ISSUE 3
Winter 2024-2025
E. Stetzar, Editor

DELAWARE COUNCIL OF WILDLIFE REHABILITATORS & EDUCATORS

LICENSED IN THE STATE OF DELAWARE

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Project with the city of Newark



Photo: USFWS



Jean speaks at a city meeting while Ethan looks on

DCWRE member Jean Hedrich convinced the city of Newark to allow a pre-construction survey for box turtles in a wooded area slated for development. Jean knew the woods well because she had found 22 individual box turtles there between 2018 and 2021.

She told Ethan Robinson, Deputy Director of the City of Newark's Public Works and Water Resources Department, about the small home range of a box turtle and how habitat loss and fragmentation is contributing to its continued status in Delaware as a Species of Greatest Conservation Need (see Delaware Wildlife Action Plan - DNREC).

Story continued on page 4

DCWRE FEBRUARY 2025 MEETING

This meeting will include a presentation, plans for 2025, and elections of new officers. Light refreshments will be provided.

DATE: February 20, 2025 at 6:30pm - 8:30pm
LOCATION: Office 3B, Treadway Towers, 9 East Loockerman, Dover, DE (*Senior Helpers Office, 3nd floor, left at top of stairs)*

PARKING: Park in the lower parking lot adjacent to the building, walk up the outside stairs to the front entrance, enter and go up the stairs.

2024 REPORTS ARE DUE

***DCWRE Licensed Wildlife Rehabilitators**:* DNREC's Division of Fish and Wildlife (DFW) requires annual reports be submitted by January 31. Send reports to shawn.sullivan@delaware.gov and copy DCWRE at cathytheark@comcast.net

DCWRE Apprentices - Please make sure your mentor has all of the information from your 2024 wildlife rehabilitation activity.

PERMITS: Check that your permit is current. To renew your permit with DFW you must be a DCWRE "Member in Good Standing"

HEALTH NEWS

Highly Pathogenic Avian Influenza (HPAI) in the Region

On December 19, 2024 a message sent by the Centre Wildlife Care (Port Matilda, PA) to fellow rehabbers was a warning about suspected cases of HPAI in PA, NY, and NJ. It turned out to be a timely message because by December 27, avian influenza killed dozens of snow geese at Prime Hook Beach in Sussex County DE. HPAI has now spread throughout the state. The last time this highly pathogenic virus was confirmed in the region was in May 2022 when it was found in black vultures in Harford County, MD.

Avian Influenza is a respiratory disease caused by influenza Type A virus and the severity of the illness depends on the strain and the species. A few cases of avian influenza have been found in humans in the United States, and the highly contagious strain of this virus (H5N1) has wiped out entire flocks of domestic poultry in a matter of days.

Although wild birds are commonly thought of as carriers of HPAI, the H5N1 strain has been found in some mammals. The USDA has a complete list of mammals confirmed with HPAI (www.aphis.usda.gov) but those that could be encountered by DCWRE rehabilitators include: Virginia opossum, raccoon, striped skunk, coyote, red fox, river otter, and mink. The virus has been found in house mice and domestic cats as well, thus its likely it could infect other mammals not currently on the USDA's list.

HPAI can be transmitted in the air and on surfaces such as shoes, vehicles, or equipment. Biosecurity protocols should be implemented while rehabilitating wildlife to avoid spreading the virus to animals in your care:

- avoid contact with wild birds and poultry, especially saliva, mucous and feces
- Wear personal protective equipment (PPE) at all times when handling sick or injured animals
- Use a foot wash before entering the enclosure of animals in your care

TO REPORT DEAD WILD ANIMALS: **Reporting Sick or Dead Wildlife - DNREC**
DNREC, Division of Fish and Wildlife: 302-735-9910

Immune Boosting Recipe for Squirrels

(From West Michigan Squirrel Rehabber Susan Arnold via FB)
Susan noticed a hairless, mangy squirrel with scabs all over its body foraging in her yard, so she whipped up some 'oatmeal balls' as a supplement. The squirrel (a male) came every day and Susan found that within a month his hair grew back. She recognized him by the notch out of an ear, his severe head tilt, and the way he hopped like a bunny. She believes these oatmeal balls gave him the immunity boost needed to restore his health (*see the before and after photos from Susan on the right*).

- 1 C. Oatmeal
- 4 Tbs Coconut Oil
- 2 Tbs Peanut Butter
- 15 drops of vitamin drops (for rats, hamsters, etc. - can get at a pet store)

Mix all ingredients and then form into 1/2" balls. Freeze to use as needed. Thaw and toss to the target animal. Can feed 1- 2 per day as needed.

The following ingredients are optional but highly recommended:

CBD Oil (10 drops), Flaxseed Oil (1 tsp), Banana (1/4 of one medium size), Nutritional Yeast Flakes (1 tsp), Crushed nuts - no shell (2 Tbs)



OVERWINTERING ANIMALS

Occasionally rehabbers have animals not ready for release by late fall or in time to be released in their natural habitat when food is plentiful. While its imperative to release animals back into natural habitats as soon as possible, in these cases, chances of survival increase if they are held over until environmental conditions are suitable for that species to be released. Animals that truly hibernate (see page 4) require specialized care, which is handled by trained DCWRE licensed rehabilitators.

Small Mammals

Small mammals that do not truly hibernate, such as tree squirrels and Virginia opossum use their nest or den sites during the winter (i.e., leaves, tree cavity, hollow log, burrow, artificial box) venturing out to forage for food when the weather is suitable. Therefore, if these animals are overwintered, its important to provide small mammals in rehabilitative care with a warm nest or den; accommodating conspecifics that can keep each other warm. It is vitally important they have access to straw and leaves to use as nesting material. Outdoor enclosures can be covered with a bit of plastic sheeting on the outside to provide shelter from the cold, wind and precipitation. Make sure there is access to unfrozen, fresh water for hydration. Scatter some food for foraging on milder weather days, but be sure to monitor leftover food and remove it from the enclosure. Also make sure there are branches and stumps at various levels to use for perching.

Box Turtles (terrestrial turtles)

Sick or injured turtles in rehabilitation should not go into hibernation (brumation) as they do not heal while hibernating. So to overwinter, they have to be kept indoors with appropriate lights (UVB on 14 hrs/day) and a heater to maintain a temp near 80° (optimum temp may vary by turtle species). Turtles begin to prepare for hibernation and stop eating as day length gets shorter and temps drop. They must keep eating during this time. The 14-hr "daylight" regime discourages non-feeding behavior in turtles needing to recover from injuries or disease. Maintaining high humidity and providing a shallow water dish for soaking are also important.

Bats - A Special Note

Big Brown Bat (***Eptesicus fuscus***)

Photo: K. Braunskill



Bats found in Delaware between November and March should be brought to a licensed wildlife rehabilitator specializing in rabies vector species (RVS) and bats. During these months, insect prey is scarce, and bats may be roused from hibernation by unseasonably warm temperatures, mistaking it for spring. This can lead bats to expend critical energy reserves while foraging, only to face a return to cold conditions.

Bats found grounded or roosting low could be critically underweight or dehydrated, unable to find suitable hibernation spots in time and roosting in exposed areas. It is vital that they receive care during this period by an experienced rehabilitator.

GENERAL TIPS:

Cautions	Don't put an animal in an outside enclosure if its not acclimated to outdoor temperatures; Sick and injured animals will not heal if hibernating.
Food	Provide a mix of natural foods. Remove uneaten food often.
Water	Keep a fresh and unfrozen source of water available at all times.
Shelter	Provide safe, secure, warm shelter in the enclosure. It can be a natural den, nest, log, etc. or manmade box suitable for that species.
Insulation	Insulate the enclosure with straw, leaves, soil (as suitable for that species). Can use plastic weatherizing material on the outside of the enclosure.

Hibernation - A long winter sleep or a time for napping

Hibernation is defined in Wikipedia as: "*A state of minimal activity and metabolic depression undergone by some animal species"* .



Groundhog ***Marmota monax***

Photo: S. Stetzar

Whatever the type of animal, the process is basically the same. The temperature is cold, or its too cold to find enough food, or to process it adequately, so the best survival strategy is to go into a state of suspension. When in a true state of hibernation, metabolism slows down and body temperatures drop by 5° - 10°C (9° to 18°F). Breathing slows. Oxygen needs can drop by 90%. The heart rate drops to 5 -70 beats per minute. Brain activity may become barely detectable.

Hibernation is often thought of as a long period of "sleeping" but species that hibernate don't stay in this inactive state for the entire winter. They intermittently wake up and warm up, tapping into their energy reserves. They may spend nearly 80% of their energy in this cycle of waking and being in a state of suspension.

Vulnerability to predators increases during this time of waking and sleeping. There is also danger that they will die during hibernation due to a lack of fat. That is why animals that hibernate in winter will feed heavily from spring through summer.

Animals that hibernate have what is akin to 'super human abilities'. For example, Arctic ground squirrels *Spermophilus parryii* cool their bodies to subfreezing temperatures. Wood frogs can take this a step further and freeze solid - luckily their bodies produce an 'anti-freeze' so they can survive. When preferred food is scarce, dormice were found to hibernate continuously for 11 months!

While a variety of mammals, amphibians, reptiles, and insects hibernate, just one bird species is known as a true hibernator, the common poorwill *Phalaenoptilus nuttallii*. This small nocturnal bird is found in the western U.S. (from Canada to Mexico). It must use torpor as a survival tactic in the winter, sometimes for weeks at a time, because the insects it needs to sustain itself are scarce.

Hibernation is another example of the fascinating lives that wild animals lead. We should be humbled by their incredible resiliency and the lengths they must go through just to survive!

Project with City of Newark

Continued from the Cover page

With permission from Ethan and a DNREC permit, Jean and a group of Delaware Master Naturalists surveyed the wooded area one month prior to construction. Although no box turtles were located, several red-backed salamander were relocated a short distance from the site out of harms way.

Ethan's professionalism and compassion expressed through his communications about the turtles was impressive. DCWRE honored him and the city of Newark with a Cooperative Conservation Achievement Award.



Time to Inventory Supplies and Equipment

Active wildlife rehabilitators are especially busy spring through fall, making winter an ideal time to organize supplies and plan for the next wildlife rehabilitation 'season'. Mark your calendar each year in the early winter to conduct a major inventory of your rehabilitation operation. Toss out (or recycle) expired food and 'takeback' medicines[1]. Repair caging or build/purchase new housing. Order essential supplies that are needed. Seek out new training opportunities and educational materials, even if you are an experienced rehabilitator there are still new techniques, advances in animal care, and emerging diseases to learn about. It is wise to 'check-in' with yourself throughout the year (every 3-4 months) to make sure you are prepared for unexpected animal intakes or have a back up plan if you should need help from another rehabber.

[1]Do not flush medicine down the toilet or throw it out with trash for the landfill, this can contaminate ground-water or end up being consumed by scavengers The best way to dispose of ***most types*** *of unused or expired medicines (both prescription and over-the-counter) is to immediately use a 'take back option' or mail your expired or unused medicines using a pre-paid drug mail back envelope.*

Community Reinvestment Grant

DCWRE was awarded $15,000 in grant funds from the state of Delaware. This enabled purchase of enclosures for rehabilitating small mammals, incubators, and feeding supplies. Local carpenters were hired to construct three enclosures, which measure 8 ft x12 ft x 8ft and have a double entry that enables the wildlife rehabilitator to enter it without risk of the animal escaping. The cages were strategically placed on properties of the most active rehabilitators, but can be moved to other areas as animal rehabilitation needs change. **Contact DCWRE leadership for more information about the grant award.*



RECENT DCWRE OUTREACH AND EDUCATION EVENTS

DATE	LOCATION	TOPIC	NUMBER OF PARTICIPANTS	LED BY:
November 7	Hartley Elementary School 2nd Grade	Backyard Delaware Wildlife	58	J. Taylor
November 16	Dover Public Library	Hibernation	22	J. Taylor
December 3	Wyoming Mill Park - Girl Scout Event - Troop #33	General Wildlife Education	76	J. Taylor
December 11	Marshall Elementary School 3rd Grade	Box Turtles	25	J. Hedrich
December 19	Hanby Elementary School 5th Grade	Box Turtles	100	J. Hedrich

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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