtles and birds. Fishing line can wrap around wings, legs, necks and bodies. The constriction from these lines can leave animals unable to fly, swim, or even eat. Animals that partially free themselves can become entangled in trees, underbrush and even man-made objects by the trailing line. Bits of line or netting worked into bird nests can strangle nestlings in the nest. Swallowed hooks can cause tears in the mouth, esophagus, or stomach causing internal bleeding and death. Even raptors can be affected. Consumption of prey items that have lead hooks or sinkers in them can produce toxicity and death. Wildlife and

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people can share the waterways, we just need to do our part to keep them safe, for both people and animals, and not cause unintended injuries with irresponsible disposal of fishing gear.



Domestic Cats:

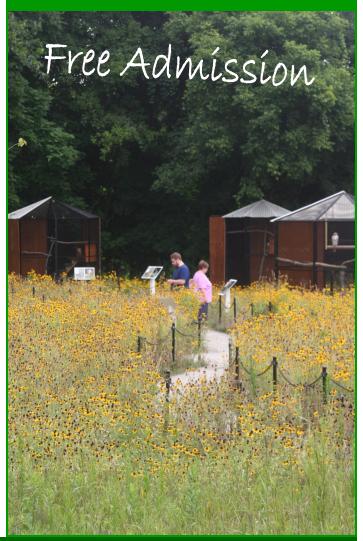
Cats, both feral and household cats that are allowed outside, are one of the greatest threats to native wildlife. Even a well-fed cat will hunt if it is free-roaming outside. Small mammals and birds are the most targeted prey of cats. Cats can cause multiple injuries including lacerations, puncture wounds, fractures and internal bleeding. If the animal survives the initial attack many succumb to bacterial infection. The bacteria Pasteurella multocida is in the saliva of all cats and is difficult to treat in wildlife, even if they receive antibiotic treatment. Cats also reduce available food for native predators including hawks, owls, foxes, coyotes and even bobcats - as they kill many of the animals that form the bottom of the food chain.

New Jersey is home to over a thousand species of animals, including 90 species of mammals and 400 species of birds. Habitats range from mountains and freshwater wetlands to the Pine Barrens and Atlantic shore beaches. We can all do our part to **Save Wild** and keep New Jersey a thriving environment for our native wildlife.

MCWC OUTDOOR EDUCATION ENVIRONMENT The Mercer County Wildlife

The Mercer County Wildlife Center's Outdoor Education Environment is open for self guided tours.

> Wednesday-Sunday 10AM-4PM



Mercer County Wildlife Center - 1748 River Road, Titusville, NJ 08560 (609)303-0552

EASTERN PAINTED TURTLE

BY NICOLE GOLDEN

Eastern painted turtles (*Chrysemys picta*) are an aquatic turtle found throughout the state of New Jersey in mainly fresh water, although some have been seen in brackish water from time to time. They inhabit ponds, marshes, creeks and prefer shallow bodies of water with muddy bottoms to dig in, downed trees for basking and plenty of vegetation that provides both food and camouflage from predators. Eastern painted turtles are very social and tend to live in large groups of varying ages and are commonly seen basking with the larger American red bellied turtle.

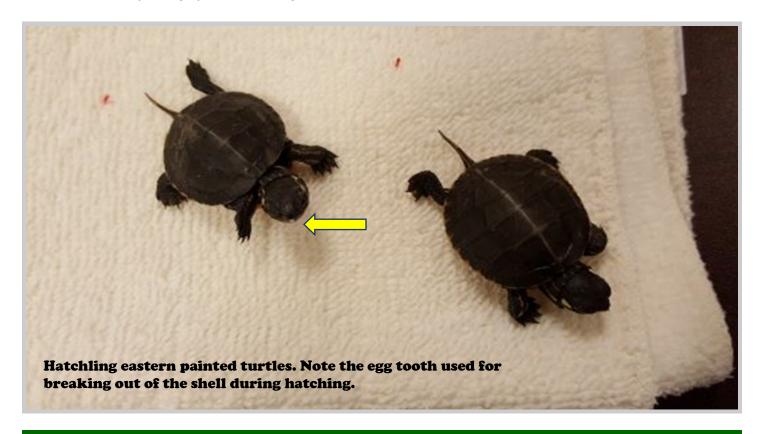
Eastern painted turtles range from 4" to 9" in length, with females being the larger of the sexes. The carapace (top of the shell) is smooth



and dark and the plastron (bottom of the shell) is muted yellow-orange. They have dark skin with red, orange or yellow stripes on most of their body but only yellow stripes on their head. Like other aquatic turtles they have webbed feet for swimming and diaging in the mud.

Eastern painted turtles are omnivores. Their diet includes algae, aquatic vegetation, insects, and crustaceans. They will eat both live and dead animals and prefer to feed in the water. Like

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other turtle species, the younger turtles tend to be more carnivorous while more mature turtles are more herbivorous.

Females can lay multiple clutches of eggs each year during the late spring through summer. Clutch sizes range from 4-15 oval-shaped eggs. Incubation is 70-80 days, hatching in the fall. Hatchlings are independent at birth relying on the remainder of their yolk sac for the first week to ten days before having to forage for food. Hatchling turtles are preyed upon by many species including raccoons, hawks and even other turtle species. Lifespan of a painted turtle is 20-40 years, if they can survive the first few years.

This year the Mercer County Wildlife Center received 17 eastern painted turtles and are currently overwintering one with plastron and carapace damage from a vehicle strike. We have hopes to release him in the spring.

Points to remember:

- Never relocate a wild turtle. They have a small home range and will spend their lives trying to get back home.
- If you pick up an injured turtle, put them in a box with a clean towel, write down your exact location and call a rehabilitator.
- If you stop to help a turtle cross a road be aware of your surroundings; keep yourself safe and always put the turtle on the side of the road in the direction it was headed.
- Never keep any wild animal as a pet.
 Always call a rehabilitator with any questions we are always happy to help!

New Jersey Fish and Wildlife link to all New Jersey licensed rehabilitators.

https://www.njfishandwildlife.com/pdf/rehab list.pdf

Social Media is an invaluable tool in raising awareness about the Wildlife Center. Our Facebook page has the most up to date information on events, animals, fundraisers, and public service announcements that pertain to our wild neighbors (the furry and feathered ones, I mean).





Help Us Help You



- If you find an animal in distress, please keep it warm and quiet.
- Handle the animal as little as possible, keeping it away from pets and children.
- Any attempt to feed or force water may not be in the best interest of the animal.
- Call the Center at (609) 303-0552. An animal may not actually need assistance, and bringing them in may cause them more harm.
- Although the Center will gladly offer referrals, domestic animals cannot be accepted as patients.
- Ounfortunately, the Mercer County Wildlife Center is not equipped to provide a pick-up service.
- Remember...an animal in distress may not know that you are there to help. Extreme caution should always be used when assisting an injured animal.







