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Fall 2024

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DELAWARE COUNCIL OF WILDLIFE REHABILITATORS & EDUCATORS

LICENSED IN THE STATE OF DELAWARE

DCWRE NEWS

Delaware Council of Wildlife Rehabilitators and Educators

Autumn: A Busy Season for Wildlife



Photo: E. Stetzar

The cooler temperatures of autumn are a welcome respite from the heat and humidity of summer, but the shorter days also cue wild animals to start preparing for winter. Like people winterizing their homes, pulling out sweaters, or looking up hearty stew recipes, wild animals are busy preparing for a time of year when food supplies can be limited and the need for shelter increases.

Autumn is also a time when DCWRE members prepare animals in their care for release back into natural habitats. Planning is *key* for increasing the potential the animal will survive, grow, and lead a normal life. Rehabbers 'check off the boxes' in the six categories below (see 'Key Aspects' on page 2).

This issue of DCWRE NEWS will cover these important areas with input from veteran rehabilitators, including DCWRE members, and information from scientific journals.

1) *Veterinary* - health check and disease risk assessment
2) *Behavioral* - species specific, food acquisition, predator avoidance
3) *Authority to release* - from state, regulatory adherence
4) *Release site* - Identification of appropriate site, beneficial weather, timing
5) *Release technique* - direct or supportive?
6) *Post release* - monitoring, filing of paperwork

SAVE THE DATE

DCWRE Fall Members Meeting

Date: November 21, 2024
Time: 6:30 pm - 8:30 pm
Location: Kent County Levy Court - Rm 220
(555 S. Bay Rd, Dover, DE)

KEY ASPECTS OF PLANNING FOR RELEASING WILDLIFE

Health Assessment

The first step is to determine if the animal is healthy enough to survive on its own in the wild. If feasible, a veterinarian should examine the animal and concur that it is releasable.

- Does it have the necessary agility to forage for food and avoid predators? (i.e., can climb, leap, groom, preen, swim, dive, fly as appropriate for the species)
- Is it disease and injury free?
- Can it eat and digest its food naturally?
- Has the animal gone through a period of acclimation to the outdoors?

Behavioral

The animal's behavior should be comparable to those of healthy wild individuals of its age, sex, and species. It should fear you and not associate you with food.

- Does it have an immediate flight response to you? This is essential for predator avoidance.
- Can it identify, manipulate, and handle food items?
- Does it have the necessary foraging, hunting, killing skills it will need to obtain nutrition in the wild?
- Does it interact normally with conspecifics?

Authority to Release

In Delaware, you must have a permit from the Department of Natural Resources and Environmental Control, Division of Fish and Wildlife to rehabilitate and release wild animals back into their natural habitats.

- Do you have a permit or are you working under the permit of a DFW permitted rehabilitator?
- Do you have permission from the landowner to release the animal in the intended habitat?
- Is there a federal nexus for the animal you intend to release?
- Have you consulted with a DFW biologist for appropriate release sites for animals with specialized habitat needs or that need protection from illegal collection or other threats?

Hall, E. 2005. Release conditions for Rehabilitated Wildlife -Tonga Zoo. National Wildlife Rehab Conference



Release Site

The identification of an appropriate release site should be considered when an animal is first taken into rehabilitation so there is ample time to plan for optimal conditions.

- Is the site near where the animal was initially encountered?
- If there are too many threats at the encounter site, can the animal still be released within the known distribution area for that species?
- Is there adequate food, water, and shelter?
- Are there other individuals of that species at this site so it can find suitable mates? (but not overcrowded)
- Are there suitable connections between breeding, foraging, resting, hibernating/estivating habitat available?
- Is it safe from threats (roadways, domestic animals, proposed land development)?

Release Technique

Its imperative to determine if an animal will need continued support after you release it. In general, the longer an animal was in rehab or the more unfamiliar the release site, the more 'after care' you will have to invest.

- Can this species be released directly and survive on its own or will it require some supportive care?
- If continuing care is needed, can a cage be accessible to the animal at the release site and can you bring it food regularly for a few weeks?
- Is the time of year and time of day optimal for that species?
- Is the long-range forecast optimal for release of this animal?

Post Release

Once an animal is released, a rehabber's work is not done. In some cases, continued monitoring of that animal is necessary. Careful documentation and filing of paperwork by members is also essential to rehab organizations.

- Does the animal require monitoring post-release to assess its condition and behavior?
- Was the care of this animal carefully documented and all necessary paperwork submitted to DCWRE?

A TALE OF TWO RELEASES

THE OPPOSUM

What started out as a tragedy one day in early April 2024, turned into a second chance at life for a litter of Virginia Opossums. Their mother was hit and killed by a car, which is a fairly common due to their propensity to lumber slowly across roads or lay down and 'play dead'. Candace, whose house is near the roadway, noticed three live baby opossums clinging to their mother. So she put the dead momma opossum with the three young ones into a box lined with fleece bedding and brought them to Cathy, a DCWRE rehabber. Cathy knew there was a good chance that additional babies were still in their mother's pouch, and she found another six babies!

They were very small – 14 grams each (the same weight as 3 nickels) and had to be put on heat immediately. Getting cold will kill baby opossums in less than three hours. Karen, then Jean, both rehabbers with medical backgrounds, tube-fed the babies many times a day (and at night initially) until the seven survivors began to lap from a dish, making their care much easier. In July when the opossums progressed into eating some solid food and needing a larger cage, Cathy took over again. The raising of these orphans was a team effort!



The seven litter mates peak out of their 'pouch'

The babies still needed a specialized formula along with vegetables, protein, and a little fruit. Opossums need a lot of calcium or they can suffer from Metabolic Bone Disease; similar to osteoporosis in humans. It is critical to maintain a varied and healthy diet. An opossum cannot be released until it reaches a size of about two pounds (900 grams). A bigger cage allowed the inclusion of more natural items: branches, leaf litter, log hiding places, a pan of dirt for digging, and a shallow pan of water to serve as a latrine. This type of 'enrichment' or addition of natural items found in their wild habitat, is essential for a better assimilation back into the wild.

The seven opossums were released at two different sites in mid-September, 152 days after intake. They will be able to fulfill their ecological role in nature by eating a variety of insects (including ticks), carrion, and many other items because opossums are omnivores, meaning they eat almost anything. They also serve an important role as a mammalian "vulture", cleaning up dead animals and limiting the spread of disease.

THE EASTERN COTTONTAIL

Eastern cottontail is the most common species that comes into rehab, due to a variety of reasons, including: cat or dog attacks, mowers, or people finding a nest with no mom (or 'doe') in sight and mistakenly presuming she abandoned[1] her babies (or kits). The doe makes a shallow depression in the ground, then lines it with dead grass and some fur from her belly which creates a warm, soft environment. She gives birth there and covers the kits with more grass. She only comes back around dusk and dawn for about five minutes to feed as she doesn't want to attract predators to the area.

Cottontails typically come in to rehab February through mid-October at various stages of development. The length of time in rehab depends on the age at intake, but kits a week or less old typically do not survive. Dependent young bunnies only need to be fed formula twice a day for two weeks or so. Because they are born with benign guts that have a low pH, they are vulnerable to pathogens. Cleanliness of their cage and feeding equipment is vitally important. They are quickly weaned on to native plants, like those found in the area they were found. In the wild, they are weaned and 'on their own' by 28 days old; their time in rehab is usually less than one month. Prior to release its good to get them outside and acclimated to local conditions. When they are released they typically weight at least 140g and are ready to forage on all the local greenery at their disposal!

[1]Note: If you find a nest and the kits are not injured, drape three 10-inch strings or yarn on top of the nest in an asterisk shape (*). When the doe comes to feed, she will disturb the string, confirming she is feeding them.



This Eastern Cottontail was one of a litter of 4 that came in at about 3 weeks old, so was only in rehab 7 days before being released in late August. It was released on private property with mixed woodlands, a pasture, and left with several large brush piles for safe refuge.

Habitat Release Notes:

- Opossums need farmland, woodland, or natural areas as far from busy roads as possible.
- Eastern cottontails need protective cover (shrubs, brush piles, or hedgerows) and lots of greenery to eat.

External Parasites on Wildlife

Several DCWRE rehabilitators have been collecting ticks (and more recently mites and fleas) from wildlife in their care in the name of science. The Delaware Division of Fish and Wildlife (DDFW) is studying these insects as part of a 'surveillance program' to ascertain when and where different tick species occur in DE. The ticks are screened to determine if they're infected with pathogens. The DCWRE members have been collaborating on this study for three years, using collection kits provided by DDFW. For more information on the tick surveillance program: Tick Program - DNREC

COVID-19 in Wild Animals

A researcher recently contacted DCWRE president Jean Taylor about a possible collaboration on COVID-19 research in wild animals. The research sampling protocol will entail swabbing the nostrils of wildlife and placing the swab into a vial, similar to the COVID-19 tests available for people. The research is nationwide but being conducted out of the University of Florida. Stay tuned for more information about this in an email to members.

WARNING about IVERMECTIN

A veterinarian with the U.S. Fish and Wildlife Service told wildlife biologists and managers at a recent meeting of the Northeast Wildlife Administrators Association that there is concern with the public putting Ivermectin out onto the landscape to treat wild foxes that have mange. Although this is a tact that well meaning people take, it can have dire consequences for non-target species and for the foxes themselves. DCWRE does NOT recommend putting ivermectin (or any medication or chemicals) indiscriminately out into the environment where random animals could access it.

Reasons NOT to do this:

1) It requires 3 applications given at specific intervals to be fully effective. What are the chances a particular wild fox could comply with this tight schedule and even get the correct dosage?
2) Ivermectin is not labeled for use with wild animals, thus putting it into the environment is illegal - it's an off label use.
3) Several breeds of dog can be killed by it and you would be legally liable for the death of those dogs.

Squirrels and Nuts: a Complicated Relationship

Squirrels are known for stock piling nuts for the winter. Research shows they sort and bury nuts by size, type, and perhaps nutritional value and taste. A single squirrel can bury up to 3,000 nuts in a season using a process called "caching", either hiding them all in a few key locations or scattering them across their habitat. A sense of smell, and visual and spatial cues help them relocate their food stash.

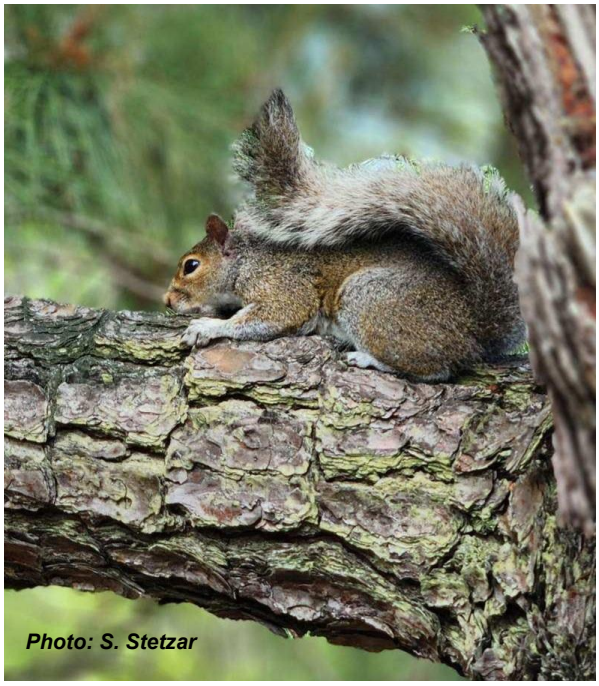


Photo: S. Stetzar

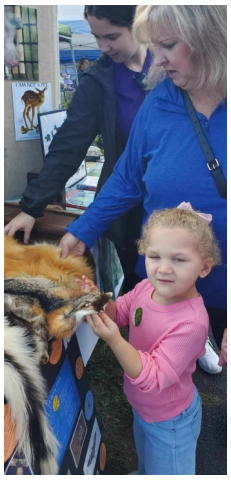
Studies show that gray squirrels can remember up to 24 cache locations for at least two months. During that time they revisit the sites, at times digging up nuts - perhaps refreshing their memory. Researchers also found that some squirrels "fake" dig to trick or distract others into thinking they hid nuts in that location, perhaps in an effort to protect their real cache. Pretty clever little rodents!

Squirrels in the care of wildlife rehabilitators are given a variety of natural foods, including different types of nuts prior to release back into their natural habitats. Opportunities are given for them to practice handling the food by introducing nuts that are easier to crack open first. Foraging behavior is encouraged by scattering the nuts throughout their enclosure or hiding some so they have to use their sense of smell and visual cues to find it. The key is to match the food given prior to release to the food items the squirrels will encounter in their natural habitat (i.e., resources found at the intended release site).

E. Bryce. November 2023. Do squirrels remember where they bury their nuts? Scientific American, a Division of Springer Nature America, Inc.; www.scientificamerican.com

DCWRE Outreach and Education - Statewide

Sussex County: Coast Day at University of Delaware - October 6



Attracting more than 5,000 visitors from across the region, Coast Day is the annual flagship event of the University of Delaware's College of Earth, Ocean, and Environment. Attendees enjoyed hands on activities, toured research vessels, explored the campus laboratory, listened to lectures from local scientists, and interacted with a wide range of exhibitors including the DCWRE.

Tonyea Mead, wildlife educator and DCWRE member, set up the Council display to educate visitors about the wildlife found in Delaware and the important work that rehabbers do. Visitors were allowed to touch real animal pelts and guess which species they were. Visitors of all ages loved this part of the experience, although many had no idea these species were found in Delaware. The DCWRE booth was also part of a Coast Day treasure hunt where visitors had to answer the question, "*How many mosquitos do bats eat in an hour*?" Tonyea had a bat house, a bat mount, and pictures of different Delaware bats that people could observe. She also dressed up in her best 'bat' costume to the delight of all!

Kent County: Delaware Master Naturalist Jamboree - October 18



The 3rd Annual DE Master Naturalist Jamboree was held at Killens Pond State Park. The Master Naturalist program is a science-based natural resource training program jointly coordinated by University of DE Cooperative Extension and DE Nature Society. The Event was open to certified and in-training Delaware Master Naturalists; 60 individuals participated as part of the program's required continuing education. The topic for 2024 was "Challenges to Preserving Native Wildlife".

DCWRE President Jean Taylor spent the day educating participants about Delaware's native wildlife and the work that wildlife rehabilitators do. She described the threats that native wildlife species face such as habitat loss, invasive species, predation, disease, and climate change. Jean said it was an honor to be there and had an amazing day of networking, learning, and enjoying time in nature with like minded citizens.

New Castle County: Blackbird Creek Fall Festival - October 19

The fall festival is a family-oriented event hosted by the Delaware Estuarine Research Reserve and held at the Blackbird Creek Reserve in Townsend, DE. The great weather in 2024 brought out over 1,600 visitors. DCWRE members Phil Pemberton and Shirley Semple helped set up the Council's display and Cathy Martin and Natalie Allen educated visitors about native wildlife and wildlife rehabilitation. The display also served as one of the festival's 'scavenger hunt' stations. To get a stamp in their contest booklet, visitors had to *ask a question* about the display or *answer a question* about native wildlife. Festival organizers gave awards to those that filled their booklets with stamps from all the participating stations. The younger attendees really got a kick out of doing this.

All visitors enjoyed wildlife facts, native wildlife pelts, turtle shells, and a live male box turtle. He was a long-term pet surrendered to DCWRE with Metabolic Bone Disease, which was caused by poor husbandry. His example taught visitors how important it is to leave turtles in the wild and highlighted one of the problems that arises from poor care. Participating in the festival gave DCWRE a great opportunity to educate many people about the issues that wildlife face.

DELAWARE COUNCIL OF WILDLIFE REHABILITATORS & EDUCATORS

Dedicated to the Care of Native Wildlife through Rehabilitation, Education, and Community Engagement

www.dewildliferescue.com

https://www.facebook.com/dewildliferescue/

DCWRE Leadership

- President: Jean Taylor
- President-Elect: Edna Stetzar
- Past President: Kesha Braunskill
- Secretary: Cathy Martin
- Treasurer: Taryn Davidson