



Volume 29, Number 1, Spring 2009

THE QUARTERLY NEWSLETTER OF THE NEW YORK STATE WILDLIFE REHABILITATION COUNCIL, INC.

**Important Dates:**

**NYSWRC Board Meetings**-open to all  
E-mail Kelly (kmartink@midtel.net) for information about how to join us.

**NYSWRC Annual Seminar,**  
Fort William Henry, Lake George, NY  
November 13-15, 2009

**President's Report:**

**Wildlife Rehabilitators Have Big Hearts**

By Kelly Martin

There are always so many nice memories added to NYSWRC's history following an annual seminar. We meet old friends and make new. We share a common interest--to learn how to provide the best care possible for wildlife. We get a chance to hear the best speakers and learn many things from them and from others in attendance. It is a beneficial exchange of information and ideas. Another strand is added to the fabric of our network. What if this network did not exist? What if our state licensing agency were not supportive of wildlife rehabilitation? What if the experienced rehabilitator in an area was not willing to share knowledge and help the new person to become a good wildlife rehabilitator too? What would you do, give up or try harder?

This year at the seminar I met someone who showed great determination to learn how to be a good rehabilitator. And in her corner, helping her, were people from other states doing what they could to give her a hand. Mandy Tiggelaar came all the way to Grand Island from Missouri. Licensing in MO is much more onerous than in NY, and she was getting nowhere in her desire to learn. Her efforts to find opportunities to learn led her to a support group on-line. This forum calls itself the "Squirrelboard" and

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**NYSWRC WEBSITE:** [www.NYSWRC.org](http://www.NYSWRC.org)

**Our NYSWRC Mission:**

NYSWRC, Inc. is a not for profit membership organization dedicated to the education of wildlife rehabilitators, improvement of the field of wildlife rehabilitation, and the protection and preservation of the environment.

**Editor's note:**

I welcome your articles, poems, information, questions and artwork. We are pleased to print articles from our members, but caution each reader that NYSWRC is not responsible for the accuracy of the content or information provided, and does not necessarily endorse the policies proposed. Submissions should be sent to: nisseq@aol.com or to PO Box 62, Newcomb, NY 12852. Thank you, Arleen Santonas for your beautiful artwork!

### **President's Report, continued**

the members took Mandy under their collective wing and helped her. Mandy is a young woman and did not have the resources to attend an educational training session. One of the greatest and most generous things the forum did was to pay for her to come to our seminar. Mandy asked me if there was a way to acknowledge these wonderful ladies. By the time Mandy and I spoke, there was not really a time when the entire seminar was together in one spot. So I promised to find a way to thank them on her behalf. Some of these names are familiar to me, but, if you know any of these good-hearted individuals, please let them know that they make rehabilitators look good in more ways than one. They don't just care for wildlife, they care about making good people into good rehabilitators. Many thanks from Mandy and also the wildlife rehabilitation community to: Gabe Whitman, Maura Mandan, Lynn Dunlap, Lynn Saxon, Sharon Muscle, and Deanna Smith.

### **NYSWRC Recognizes & Thanks Seminar Co-Chairs, Steve and Amy Freiman**

At long last it is official, we acknowledge that NYSWRC would be lost without Steve and Amy at the helm steering our seminar to success. The NYSWRC Board and members presented Steve and Amy with a plaque thanking them for all their hard work on behalf of the organization, and specifically as chairs of the annual seminar committee. It is the most difficult job of the organization, with many different responsibilities under one umbrella. They keep us on task, remind us of deadlines, organize mailings and printed materials, negotiate with hotels/conference sites, maintain a budget (and make us stick to it), and they are the go-to resource for problems before, during and after the big weekend. All this and they get to sit at the registration desk all weekend without getting to listen to our great speakers. We did not want another year to go by with the possibility of them thinking it is a thankless job. Steve and Amy, we thank you.

### **Dexamethasone: Friend or Foe**

By Marc Valitutto and Noha Abou-Madi, Cornell University, Janet Swanson Wildlife Health Center

Dexamethasone is a synthetic steroid (glucocorticoid) that has been extensively used and abused in veterinary medicine. It is long acting and 30 times more potent than the commonly used over the counter steroid: hydrocortisone (main ingredient in anti-itch creams).

Steroids have been employed for adjunct therapy in immune mediated diseases (eg HIV), shock and acute brain/spinal cord trauma. However, research in the past ten years for both humans and animals have

### **Dexamethasone: Friend or Foe, continued**

largely concluded that steroids are contraindicated in many forms of shock and brain/spinal cord injuries. At best its use is controversial and the animal should be monitored closely while being treated.

The indiscriminate use of steroids (such as for fractures, weak and/or painful animals) has been shown to cause serious deleterious effects, including death. Direct effects include a strong potential to delay wound healing and may severely compromise the immune function of the patient. Steroids are contraindicated in systemic fungal infections, due to the suppressive effects on the patient's immune system. Dexamethasone has been shown to prematurely induce birthing in animals (especially towards the end of pregnancy), delay growth in neonates and juveniles and depress the function of the adrenal and the thyroid glands.

Steroids are used for specific conditions because of the seriousness of the side effects even if given only once. The use of steroids should be discouraged unless specifically indicated by a veterinarian. Steroids should not be used as primary pain control medications. Safer alternatives including non-steroidal anti-inflammatories (similar to aspirin) are available; however, these should always be used under the direction of a veterinarian.

### **DEC Issues Guidelines for Conducting Bird & Bat Studies at Commercial Wind Energy Projects**

"While wind energy has significant environmental benefits when compared to energy produced from fossil fuel, DEC must consider any potential negative environmental impacts of wind energy production when evaluating proposed projects," said Commissioner Grannis.

While most of New York's renewable energy currently comes from hydropower, the amount of wind energy produced has been increasing and New York now has more than 1000 Megawatts of windpower on line.

"These guidelines set forth DEC's recommendations to commercial wind energy developers on how to characterize bird and bat resources at on-shore wind energy sites and how to estimate and document impacts resulting from the construction and operation of these projects," added Grannis. The protocols in the guidelines are intended to provide comparability of data collection among sites and between years so that the information from each site contributes to a statewide understanding of the ecological effects of wind energy generation. The *Guidelines* have been revised to incorporate comments received during the public comment period and are available on the DEC website at <http://www.dec.ny.gov/energy/40966.html>.



### Rock Painting Reveals Unknown Bat

By Paul Rincon, Science reporter, BBC News

An ancient cave painting from northern Australia depicts a previously unknown species of large bat, researchers say. The team thinks the rock art from Australia's Kimberley region could date to the height of the last Ice Age - about 20-25,000 years ago. The painting depicts eight roosting fruit bats - also called flying foxes. They have features that do not match any Australian bats alive today, suggesting the art depicts a species that is now extinct. The findings have been published online in the scholarly journal *Antiquity*.

The bats would not have lived in the same cave as the painting; they are depicted hanging on a vine, which indicates a lowland forest habitat. Jack Pettigrew, from the University of Queensland, and colleagues report that the eight bats in the painting have white markings on their faces. No present day Australian flying foxes possess these features.

#### Megabats:

Dr Pettigrew and his team then considered whether the bat matched any living "megabats" from other parts of the world. Worldwide there are six such species, two in Africa and four living in islands off South-East Asia. The two African species have irregular white markings, unlike the depiction. One of the Asian species has a white patch above the eyes - which is inconsistent with the rock art; the other lacks the pale belly shown in the Kimberley painting.

This left *Styloctenium wallacei*, from the island of Sulawesi, *Styloctenium mindorensis* from Mindoro in the Philippines. All are medium-sized with the distinctive white facial stripe shown in the cave art. All are fruit eaters living in lowland forest. Although *Styloctenium* have small white markings just above the eyes, these would not have been visible in profile, say the researchers. On balance, say the researchers, *Styloctenium* is the closest living genus to the ancient species in the painting. No fossil bats that could fit the bill are known from the local area.

"Fossilisation is notoriously poor in the rocky tropical environment of the Kimberley," Dr Pettigrew told BBC News. Small fossil bats are known from Queensland's Riversleigh rocks, from which they can be extracted using acetic acid. But no flying fox remains have been found. The Queensland fossils are 30 million years older than the Kimberley flying fox.

#### Stripe face:

The bat depictions were found on a sandstone wall protected by overhangs, near Kalumburu. They belong to a type of rock art known as "Bradshaw". This Bradshaw rock art was painted more than 17,500 years ago by sophisticated artists. The style is spread over an area belonging to several Aboriginal nations, each of which has a different name for the rock art. "The art site has been chosen so that it is not exposed to sun, has a flat wall for the art and a cap to protect the wall from the weather," Dr Pettigrew said.

There is considerable debate about whether past mammal extinctions in Australia were caused by human hunting pressure or by climate change. The researchers regard bats as too mobile to have been hunted to extinction by the culture that produced the cave art. The demise of the Kimberley white-faced megabats is more likely to have resulted from the climatic and ecological changes that followed the end of the Ice Age, say the scientists.

### Deadly Bat Disorder Spreads in Northeast

By Michael Hill

ROSENDALE, N.Y. (Feb. 4) - A mysterious and deadly bat disorder discovered just two winters ago in a few New York caves has now spread to at least six northeastern states, and scientists are scrambling to find solutions before it spreads across the country.

White-nose syndrome poses no health threat to people, but some scientists say that if bat populations diminish too much, the insects and crop pests they eat could flourish. Researchers recently identified the fungus that creates the syndrome's distinctive white smudges on the noses and wings of hibernating bats, but they don't yet know how to stop the disorder from killing off caves full of the ecologically important animals.

"The cause for concern is that this is going to race across the country faster than we can come up with a solution," said Alan Hicks, a wildlife biologist with New York state's Department of Environmental Conservation. "Now that is entirely possible." Bats with white-nose burn through their fat stores before spring, driving some to rouse early from hibernation in a futile search for food. Many die as they hunt fruitlessly for insects.

White-nose syndrome spread fast last winter to dozens of caves in New York and southern New England, within a roughly 150-mile radius of the caves west of Albany, N.Y., where it was first found. Early observations show it has reached farther still this winter, even before cave inspections and bat counts begin in earnest this month.

Bats with white-nose syndrome were found recently in northern New Jersey's Morris County and in an old iron mine in Shindle, Pa., more than 200 miles away from

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## Deadly Bat Disorder Spreads in Northeast, continued

the outbreak's epicenter. In addition, the Pennsylvania Game Commission on Tuesday said that hundreds of little brown bats, a species devastated by white-nose syndrome, were found dead from the disorder outside two eastern part of the state.



The syndrome may have spread as far as 450 miles from the epicenter, to the John Guilday Caves Nature Preserve in West Virginia. The National Speleological Society has temporarily shut down the preserve as a possible white-nose sighting is investigated. So far, there are 40 confirmed white-nose sites in the Northeast, said Jeremy Coleman, who is tracking the disorder for the U.S. Fish and Wildlife Service office in Cortland, N.Y. Death tolls for the tiny creatures are hard to pinpoint, but some estimates run into the hundreds of thousands.

The news was grim on a recent day when more than a dozen researchers lowered themselves by rope into a sprawling old limestone mine in New York's Hudson Valley, about 80 miles north of New York City.

Bat counter Ryan von Linden's headlamp swept across isolated clusters of the mammals hanging off the rock ceiling. A chorus of squeaks echoed in the blackness. "There are not as many as there are supposed to be," von Linden whispered. "Not even close." With a precise total pending, Hicks estimated the cave's count of Indiana bats, an endangered species, was down 15 to 35 percent from last year's roughly 19,000. Researchers said the number of little brown bats also appeared to be down, although they didn't have enough specifics from prior years to measure the drop exactly. Hoping to glean more information on the syndrome, the researchers plucked 14 groggy little brown bats from the rock, weighed them, measured them, snipped a bit of their hair and stuck tiny radio transmitters to them to track their activity levels.

Bats' nocturnal habits and some species' ability to carry rabies can give the flying mammals a fearsome image. But they can pollinate plants and play an important role in checking the populations of mosquitoes and insects that can damage wheat, apples and dozens of other crops.

Researchers at the U.S. Geological Survey's Wildlife Health Center this fall established that the sugary smudges on infected bats are a previously undescribed fungus that thrives in the refrigerator-like cold of winter caves. The center is still working to determine whether the fungus causes the disorder, but biologists are already focusing on potential ways to combat the fungus. Since the fungus grows in the cold and damp, they could try to lower humidity levels in at least some crucial caves, though that could create other problems for those ecosystems.

Researchers also are looking at the possibility of a fungicide or even fungus-killing bacteria that could spread from bat to bat. Ward Stone, New York state's wildlife pathologist, said he has been able to culture bacteria that live on big brown bats and kill the white-nose fungus in a lab. Tests need to be performed to see whether any of the options are realistic. And time is "our biggest enemy," said David Blehert, head of microbiology at the USGS center in Madison, Wis.

### WHITE-NOSE Syndrome Surfaces in Pennsylvania

By Joe Kosack, Wildlife Conservation Education Specialist, Pennsylvania Game Commission

Aware since 2008 that White-Nose Syndrome appeared to be making its way to the Keystone State, the PA Game Commission now has evidence that the deadly bat disorder is likely present in a mine near this small community in the state's heartland. Where else this may be occurring and the consequence to bats, a fragile guild of wildlife species, remains an unfolding story.

In late December, DeeAnn Reeder, a biologist with Bucknell University, and Greg Turner, a biologist with the Game Commission's Wildlife Diversity Section, found bats in an old Mifflin County iron mine that exhibited some of the signs of White-Nose Syndrome (WNS), during field investigations into bat hibernation patterns that included weekly monitoring for the disorder's presence in several Pennsylvania hibernacula. During this work, which had been ongoing for weeks, dozens of bats suddenly had a fungus appear around their muzzles and on the wing membranes, while many more displayed other symptoms associated with this disorder. Several bats were submitted to the National Wildlife Health Center in Madison, Wisconsin, which now is reporting that the bats have preliminarily tested positive for the cold-loving fungi found on many bats with WNS....

In New York and New England, the disorder seems to arouse bats from hibernation prematurely. Once they depart from caves and mines, they quickly sap their energy reserves and die on the landscape. Mortality in some colonies has exceeded 90 percent, ensuring that any local recovery will be quite lengthy given the low reproductive rate of bats. Little brown and the federally-endangered Indiana bats produce only one young per year.

Currently, researchers still are unsure exactly how bats contract WNS and how it initially and, ultimately, affects a bat's body. They cannot confirm whether the fungus appearing on some bats is a cause or a symptom of the disorder. What is clear is that the geographic area where WNS has been documented is expanding. It was first found in bat colonies in New York in 2006, and subsequently in populations in Connecticut,

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## WHITE-NOSE Syndrome Surfaces in Pennsylvania, continued

Massachusetts and Vermont in 2007. Now bats in Pennsylvania and New Jersey appear to be affected.

“We do know that the visible fungus appears on some, but not all, bats afflicted with WNS, and that a significant percentage of bats in affected hibernacula move closer to the entrance,” explained Turner. “The bats eventually leave their hibernacula—often in daylight, which is unnatural. Most of those bats likely die on the landscape, but some may return to the cave or mine they left. Researchers cannot determine what bats are searching for, or if they’re hunting for anything. Most bats found dead on the landscape have depleted their fat reserves.”

About the only thing certain about WNS is that its ambiguity continues to baffle the cadre of researchers who are working long hours to positively identify what it is, and if there is anything wildlife managers can do to disable it. WNS does appear to be spreading bat-to-bat, but it’s unknown whether it’s passed in summer roosts, or hibernacula, or both. It also is unknown yet whether the cause of WNS will linger in hibernacula without bats.

“Of course, there’s also the possibility that bats have been – or are being – poisoned somehow,” Turner said. “The source could vary; insecticides, herbicides, livestock supplements, changes in the composition of building materials, even changes in air and water quality. That’s what makes this whole search so open-ended. But, to date, the disorder is found only in America’s Northeast, so it would appear the source is here, too. That’s a solid lead, if it is something like a toxin.”

New York and New England have lost tens –maybe even hundreds – of thousands of bats to WNS over the past two years. Significant losses to bat populations could have ecological consequences because of the role that bats play in the environment. Across Pennsylvania, bats eat tractor-trailer loads of insects on summer nights, making our backyards more bearable and crop yields more bountiful.

“Bats have survived for more than 50 million years because they are tough mammals,” said Lisa Williams, a Game Commission wildlife diversity biologist. “But they have become increasingly vulnerable. Destruction and disturbance of caves, changes to summer habitat, all have impacted bat populations. White-Nose now presents more uncertainty for bats. Quite frankly, we’re not sure yet that we can help them survive this threat. We’re looking for answers. “An impressive team of researchers is in place. But this whole situation has been so sudden, so fluid and so devastating to bats, that it makes it incredibly hard for wildlife managers to develop a conservation response.”

The Game Commission spent last summer monitoring the state’s bat maternity colonies for signs of mortality, both in adults and juveniles. Bats also were mist-netted and checked for abnormalities. Both efforts shed light into Pennsylvania’s unfolding situation, but neither provided conclusive evidence as to what’s happening.

“We came out of summer knowing that we hadn’t lost major numbers of bats, but we did notice that some bats had small white spots on wing membranes,” Turner said. “What the white spots represent is still unclear, but some researchers believe they may be the early signs of WNS.”

“This past fall we began to examine the health of our bats to see if they came into their winter quarters prepared for hibernation. We also are using telemetry gear and data-loggers to monitor the body temperatures and arousal patterns of hibernating bats, hoping to shed light on how the emergence of WNS may be affecting individuals, hibernating clusters and the wintering colony.”

Weekly battery changes are needed to keep the telemetry receivers (data recorders) going. It was during one of these battery changes that Reeder and Turner noticed changes occurring in the Mifflin County hibernating colony. As recently as Dec. 12, there was no change to bats in the mine. Then on Dec. 20, they noticed bats starting to shift toward the mine’s entrance and a small amount of fungus on some of them. Bats normally don’t hibernate at entrances, so this movement was interpreted as a red flag. On Dec. 29, about 150 of the 2,200 bats in the mine appeared to be affected. By Jan. 5, about 45 percent of the mine’s wintering colony had relocated toward the mine’s gated entrance.

Reeder and Turner are monitoring three sites in Pennsylvania to record the arousal patterns and body temperatures of hibernating bats. This work, part of a multistate effort funded primarily by the U.S. Fish and Wildlife Service, also is being conducted in New York, Vermont, Michigan and Kentucky.

“This research may tell us if bats are arousing too frequently and consequently burning off fat reserves prematurely, or if they’re not lowering their body temperature enough to support hibernation,” Reeder explained. “It may also show that bats are having difficulty going back into hibernation after being aroused.”

The Game Commission will be surveying 20 to 30 hibernacula between January and March as part of annual fieldwork and during those visits will be monitoring for signs of WNS. The agency also will assist researchers who are doing fieldwork in state. This work includes investigating metabolic rate of hibernating bats; studying the immune response capabilities of bats; and measuring whether bats have sufficient amounts and types of fat heading into hibernation.

**Simple Things to Help Wildlife**, prepared by  
Ravensbeard Wildlife Center

Dear friends & neighbors,

Most of the wild animals brought to our care suffer from injuries or problems caused by humans. Since most people try to avoid causing harm to other living creatures we have put together a list of things to do, or not do, to help wildlife. The list is in no particular order of importance, but if everyone followed these suggestions our wildlife would have an easier time.

1. Before mowing your lawn or rototilling your garden walk through the area first to make sure no rabbits or ground-nesting birds are in harms way. It only takes a couple weeks for these babies to grow and leave the nest. Be tolerant and give them the time they need. Help them by keeping your pets away from them.
2. Alert birds to large expanses of glass in your home, such as patio doors or picture windows. Use hanging, streamers, put bird silhouettes on the glass surface, or allow the glass to be a little bit dirty. A screen over the window can help. Reduce the reflection to cut down the numbers of birds who collide, often fatally with windows and doors.
3. Pick up litter and refuse. Many things such as six-pack connectors, bottle caps and rings, monofilament fishing line, plastic bags and watch batteries can cause asphyxiation or poisoning in animals.
4. Use non-toxic products on your lawn, garden and in your home.
5. Educate children to respect and care for all wild creatures and their habitats. Teach children that wild animals are not playthings and should be allowed to go about their lives unmolested. Children should also be taught not to destroy nests, burrows or other wildlife habitat.
6. As a general rule, leave infant wildlife alone since they are not always truly orphaned. A parent may be nearby or will return soon.
7. Place caps over all chimneys and vents on your roof to prevent birds, ducks and raccoons or squirrels from taking up residence and becoming a nuisance or getting trapped.
8. Do not leave fishing line or fish hooks unattended or lying about outdoors. Try to retrieve any fishing life or kite string that has become entangled in trees or water.

9. Before doing tree work or cutting down a tree, check for birds' nests and small mammal nests on branches and in tree cavities. Avoid cutting down dead trees since they provide homes for a wide variety of wildlife.

10. Drive more slowly and be alert for wildlife. This will give you the opportunity of seeing many more wild animals and birds, and you can avoid many accidents with deer and other creatures.

11. Prevent your pet cats and dogs from attacking and/or "playing with" wildlife. Don't allow them to run without supervision and raise your cats as indoor pets. Dozens of animals arrive for care each year with wounds from cats and dogs.

12. Motor oil and antifreeze should not be left unattended or in open containers. Please dispose of these & all poisons safely.

13. Do not attempt to raise, keep or rehabilitate wildlife yourself. Not only is it illegal, but wild creatures do not make good pets and captivity poses a constant stress to them. Young wild animals raised without contact with their own species fail to develop survival skills and fear of humans, virtually eliminating their chances of survival in the wild. If you want to rehab please call us and we will mentor you and help you get licensed.

14. Birdfeeders need to be cleaned with a bleach solution once a week to prevent infections such as conjunctivitis among song birds which causes blindness and death. Consider planting trees and plants that provide food and habitat for the song birds. Take the feeders in during bear season.

15. If you use bird or deer netting mark it with surveyor's tape so that the birds and small animals become aware of it.

16. Please dispose of all garbage in adequate containers for your wildlife situation. Bear resistant garbage cans are available from the group [www.savenjbears.com](http://www.savenjbears.com) To avoid attracting bears to your home keep a clean yard, take down bird feeders, keep garbage in resistant containers and clean your grill after every use. Right after!

17. Walk slowly and see, hear and feel the beauty all about you everyday. See what animals come to you. Listen to what they have to say!



## Lame Duck's Latest

By Barb Cole (former NYSWRC President and current Bd. Member)

You don't have to be a rehabilitator very long before it dawns on you that being a rehabber is more than just taking care of wildlife. We also are resources for information on wildlife for the public.

In part, our educational efforts are purely self-defensive. If we can prevent people from kidnapping fawns and fledgling birds, disturbing nests of cottontails, and stealing mother squirrels away from their families, we save ourselves a whole bundle of time, effort and expense!

So, we patiently (or not so patiently) answer phone calls, offer programs, publish brochures and talk to reporters, all in the effort to spread good information as widely as possible. It goes without saying that it is of utmost importance that the information we give out be as accurate and timely as possible. You can imagine the consequences, for instance, if you gave out information about rabies that was wrong. It doesn't happen very often, but another person's life could depend on your knowledge and advice; to say nothing of the animal's life. That is why it is as critical to continue educating ourselves, as well as educating the public.

Which leads me to the dilemma which inspired this particular "literary effort." There is an ever increasing problem with the Internet. Yes, I am barely computer literate, and view computers with a slightly jaundiced attitude. But the truth of the matter is that the information people are getting from their computers can be very, very good or very, very bad. And if you are a member of the public, and not a rehabilitator with an background in wildlife rehabilitation, you have absolutely no way to judge the information you have gotten. There are a plethora of web sites on the Internet now, and many are offering information on helping distressed animals. Some of these sites are very attractive and offer sound education. Some of them offer some sound information and some wacky information, and some of them are just plain out there. How can a member of the public judge what is good advice?

Many of the rehabilitators who take in juvenile squirrels have had the misfortune to see the results of the infamous "boiled cow's milk diet" that floated around the Internet for a while; severely compromised babies suffering from horrible metabolic bone disease. Many of these squirrels had to be euthanized if they were not given a correcting diet soon enough. This was obviously not from a source that set out to be deliberately harmful, they were trying to help. But they should have checked with more expert resources for the most currently researched formulas. The NWRA, IWRC, NYSWRC and other state organizations, the Cornell Wildlife Health Center,

Tufts University, veterinary teaching hospitals; and nationally recognized rehabilitation centers are all valid resources for appropriate advice.

So, what do we do? Unfortunately, there is no practical way to "police" all the sites giving advice on wildlife. There are ethical considerations if actual formulas are published, because possession of wildlife is only a permitted activity. But we have all been in situations where we are totally overwhelmed with cases and have been tempted to give people advice on raising orphans.

If you talk to someone who has gotten misinformation from a web site, you can encourage them to reply to that site. If you know someone who has published questionable advice, you should tactfully help with more current information. And we can always request peer review of any information we ourselves put out there. As we all know, every rehabber in the business has their own tips, hints, and above all else, experienced knowledge. We are each other's own best resources. So, whether you are starting a web site, or putting together a newsletter, or doing a program for your local scout troop--let's use each other, and the reputable organizations out there, to make sure we are truly doing our educator/rehabilitator tasks as best we can.

Informative web site links can be found on our NYSWRC site: [www.NYSWRC.org](http://www.NYSWRC.org)



## Rehabilitation and Release of Whitetail Fawns

By Tabitha Fierro

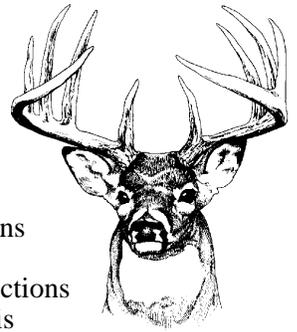
I am presenting just one way to rehabilitate fawns. Every rehabilitator has their own techniques, but I want to share the basics I have learned through the tireless support of experienced deer rehabilitators, veterinarians and “on the job” experience. As a licensed wildlife rehabilitator, you may find yourself in a situation where a fawn is in desperate need of your help. I want to give you some basics on how to raise this precious baby that you now have in your care. Be warned, once you have let one of these helpless lovable creatures into your home, it will steal your heart. Even the most die-hard opossum queen will lose her heart to the fawn.

It is our job to make sure we are doing what is right for these babies. Let's start with your first fawn call. It is important to understand the basics of natural deer behavior. You will receive many calls from well-meaning people who want you to save an abandoned fawn. It is important to know and explain to the public that fawns are born with a natural defense mechanism. At birth and for the first three days, the fawns have no scent and an amazing ability to lie perfectly still and quiet, which allow them to hide from predators. The mother does not stay with her fawn because she does not want to alert predators to her baby's location. She comes back to her fawn throughout the day and night when she feels safe. She feeds and thoroughly cleans the fawn to eliminate any scent. Instinctively, the fawn knows that when mom leaves it must stay very still and silent in the location she left it. Since the fawn does not move and no mother is present, people often think it is abandoned, so healthy fawns are often “kidnapped.” It is possible to return a kidnapped fawn to its mother if you know the exact location it was taken from and the fawn has been with humans for less than 3 days. It is a myth that once you touch a fawn the mother will no longer accept it. If you suspect that a fawn is healthy and has been kidnapped always try to put it back. Mom is desperately searching for her baby.

There are many times when fawns are not exhibiting normal fawn behavior. I am always very concerned when I get a call about a fawn that is wandering around blatting. This is not natural behavior because it attracts predators. Diarrhea, falling down, limping, and apparent wounds are also signs of a fawn in trouble. Get as much information from the caller as possible. You may have to go out and assess the situation yourself before you decide if the fawn needs your help.

Now that you have your first fawn, it is important to do a few initial intake procedures. Of course you will need to address any wounds, broken bones, low body temperature, dehydration, and other possible issues.

A fawn's normal body temperature is 101. Your new fawn has undergone a lot of stress which causes the fawn's body to use up important vitamins and minerals. For this reason, I routinely give two essential injections to each fawn I admit. The first is Selenium/Vit E. This is given under the skin, in the rump, at a dose of 0.1 cc per 10 lbs. It is extremely important not to overdose your fawn as Selenium can be deadly. The second, Vitamin B Complex, is also injected under the rump skin at a dose of 1 cc per 10 lbs. These supplements can be purchased at most feed supply stores. The fawn's skin is very soft at this age, so I use small insulin syringes for these injections. I have found these initial supplements to be very effective in helping to prevent some common fawn diseases.



My suggestion is to never raise a singleton fawn. Deer are sociable creatures and we must teach these fawns to grow up knowing they are deer, not dogs or humans. They have a strong bond with their mothers, and since you have now become their surrogate mother, you will need to build that bond with the new fawns. I start raising my fawns in playpens in my home and do this for a number of reasons. Briefly, it helps the babies adjust to rehab and quickly bond with you. It allows me to keep a close watch on the babies' poop, which is a great health indicator. When you are literally feeding round the first one to three weeks, it is much easier if the fawns are near the kitchen. I have to admit, the down side is the never-ending laundry.

Many rehabilitators are fearful of imprinting the fawns and therefore have no physical contact with them. It is my experience, and the experience of the nine deer rehabilitators I network with, that fawns do better, both physically and psychologically, when they have the physical contact, love, attention, and discipline from their human caregiver. Whenever possible, it is best to have a primary and possibly a secondary care giver only. Do not introduce the fawn to all of your family and friends. These animals are intelligent and will recognize you as their caregiver. I have found that fawns do not become imprinted on people if they have limited exposure to them.

Like most wild mothers, you will spend much time feeding and cleaning your fawn. As with most mammal babies, it is very important to stimulate the newborn fawn to pee and poop until they are eliminating on their own. A doe will clean her baby with her tongue but for us surrogate mothers, damp paper towels work just fine.

## Rehabilitation and Release of Whitetail Fawns, continued

Now let's talk about raising fawns. I feed pasteurized whole goat milk, although other rehabilitators may use doe or goat milk replacer. Do not feed cows' milk because it does not have the fat and protein content that a healthy fawn requires. It is important not to over feed your fawn because overfeeding causes diarrhea which can be fatal if left untreated. Watch the size of the fawns' bellies; they should look full, but not big—firm, but not protruding.

From birth to 2 weeks fawns eat an average of 1 oz per hour/24 oz per day. This is where sleep deprivation sets in for you as caregiver. If a fawn will eat 2 oz at a time, you can sleep for 2 hours; 3 oz at one time, sleep for 3 hours, etc. At this age a fawn cannot eat more than 4 oz at one feeding. During this time the fawns are living in playpens and spending most of their time eating and sleeping.

At 2-3 weeks of age you will begin to increase the amount of milk per feeding. Do this gradually over a few days: 6 oz every 6 hours, then 8 oz every 8 hours. Introduce water, dirt, grass, dandelions, clover, deer or goat grain, fruits, and vegetables cut into small pieces. Yes, I said dirt. I dig up clumps of grass, roots and dirt. They love it and get the nutrients they need. Now this is important: at this age remember that deer are browsers and should have access to solid food and water at all times. Usually at this age I move the fawns to a small outdoor pen with a shelter. The size of the pen can vary based on the number of fawns. Another warning...these little guys can jump. I would suggest at least a 6 ft high pen. At this age wild fawns begin to follow and forage with their mothers. We need to allow our fawns room to run, grow and be fawns.

Each fawn is an individual, and each develops at its own pace, so it is not unusual for me to have some fawns outside while others are still in playpens. All fawns should be healthy before they are moved outdoors, and no fawn should be moved outside alone. At this age, your fawns should be coming to you and eating well. Once they are outside they can be very fast and almost impossible to catch, so you want them to come to you at feeding time.

When your fawns are 4 weeks old you will gradually increase their milk to a maximum intake of 16 oz, 4 times per day. You should reach this maximum amount from the beginning to mid July. At this time fawns are growing quickly and eating more grains and solid foods. By the beginning of July, I have moved my fawns from their small starter pen to a regulation pen which also houses my non-releasable deer. These unreleasable deer will be foster parents to the fawns until they are released the following spring.

By mid to end of July, after the fawns have been consuming their maximum milk intake for about 3 weeks, you will then want to start decreasing feedings to 3 times per day. In mid August you will decrease again to just 2 feedings per day. By the end of August, you should be down to just one bottle of milk a day. Your fawns should be fully weaned by beginning to mid September. Remember that there are always exceptions to these guidelines. A fawn that had suffered malnutrition, broken bones, or illness may require milk feedings longer than those fawns that had a healthy start in life, so use your best judgment.

When your fawns are weaned, it is time to begin breaking the human bond and allowing them to become adult deer and prepare them for release back into the wild. Some rehabilitators release fawns as soon as they are weaned in the fall. I have learned a different approach that I find works well for the fawns I have raised. In the wild, a fawn will stay with its mother through its first year. A doe may even stay with her mother and siblings for up to two years. Bucks are usually chased away by their mothers before she gives birth to her new babies in the spring. I have read in various publications that only 50% of wild fawns born in the spring make it through their first winter. The point is that it's tough for a wild fawn to survive the winter with the support and experience of its wild mother. For this reason I believe that it is in the fawns best interest to remain under rehabilitation until the following spring.

This is not the cheapest method of fawn rehabilitation, but I feel deeply that the results are worth it. As I mentioned above, I have a regulation size pen and non-releasable foster parents. In order to possess non-releasable foster parents you must apply for a special permit from the NY State DEC. This allows me to possess up to 5 foster parents. When I applied for my possession license my pen had to be 21,000 sq ft, at least 8 feet high and have an acceptable shelter. If you have predators in your area (and who doesn't?), I would suggest a single strand of electric fence around the outside bottom section of the fence to protect the fawns. Shelters can come in all designs, so be creative.

Foster parents take over when the fawns no longer need their human parent to bottle feed them. Once my fawns are weaned, I stop all interaction with them. My job now consists of being sure they have access to grain, fruits, vegetables, alfalfa and clean ice-free water at all times. I take a head count and watch for any signs of illness each day. The foster parents teach them all of the things I cannot. The fawns will learn

*Continued on p. 10*

## Rehabilitation and Release of Whitetail Fawns continued

deer verbal and non-verbal communication, discipline, social behaviors, hierarchy, how to dig for snow-covered food and things I'm probably not even aware of.

I have found my best foster parents are bucks. They have exceptional interaction with the fawns. In keeping a buck you must always remember that they are very powerful wild animals. No matter how friendly they may be most of the year; once they hit rut each fall they can be as dangerous as any predator. I am not telling you this to scare you, as I said my bucks are the best fosters. This to remind you to have great respect for these wild creatures. For my protection and the protection of the fawns, I cut off the bucks' racks once they have shed their velvet. Never cut a rack before the velvet has been rubbed off. This may require the buck to be tranquilized with the assistance of your vet. A simple hack saw works well to saw off the rack at its base. Don't worry, the antlers are made of solid bone and do not bleed once the velvet is shed. This causes no pain to the buck but could save your life. There are other options you can discuss with your vet such as castration or vasectomies. There are pros and cons to each, so do your research.

I do a soft release in early spring when the grasses start growing but are not yet lush. The exact time varies based on your location and weather. I am fortunate to have the land to be able to release right on my own property. My neighbors enjoy watching the curious, excited yearlings as they discover their new home in the wild.

I separate my non-releasable foster parents into a separate section of my main pen, then open the gates of the main pen and allow the yearlings to come and go as they please. I keep food and water in the pen for a few weeks. At first they will come back regularly, but soon the call of the wild is too great and they are gone.

Good job! You have accomplished what you set out to do. You have given those helpless little fawns, the second chance they needed, and you have released true wild white tail deer.



## Life high in the canopy!



### Thoughts from My Vacation By Amy Freiman

Macaws photo by Steve Freiman

I just returned from a bird watching trip in Costa Rica, and it was a vacation that opened my eyes. In the rain forest I observed Scarlet and Green Macaws, and parrots and parakeets of all varieties as they enjoyed life in the wild. It was quite the sight to watch pairs of Macaws flying back and forth from the mangroves each evening. The noisy parrots joined in large gatherings to eat fruit from the trees and socialize with one another. Watching these birds enjoy their freedom, I vowed never again to keep a bird in captivity just to be a pet. It is just not their nature to be caged! Not when freedom is so spectacular. Yes, they have to work to exist, but what an existence it is.

The concept of free flying birds went well beyond the pet trade caged birds as I also observed large kettles of raptors, trees filled with warblers, rivers edged with shorebirds, and others—all visitors from North America. They had made the long migration to winter in Costa Rica and will need to fly back to their home again this spring. It took me 17 hours by airplanes and automobile, and I was exhausted! One can only imagine the toll it takes on the birds. It just goes to show how perfect they have to be to survive. Condition is everything.

Next time I accept a bird for rehabilitation I will need to ask myself: Can I bring it back to a state of perfect condition? Will it be able to migrate? What are the options? What kind of a life will I be giving them? Yes, I can find an educational placement for some, and yes, we need good education birds to be ambassadors for their species. Will the educational birds have the ability to socialize with their own kind, to move about in spacious living quarters, to find their own food, and to be stimulated and involved in "enjoyable" activities? We owe that to our captives! We all need to rethink how we provide enrichment for those wild birds in our care. Is what we do good enough? Let's try to do better. We can't give them back their freedom, but we can, and must, provide a high quality existence for them.

## SNOWY OWLS Spottings Rise in New York, Likely Good News for *Bubo Scandiacus*

By Yancey Roy

Across New York, Snowy Owl sightings are on the rise this winter. From Buffalo to Long Island, from a grassy field in Greene County to the roof of the State Capitol in Albany, New Yorkers are spotting what appears to be an increase in the number of Snowy Owls traveling south from their Arctic breeding grounds, said John Ozard, a biologist who specializes in bird species at the New York State Department of Environmental Conservation (DEC).

“Every winter, New York receives some influx of Snowy Owls. But this year, anecdotally, there seems to be more of these birds around than usual,” Ozard said. “And they arrived a bit earlier than normal.”

The likely cause is not what some might think, Ozard explained. While some might guess that the Snowy Owls (*Bubo Scandiacus*) are flying south because of a shortage of food (primarily lemmings) in the Arctic, the more probable reason is that the birds have had a very productive breeding season and the younger owls – faced with heavy competition for food – are crowded out of their home base.

“This is a good sign for the owl,” Ozard said. “If food were scarce, if there were no lemmings in the Arctic, the birds would react by not raising any young. Snowy Owls are opportunistic breeders. In good times, a single breeding pair can hatch and raise a dozen offspring in a year. When there are excess birds, the young – especially the males – are sort of kicked out of their territory and head south.”

This is not first New York winter with a high number of Snowy Owl sightings. Records show such winters occurred sporadically through the 20<sup>th</sup> Century.

Ozard cautioned that there is no extensive banding of Snowy Owls and, therefore, it’s almost impossible to determine exactly where these “local owls” originated. The bird typically breeds in the Arctic, in the far north of Canada, Greenland and Norway. The Cornell University Ornithology Lab describes it as “a nomadic species and often unpredictable migrant.” It differs from other owls in being diurnal – a daylight hunter – rather than nocturnal.

News accounts and bird-watching blogs have detailed a number of Snowy Owl sightings since mid-fall. One roosted for several days at the State Capitol. Others have been reported in fields, on buildings and on telephone poles in a number of communities.

The birds will likely stay in the region through late March or early April, depending on weather, while

feeding on rodents and small birds. The owls generally are tolerant of people but onlookers shouldn’t approach too closely so as to avoid stressing the birds. Birdwatchers occasionally might spot crows “mobbing” a Snowy Owl trespassing on their turf – a behavior tactic crows use to shoo predatory birds.

For more information, the New York State Ornithological Association’s website has a link to rare bird alerts throughout the state: <http://www.nybirds.org/RecordsRBA.htm>

Photos are available at: <ftp://ftp.dec.state.ny.us/dpae/press/SnowyOwl>.



Snowy Owl photo by Larry Master

### Subject: Thesis Owl Survey

Dear Colleagues,

I am a graduate student in Conservation Biology at Antioch University New England, embarking upon a very personal thesis study and I need your help. Only your knowledge and experience can aid me in my search for answers. Please follow the link below for more information on my research and another link to a questionnaire regarding your owl patients.

<http://thesisowlsurvey.wordpress.com/>

Thank you in advance for your valuable input! And please feel free to pass this on to anyone you know who cares for or works with owls!

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