



## Message from the President

Storms are the norm for this time of year, and we all know the extra work that comes from those. Be prepared, and have extra supplies on hand. Have back-up plans in place - what can be transferred out, what can be done when the power goes out, etc. The summer heat brings its own problems too; mealworm shortages have been common for the past several years when the heat index gets too high and they don't survive transport. Do you have enough food to feed the insectivore baby birds?

Besides the animals in your care, please consider the volunteers and helpers that assist you, and be concerned about their welfare, too. Make sure they don't get overheated when working outside. Have plenty of water on hand and insist they come inside to cool off and get rehydrated. Keep sunscreen and insect repellent available and encourage everyone to use it.

Pace yourself and don't sweat the little stuff! It gets pretty intense when many animals are admitted at once, but remember to triage and set priorities. Deal with the big problems and then tackle the little ones. Caging can be washed and put away when the hectic care times are slowing down. Laundry and baby bedding can be folded and stored tomorrow - the world won't end because it didn't get done today. Sounds pretty simple, but how many of us stress over the little things? I know I do!

We lead by example, so we need to take care of ourselves first. Get enough sleep, don't skip meals, delegate duties whenever possible to free up time for other tasks only you can do, and stay relaxed. Take some time for yourself when you can, even if it is only a half hour per afternoon to go for a walk or read a book away from the animals. You need to be sure to stay mentally sharp and not become exhausted, since you are responsible for the welfare of both the two-legged and the four-legged beings under your supervision.

The summer will eventually come to an end and the frantic pace will subside, and we will all have survived another season. The key to remember is that we can have fun while doing it!

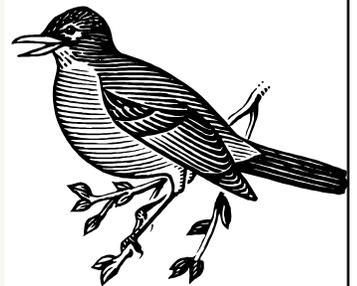
Toni O'Neil, WRNC President  
June 11, 2013



*This is a quarterly newsletter produced by Wildlife Rehabilitators of North Carolina (WRNC). WRNC was organized in 1999 with a mission to share information and knowledge about wildlife rehabilitation. The opinions, techniques, and recommendations expressed in the articles of this newsletter are those of the authors and do not imply endorsement by WRNC. All material in the newsletter is copyrighted and should not be used or reproduced without permission from the author.*

## INSIDE THIS ISSUE:

<i>Message from the Prez</i>	1
<i>Letter from a Member</i>	2
<i>Pearls of Wisdom</i>	2
<i>Ruptured Air Sacs</i>	3
<i>Snake Fungal Disease</i>	4
<i>Creature Feature</i>	5
<i>RVS Update</i>	6
<i>In the News...</i>	7
<i>Swift Towers</i>	8
<i>Events</i>	9
<i>Announcements</i>	9



## BOARD MEMBERS

Toni O'Neil (President)  
Carla Johnson (Vice President)  
Jean Chamberlain (Treasurer)  
Ann Rogers (Secretary)  
Linda Bergman  
Halley Buckanoff  
Nicki Dardinger  
Laurel Degernes, DVM  
Sue Heritage  
Christina Hildreth  
Kathy Lillard  
Michelle Ray  
David Scott, DVM  
Mary Weiss  
Linda Woodruff  
Veterinary Student Liaisons:  
Kelsey Blackburn  
Amanda Malueg



## *Letter from a Member....*

I temporarily took in a super dehydrated, nearly dead nestling House sparrow which had fallen from the ceiling at a Lowes, onto the concrete floor. Poor little thing broke a leg when it fell, and apparently had not been fed for quite some time while in the nest. Anyway, the baby had been in such pain and was so dehydrated that it didn't gape for food, even after it was rehydrated. So I made a little discovery, which I'm passing along, in case you get a single baby that won't gape. You know how you can often get a single baby to gape by putting other gaping babies in the nest with it. Of course, I had no other babies, so I went on the internet and found a video of a parent House sparrow feeding nestlings, complete with lots of gaping and chirps. I played the video full screen on my iPhone, and set the iPhone next to the baby in the nest box. I then loaded up a feeding stick, pointed it toward the open mouths in the video (pretending to feed them), then pointed the feeding stick at the orphaned baby. Immediately it began to gape and take food, and I have not had a problem since. I only had to use the video once in order to get the bird to start gaping.



Connie

## *Pearls of Wisdom*

*by Toni O'Neil*

Think inside the box!

That's right - what else can you use the empty tissue boxes for?

Well, for starters, they make great houses for baby bunnies! Cover with a draped towel and they will sit on the roof as well.

They also make excellent roosting boxes for the small cavity-nesting small sized birds like nuthatches, chickadees, wrens, and bluebirds. They can be hung on the side of the fledgling cage by twist ties and small holes in the back. When the roof becomes soiled (they like to sit on top as well), simply rotate the box until all four sides are dirty, then pitch out and hang up another one!

Possumwood Acres uses these disposable houses all the time. We like to re-use as much as possible!



## *Ruptured Air Sacs*

*by Calley Jones, NCSU CVM, 2014*

Birds respiratory systems are very different from mammals. Because they lack a diaphragm as humans use to breathe, birds must rely on pressure changes in their air sacs to move air through their lungs. The air sacs are connected to the lungs, but it is important to note that they do not participate in oxygenating the blood, only movement of air. As the ribs move in and out during respiration, the pressure in the air sacs changes and causes air to circulate through the lungs where it can oxygenate the blood. This bellows action method of breathing is why it is very important never to restrain a bird too tightly over the sternum. The air sacs are covered by only a thin membrane of tissue and it is possible to damage them.

Air sac rupture is not uncommon in birds that present for trauma, especially from cat bites. This condition is easily diagnosed by seeing pockets of air just under the skin. If the pocket of air is small and the bird does not appear to be in respiratory distress, the best course of action may be to leave the animal alone and allow it to resolve itself. It is possible to use a sterile needle to remove the subcutaneous air, but the pocket will likely fill up again multiple times, and each time you aspirate the air, while the needle may be sterile, the birds skin is not and there are risks of introducing bacteria into the air sacs and potentially into the respiratory tract. For a large pocket of air, it may be advisable to anesthetize the bird and surgically create a small hole in the skin for the air to drain from. A small cautery unit is a good option because the hole created will take longer to heal than a scalpel incision, allowing a longer period for the air to drain. If the cause of the ruptured air sac is because of a cat bite or the treatment plan involves repeated removal of the air and/or creating a hole for air drainage, a course of antibiotics is advised to avoid air sacculitis (infection of the air sacs). Check with your veterinarian first before proceeding, each case may be handled differently.

### References:

Altman, Robert B., Susan L. Clubb, Gerry M. Dorrestein, and Katherine Quesenberry. *Avian Medicine and Surgery*. Philadelphia: W. B. Saunders Company, 1997. 389, 408-09. Print.

Possumwood Acres recently had a severe case....

“This was the worst case we have ever gotten in - a little House sparrow that was found by a cat - and the owner swore the cat would never hurt a bird. Just look at how distorted the little fellow was on admission!

We started him on Amoxicillin immediately, and pricked him with sterile needles every hour for several days until the air and swelling finally disappeared. At that point the ruptured air sacs had healed internally, so there was no more leakage of air under the skin. That definitely had to make the bird feel better without any more pressure from the horrible swelling.

The bird is fine now, and will be released shortly.”

~ Toni O’Neil





## *Emerging Fungal Disease in Snakes*

*by Nicki Dardinger*

While snakes are not the most common animals brought to a wildlife rehabilitator, they are an incredibly important part of our ecosystem – even though the public doesn't always see it that way! Unfortunately, snakes have joined the growing list of wildlife impacted by fungal diseases, including bats (White-Nose Syndrome, caused by the fungus *Geomyces destructans*, has resulted in the death of millions of bats across twenty-two states and five Canadian provinces) and frogs and salamanders (the Chytrid fungus *Batrachochytrium dendrobatidis* has been detected on nearly 300 species of amphibians from thirty-six countries in North and South America, Australia, New Zealand, Europe, and Africa, and has caused severe declines in many frog and salamander populations).

Scientists have begun to investigate a potential emerging fungal disease that has presented in several species of snakes across the eastern and Midwestern United States. Over the past several years, the number of snakes with fungal dermatitis has increased, and has been documented in nine states, including Illinois, Florida, Massachusetts, Minnesota, New Jersey, New York, Ohio, Tennessee, and Wisconsin. So far, Snake Fungal Disease (SFD) has been documented in the following species: Northern Water Snake (*Nerodiasipedon*), Eastern Racer (*Coluber constrictor*), Rat Snake (*Panthero phisobsoletus*), Timber Rattlesnake (*Crotalus horridus*), Massasauga Rattlesnake (*Sistrurus catenatus*), Pygmy Rattlesnake (*Sistrurus miliarius*), Northern Copperhead (*Agkistrodon contortrix*), Eastern Garter Snake (*Thamnophis sirtalis*) and Milk Snake (*Lampropeltis triangulum*).

Scientists have determined that the fungus *Ophidomyces ophiodiicola* (formerly known as *Chrysosporium*) is consistently associated with SFD, but additional fungi are also present, and they have not been able to determine if *O. ophiodiicola* is the cause of SFD. *O. ophiodiicola* is a common fungus, and occurs naturally in the environment. Researchers are investigating why snakes are no longer able to fight off these fungal infections. Possible theories include changes to the fungus species, introduction of new fungal species from the pet trade, and environmental changes such as climate change and habitat destruction or alteration.

The clinical signs of SFD vary but can include scabs or crusty scales, subcutaneous nodules, abnormal molting, eye cloudiness (not associated with molting), and localized thickening or crusting of the skin. Some snakes have also presented with skin ulcers, facial swelling, and nodules in the deeper tissues of the head. In rattlesnakes and copperheads, symptoms also include misshapen or damaged facial pits. Scientists have observed that snakes that present with fungal infections die within a few weeks.

Researchers are not yet sure how SFD has impacted affected species at the population level. Because snakes are both cryptic and solitary animals, it is difficult to determine how widespread and severe the disease is. There is some concern that for species that continue to be persecuted or that occur in small, isolated populations, SFD may be yet another threat that impacts the viability of these snake populations.

Several states are conducting research to determine which species are being impacted, and how widespread and common the fungal infection is. SFD has not yet been documented in North Carolina, however herpetologists, field biologists, and wildlife rehabilitators should be on the look-out for snakes that present with symptoms of a fungal infection. The National Wildlife Health Center has posted pictures of fungal infections in snakes here: [http://www.nwhc.usgs.gov/disease\\_information/other\\_diseases/snake\\_fungal\\_disease.jsp](http://www.nwhc.usgs.gov/disease_information/other_diseases/snake_fungal_disease.jsp)

It is too soon to tell what the long-term effects of SFD will be on snake populations in North America. If you see a snake with symptoms of a fungal infection, take a picture, note the location, and send the information to the National Wildlife Health Center. Here is a link to their contact form: [http://www.nwhc.usgs.gov/information\\_desk/contact\\_form.jsp](http://www.nwhc.usgs.gov/information_desk/contact_form.jsp) Remember that as wildlife rehabilitators, we play an important role in educating the public about the wildlife that share the earth with us. Many people are fearful of the limbless reptiles, and don't understand that they fill an important niche in the ecosystem as predators on insects and small mammals (and as occasional prey for raptors such as great horned owls and red-tailed hawks!). When you have the opportunity to educate the public about snakes (and why they just might not want to kill every snake they see!) – take them! We can make a difference for snakes!

### References

National Wildlife Health Center – Snake Fungal Disease: [http://www.nwhc.usgs.gov/disease\\_information/other\\_diseases/snake\\_fungal\\_disease.jsp](http://www.nwhc.usgs.gov/disease_information/other_diseases/snake_fungal_disease.jsp)

National Wildlife Health Center – White Nose Syndrome  
[http://www.nwhc.usgs.gov/disease\\_information/white-nose\\_syndrome/](http://www.nwhc.usgs.gov/disease_information/white-nose_syndrome/)

## *Creature Feature - House sparrow*

*by Halley D Buckanoff*

The House (English) sparrow, *Passer domesticus*, is actually an old world sparrow from the family Passeridae and not related to any of our North American native sparrows from the family Emberizidae.

**HABITAT AND RANGE.** Believed to have originated in the Middle East, House sparrows are currently found all over North America co-habiting along with humans in areas that have been cultivated and developed.

**DESCRIPTION.** A relatively larger sparrow with a short tail and stout, blunt beak. Adult males and females are sexually dimorphic; males have a black breast bib while females are more drab brown.

**VOCALIZATIONS.** Their song consists of a series of similar sounding chirps. They also have an excitement call, a flock chatter and a flight call.

**DIET.** While the young are mostly insectivorous, adult birds feed on a variety of grasses, forbs, seeds and blossoms with some insects including spiders.

**REPRODUCTION.** Primarily cavity nesters, House sparrows may displace native songbirds for nest sites. The female lays 4-6 eggs and incubates for 10-13 days. Both parents will take care of the young who are flighted by about 17 days.

**LONGEVITY.** The oldest recorded House sparrow lived to be 23 years old! But on average most House sparrows live about 13 years.

**INTERESTING FACTS.** House sparrows were first introduced in New York in 1851; in 1870 they were introduced again in California and Utah. By the turn of the century they had spread across the United States and are now one of the most common species in North America. It is believed that they were introduced as both an ornamental species (because of their attractiveness) as well as for pest control. However, they are considered an aggressive species and one scientist reported observing House sparrows attacking up to 70 species of other birds.

**REHABILITATION CONSIDERATIONS.** The House sparrow is an introduced species (non-native), it is not protected under the Federal Migratory Bird Treaty Act, and therefore permits are not required to rehabilitate them. They are considered to be an invasive species because they are prolific and abundant outcompeting native species for resources. Some facilities/rehabilitators will not accept them due to conservation based concerns and the impact of the House sparrow on our native bird populations. However, on the flip side, other facilities/rehabilitators will care for them addressing the needs of the individual animal, as well understanding that the public may not be able to differentiate species, and not taking in an animal may impact how the public deals with wildlife in the future. To rehabilitate or not to rehabilitate non-native/invasive species that is the question—how you answer it is up to you!

### References:

[www.http://www.allaboutbirds.org/guide/House\\_Sparrow/lifehistory.org](http://www.allaboutbirds.org/guide/House_Sparrow/lifehistory.org). N.p., n.d. Web. 12 June 2013.

Ehrlich, Paul R., David S. Dobkin, and Darryl Wheye. *The Birder's Handbook*. New York City: Simon and Schuster, Fireside, 1988. 632-37. Print.

Sibley, David A. *The Sibley Guide to Birds*. New York: Alfred A Knopf, 2000. 536. Print.





## *Rabies Vector Species (RVS) Committee Update*

*by Michelle Ray*

We would like our membership to know that while RVS rehabilitation is still illegal in North Carolina, the RVS committee is actively working towards approaching the state again regarding this important issue.

The WRNC site has a section to post RVS phone calls. Some members have stated that the format is somewhat cumbersome. The RVS committee asks that even if you do not use the format on the website, that you please keep track of RVS calls and forward them to us, as they can be an extremely useful tool in gauging the need for RVS rehab in this state. A simple word document with the date of the call, species, circumstances and outcome (if you know) would be very helpful to us, especially if the caller states they will raise the animal themselves, which unfortunately is often the case. You can e-mail your call logs to Jean Chamberlain at [jchamberlain1@windstream.net](mailto:jchamberlain1@windstream.net). We know how busy we all are at the height of the season, so feel free to e-mail your call list when things slow down a bit and you have multiple entries to report.

If you receive a large number of these calls, as many of us do, we would encourage you to inform the public that they can call, write or e-mail the North Carolina Wildlife Resources Commission (NCWRC) regarding their thoughts and feelings on the subject. Our hope is to make the NCWRC aware of the extreme need of an outlet for these animals in our state. Also to let them know that having these animals in the wrong hands creates a hazard not only to the people caring for them, but also to individuals that the public would allow them to come into contact with, as well as to the animals themselves.

As with any species, as rehabbers, we always hope for and give advice on the reunion of orphans with their parents. If you are simply not familiar enough with the species to ascertain whether this is possible and don't have a contact for the information needed, please feel free to send inquiries to the individuals listed below. We will do our best to provide information regarding these species that may be useful in reuniting the babies with their parents whenever feasible.

While we are aware of the skepticism regarding the NCWRC allowing trained, experienced, and vaccinated rehabbers to one day be able to assist RVS species, we will continue to do our very best to make every effort to make it happen, as we feel that it is in the best interest of not just the animal, but to public safety as well. As members, you can help the RVS committee by sharing any ideas and information you may have regarding this issue.

### **Please remember that the following contacts are for advice only:**

#### **Raccoon:**

Wanda Jolley-Wandajolley@gmail.com  
Herta Henderson-herta.owls@yahoo.com

#### **Bat:**

Sue Heritage-heritage\_sue@yahoo.com  
Michelle Ray-mrinbfe@att.net  
Lessie Davis-Ldavistitmouse@aol.com (704-892-6658)

#### **Fox:**

Michelle Ray-mrinbfe@att.net

#### **Skunk:**

Wanda Jolley-Wandajolley@gmail.com  
Michelle Ray-mrinbfe@att.net



## *In the News....*

*Clinic for the Rehabilitation of Wildlife, Inc. Receives First Place Gulf Guardian Award in the Civic/Non-Profit Organization Category*

Release Date: 06/07/2013

Contact Information: William McBride, 404-562-8378 (direct), 404-562-8400 (main), mcbride.william@epa.gov

Stennis Space Center, MS – The Gulf of Mexico Program recently announced the Clinic for the Rehabilitation of Wildlife, Inc. (CROW) will receive a First Place 2013 Gulf Guardian Award in the Civic/Non-Profit Organization Category. The awards ceremony will be held on June 26, 2013, at the Tampa Bay Grand Hyatt beginning at 6PM.

For more than 40 years, CROW has been caring for and rehabilitating sick, injured or orphaned wildlife, including many threatened and endangered species, through a conservation medicine approach to care. In addition, CROW provides education to young people and adults that increases awareness of appropriate human/wildlife interaction and emphasizes the need for conservation of Southwest Florida's coastal wildlife habitats.

Since its establishment in 1968, CROW has treated and released more than 60,000 wildlife patients. CROW sees thousands of patients each year representing more than 200 species of mammals, reptiles, birds and amphibians. Many of these animals are threatened or endangered including wood storks, sandhill cranes, bald eagles, least terns, gopher tortoises and loggerhead, Kemp's Ridley and green sea turtles. CROW is the only gulf coast facility between Sarasota and the Florida Keys licensed to care for sea turtles. CROW takes a conservation medicine approach to wildlife rehabilitation with the ultimate goal being the reintroduction of wildlife into their natural habitats and a reduction of wildlife casualties from human interaction through public education.

The Gulf of Mexico Program initiated the Gulf Guardian awards in 2000 as a way to recognize and honor the businesses, community groups, individuals, and agencies that are taking positive steps to keep the Gulf healthy, beautiful and productive. First, second and third place awards are given in seven categories: individual, business/industry, youth environmental education, civic/nonprofit organizations, cultural diversity/environmental justice, partnership and bi-national efforts.

“This year’s Gulf Guardian Award recipients are to be commended for providing environmental leadership to protect and restore one of our nation’s most treasured natural resources, the Gulf of Mexico. These Award recipients are true environmental stewards and protectors of this vital ecosystem,” said EPA Acting Administrator A. Stanley Meiburg.

The Gulf of Mexico Program began in 1988 to protect, restore, and maintain the health and productivity of the Gulf of Mexico ecosystem in economically sustainable ways. The Gulf of Mexico Program is underwritten by the U.S. Environmental Protection Agency and is a non-regulatory, inclusive consortium of state and federal government agencies and representatives of the business and agricultural community, fishing industry, scientists, environmentalists, and community leaders from all five Gulf States. The Gulf Program seeks to improve the environmental health of the Gulf in concert with economic development

Ben Scaggs, Director of the Gulf of Mexico Program said, “Given all the incredible challenges that the Gulf has faced over the last several years and the work that has continued with strength and vigor despite what sometime seem like overwhelming obstacles, it is difficult to adequately and succinctly express the community value of the awards and the role they play in reminding us of what yet needs to be done while giving us all the energy and optimism to stay the course.”

For more information please contact James Robinson, Phone: (239) 472-3644; or Email: [development@crowclinic.org](mailto:development@crowclinic.org)  
*Editor’s Note: For more information about the Gulf Guardian Awards and the Gulf of Mexico Program, call the Gulf of Mexico Program Office at 228-688-3726 or visit our web site at <http://www.epa.gov/gmpo>.*



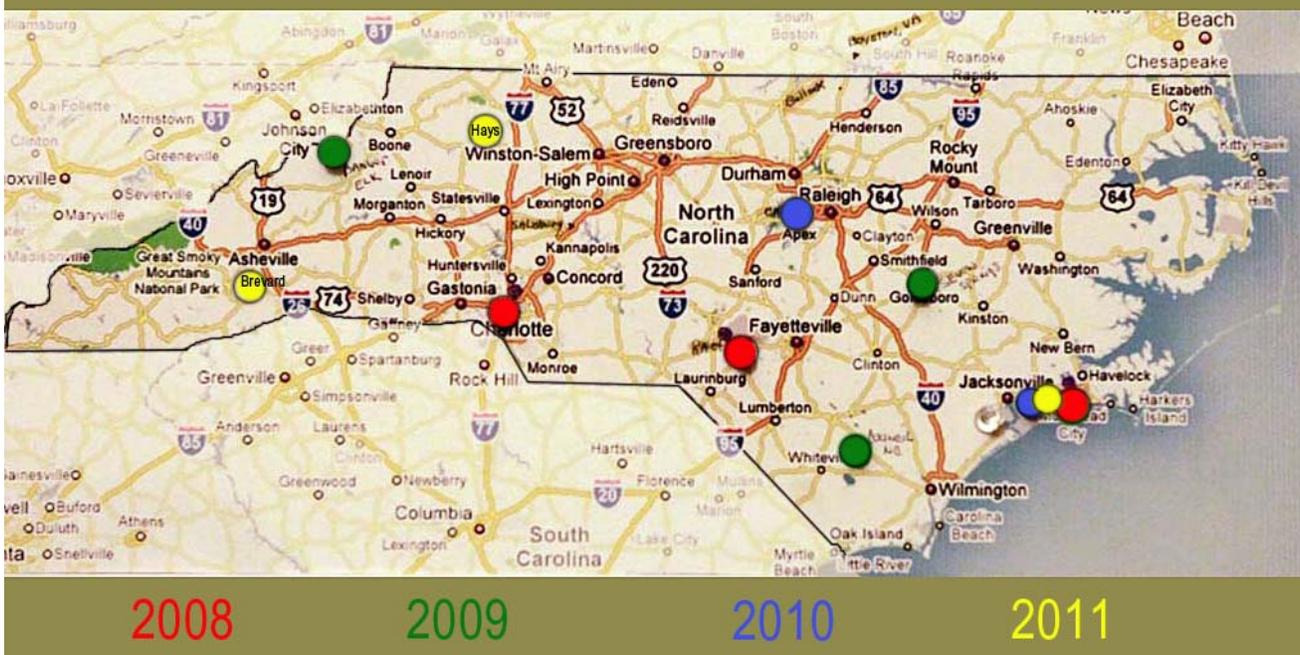
## Chimney Swift Tower Grants

by Linda Bergman– Althouse



Still going the extra mile to send a message regarding the WRNC Chimney Swift Tower Grant Program to all parties who may be willing and eager to take on this beneficial environmental project. Thanks to all who have been helping spread the word. I'm happy to say I've received a few telephone inquiries since publishing our last newsletter but still no hard copy applications for this year yet. The opportunity for monetary assistance is available through our organization and the need for alternative habitat for Chimney Swifts is still great! With the help of WRNC's Chimney Swift Tower Grant Program, construction of alternative habitat for our feathered environmental partner, the Chimney Swift, encourages them to return and thrive in our state. If you or your organization have noticed the loss of Chimney Swift habitat (possibly due to the capping of chimneys) or a decrease in numbers of Chimney Swift presence, you or someone you know may also see the need and choose to construct and maintain a Chimney Swift tower to entice the residency of Chimney Swifts, acrobatic insectivores who vacuum the sky at dawn and dusk riding our areas of pesky flying bugs, especially the dangerous mosquito. WRNC offers a \$300.00 grant and the Paul & Georgean Kyle book, "New Habitat for America's Mysterious Birds (A Construction Guide)" to assist you or your group in the undertaking of this valuable conservation project and can award three grants per year. Please refer to WRNC's website <http://ncwildliferehab.org> for details of eligibility and application requirements. This program is open to North Carolina residents only, at this time. For further questions feel free to contact the WRNC Chimney Swift Tower Grant Program Coordinator, Linda Bergman, at 910-346-8345 or [lbergman@ec.rr.com](mailto:lbergman@ec.rr.com). Deadline for submission of application and supporting documentation is January 5th, annually. Don't miss the opportunity to host Chimney Swifts in your area!!

## WRNC CST GRANT AWARDS





## Calendar of Events

Submit, questions, comments, and articles to:

Newsletter Co-Editors:

Nicki Dardinger

[nicki.dardinger@gmail.com](mailto:nicki.dardinger@gmail.com)

Halley Buckanoff

[halley.buckanoff@nczoo.org](mailto:halley.buckanoff@nczoo.org)

- **International Wildlife Rehabilitation Council**  
Continuing Education, Online Courses (ongoing)  
<http://theiwrc.org/continuing-education/online-training>
- **Wings over Vines, June 21st, Zimmerman Vineyards, Trinity, NC**  
Benefit Event for North Carolina Zoo's Valerie H. Schindler Wildlife Rehabilitation Center  
**Tickets available at** <http://store.nczoo.com/p-567-wings-over-vines.aspx>
- **4th Annual Raptor Ride, July 13, 2013, Brandon Hills Vineyards, Yadkinville, NC**  
Benefit Event for Carolina Raptor Center  
<http://www.brandonhillsvineyard.com/index.php/ride>
- **American Veterinary Medical Association Conference, July 19-23rd, Chicago, IL**  
Annual Conference  
<http://www.avma.org>
- **Florida Wildlife Rehabilitator's Association Symposium, Sep 26-29, Haines City, FL**  
25th Anniversary Symposium  
<http://www.fwra.org>

Visit us on the web: [www.ncwildliferehab.org](http://www.ncwildliferehab.org)  
Follow us on Facebook: [www.facebook.com/wrnc](http://www.facebook.com/wrnc)

## Announcements

The updated 2013 AVMA Guidelines for Euthanasia of Animals is available as a free download on the AVMA website. This link takes you to the page where you can select type of download you wish:

[https://www.avma.org/KB/Policies/Pages/Euthanasia-Guidelines.aspx?](https://www.avma.org/KB/Policies/Pages/Euthanasia-Guidelines.aspx?utm_source=smartbrief&utm_medium=email)

[utm\\_source=smartbrief&utm\\_medium=email.](https://www.avma.org/KB/Policies/Pages/Euthanasia-Guidelines.aspx?utm_source=smartbrief&utm_medium=email)

(NWRA)

USFWS Director Dan Ashe approved \$3.5 million in grants for 27 collaborative conservation projects across the Americas. The projects conserve more than 250,000 acres of migratory bird habitat, stimulate critical research into declining bird populations, and fund outreach programs to raise local awareness of conservation issues and solutions. This year's grants benefit hundreds of species in 15 countries. Full details, list of 2013 recipients, as well as those for prior years, available at:

<http://www.fws.gov/birdhabitat/Grants/NMBCA/index.shtm>.

(NWRA)

The US National Wildlife Rehabilitators Association (NWRA) and the International Wildlife Rehabilitators Council (IWRC) are pleased to announce the joint release of *Minimum Standards for Wildlife Rehabilitation*, 4th edition. This publication was reviewed and updated by experienced wildlife rehabilitators from around the country and provides useful information on appropriate cage sizes, disinfectants, and cage furniture while caring for wildlife undergoing rehabilitation. This 116-page book is available through NWRA or IWRC for \$15.00

(IWRC)

