



NEWSLETTER FOR WILDLIFE REHABILITATORS OF NORTH CAROLINA

Volume 9

June 2002

A quarterly newsletter produced by the Wildlife Rehabilitators of North Carolina (WRNC). WRNC's mission is to share information and knowledge about wildlife rehabilitation for the benefit of native wildlife. For comments or questions, write to: WRNC, 2542 Weymoth Rd, Winston-Salem, NC 27103.

THE HEART AND SOUL OF WILDLIFE REHABILITATION

By Nina Fischesser

The passion of wildlife rehabilitation typically starts with an event or experience with an injured wild animal of some type. This holds true with my experience, and most others who end up in this lifework.

I was visiting my sister Lynn in Wisconsin in May of 1985 and we were taking a night hike on her farm when we heard this strange metallic, ticking, hissing sound in the grass. This was unlike anything we had ever heard. It was too dark to see, so we went back to get a vehicle so that we could use the headlights to see. What we found were 6 baby opossums about the size of golf balls sprawled out in the grass searching for their mother – who was nowhere to be seen. After some discussion, we decided to leave them out there in hopes that the mother would retrieve her frightened and vocal babies.

When we returned the following morning to check, the babies were still there – 2 were dead and the remaining 4 were cold. We took them back to the house, put them in a box on a heating pad, and started making phone calls to research what to do for these poor orphaned creatures. In 1985 there were computers, but being the techno-peasants that we were, this was not an option. So, as we have all heard hundreds of times, we did the best we could with the information we found. I will never forget the feelings of **love** and of **determination** to help these fascinating orphaned opossums to survive.

A Reminder

Please send your 2001 animal counts to Carla Johnson or Bobby Schopler as soon as you can. A form was included in the last newsletter. If you have your records in a database, submitting them via email is the easiest way, especially if you have a lot of records.

Disclaimer The opinions, techniques, and recommendations expressed in the articles of this newsletter are those of the author(s) and do not imply endorsement by WRNC.

Continued on page 2

Continued from page 1

I did do a few things correctly, like using the correct milk replacer and keeping them on heat, but many things I did in raising them were terribly wrong. First I took them all the way to North Carolina, where I was working as a field instructor for the North Carolina Outward Bound School (OB). I remember sitting in a room with 120 OB staff listening to a speaker talk about teamwork, self-reliance, and above all compassion. The program director, Opie, walked over to me, looked in the box, looked up at me and said, "Possums." He then walked away, sat down and began to write something. As I was a field instructor and not allowed to bring pets on site, I thought, "Here it is; I am to be handed orders to get rid of the 'possums'." To my surprise, when he handed me the dreaded document, I was not even close – Opie had written down his grandmother's opossum recipe from the southern part of Alabama where he grew up! Of course, this launched an opossum recipe contest that went through the entire staff training session, with prizes and the works. The poor little opossums became the topic of many discussions and teasings and ended up like mascots for the group.

Opossums are opportunists and will eat just about anything. These orphans had a diet of the healthiest foods as they ate from the OB kitchen leftovers, which is fine if you are preparing them for foraging only in suburban garbage cans. In my mind, I thought I could change that scenario to natural foods later when I had more time to devote to them. At the end of summer, I took them with me to Florida (About as far from their origin as one can get and still be on the same continent!) where I would be staying with my Grandmother and doing my college internship. When I arrived at "Grans" and told her I would leave them in the truck until morning when I would take them away, she wouldn't hear of it. "Oh no, dear," she said, "someone might steal them. You bring them up here tonight." So we snuck them up into Grandma's fancy condominium and put them in the shower for the night.

The following day, I took them down to the Wildlife Care Center in Fort Lauderdale – the "Mash Unit" of rehabilitation centers. As I proudly walked in with my fat and healthy opossums riding on my shoulder, I picked up on the scolding looks of staff and volunteers. So that I could covertly check up on "my babes," I joined their volunteer program. When I attended the volunteer training class, the instructor talked about this awful woman who brought in these almost full-grown and entirely too tame opossums that probably didn't have a chance for the wild. Not only did I feel embarrassed at being *that woman*, but I was also devastated at the wrong I had done these poor creatures that I loved and cared for throughout the summer. It was then that I vowed to learn as much as I could to try to help injured and orphaned wildlife, in the right way, and to never ostracize the average citizen for making mistakes when they only intended to help and care for an animal they had found. I never said a word in that class about who I was, but now I wish I had. There is learning in everything – I learned that I broke the law 3 times just by rehabilitating without a license, transporting the animals into 2 other states, not to mention habituating the opossums to the point of little chance of survival in the wild. I never did find out what their outcome was. The Wildlife Care Center staff did say that they were going to try to "wild them up."

We as rehabilitators hear hundreds of similar stories from people caring, but making serious mistakes in attempting to care for wildlife they find. We often have to deal with those unintended mistakes, and it's easy to get upset when we hold a suffering or human imprinted animal in our hands when it could have been healthy and releasable. It is easy to get frustrated and point the finger.

How many of us started out as that other person who cared about the animal but made grave mistakes? The love and compassion is the catalyst and the backbone of why most people rehabilitate wildlife. It's these experiences that make people appreciate the diversity of all living things in our world, and then gives them the desire to protect this diversity. Honoring the compassion that causes people to care enough to pick up that suffering animal in the first place has a ripple effect. It spreads out the good

Continued on page 3

Continued from page 2

will for Earth's creatures and brings out the finest aspects of humanity. Let us remember this towards the end of baby season – and the end of our rope with people's mistakes.

We as rehabilitators have a great responsibility and we have to wear many hats in fulfilling this process. We don't often give each other the hard feedback like we do with the public. I know that I still make lamebrain mistakes or sometimes-poor judgments. I continue to learn and many times re-learn things that I don't do on a daily basis. The purpose of the state and national organizations is that we can continue to teach and learn from each other. In the end, this will provide us with the tools to provide the best care that we possibly can to all the thousands of injured and orphaned wildlife we collectively receive. We have a responsibility to the animals to keep learning and following through with this learning in order to hold high standards of care for all wildlife.

This fall will be an opportunity to teach and learn from each other at the Wildlife Rehabilitators of North Carolina state organization's first annual conference. As our first conference, it will not be a large undertaking, but we are trying to be sure that there is something for everyone and that the information being given is accurate and helpful. Please keep the weekend of October 5th and 6th open for an opportunity to share, learn, and meet others facing the same problems you do. All are welcome and only a nominal fee will be charged to cover expenses associated with the conference.

If you have suggestions, know good speakers, wish to present a paper, or have ideas to share, please contact Lessie Davis at 704-489-1322 or at ldavistitmouse@aol.com. Lessie is cautious with unfamiliar incoming emails – please note in subject line **WRNC Conference** to identify yourself.

Rabies Vector Survey

The school of veterinary medicine at NCSU is preparing to send out a second rabies vector species survey to all wildlife rehabilitators in NC. If you have responded to the first survey, do not answer this time around. They want to make sure that everyone gets an opportunity to respond before making a presentation to the wildlife resources commission and the state veterinarian regarding special permits to rehabilitate such species as raccoons, foxes, skunks, and bats. Your response counts – Please take the time to fill out and return this survey.

Continuing Education

The IWRC is offering several classes later in 2002:

- Basic Skills on October 5-6 in Itasca, IL
- Basic Skills on October 19-20 in W. Kingston, RI
- Clinical Pathology on November 16-17 in Kirtland, OH

Contact them at 707-864-1761 or www.iwrc-online.org for information

The deadline for sub-missions for the next newsletter is August 20th, 2002.

Ed and Mary Weiss have a new email address now: weiss275@cs.com

Here are biographies of several more WRNC board members

Bobby Schopler, DVM, PhD, Director of the APS Wildlife Rehabilitation Center.

Dr. Schopler received his DVM from North Carolina State University College of Veterinary Medicine in 1986 and his PhD in Epidemiology from the University of North Carolina - Chapel Hill, School of Public Health in 1998. He started and has run the APS Wildlife Rehabilitation Center since 11/1997. He has been on the board of the WRNC since it restarted about 2 years ago.

Mathias Engelmann

Mathias is rehabilitation coordinator at Carolina Raptor Center. Born in Munich, Germany, he "migrated" to the U.S. in 1980. He holds a degree in Biology from UNC-Charlotte and has been working at CRC since 1983, first as a volunteer and for the past 10 years as a paid staff member. Mathias has been involved with the WRNC since its reincarnation in 1999.

Notes from the Board and General Meetings at the NC Zoo Rehab Center on 4-20-2002

Lee Bolt, Ed Weiss, Nina Fischesser, Sandra Justus, Joan McMurray, Jean Chamberlain, Carla Johnson, Gail Houston, and Melanie Piazza attended the board meeting. Absent were Lessie Davis, Barbara Tomlinson, Bobby Schopler, Mathias Engelmann, and Sherri Koester.

- The minutes were reviewed and the only correction was to add Jean Chamberlain to the Wildlife Workshop Committee.
- The treasurer reported that as of 3/31/02, WRNC had \$ 4,137.34 in the bank.
- Per phone conversation with Lessie Davis, the 501(c) 3 paperwork was submitted at the end of 2001 so we should be hearing back from them soon.
- The Membership Directory was sent out to all members in September of 2001. A motion was made by Nina Fischesser to send out an updated directory every two years, 2nd by Joan McMurray and unanimously approved. It was also suggested by Joan McMurray that a separate page be sent out with the newsletter to insert into the directory with the new members listed on it instead of printing just a few in every newsletter. Unanimously approved. Corrections will still be printed in the newsletter.
- Jean Chamberlain will speak with Randy Wilson's boss about WRNC having input into changing the regulations of wildlife rehabilitators. She's going to offer that WRNC will draft some kind of new regulations and see if Randy's boss is receptive to this. Carla Johnson to get regulations that the Virginia rehabilitators use. It was unanimously agreed upon by those present that North Carolina needs some kind of regulations for its rehabilitators. Nina Fischesser suggested that we put not only Randy Wilson but also his boss on our mailing list. Unanimously agreed upon.
- Joan McMurray suggests that WRNC needs some kind of education committee to make sure that we are "all on the same page" when presenting information either in a classroom setting or to the public. Nina Fischesser suggests using the NWRA manual to model our educational material after, instead of "reinventing the wheel."
- Education committee volunteers: Ed Weiss, Joan McMurray, Melanie Piazza, Carla Johnson, and Lee Hunter.
- No Rabies Vector Species report
- Jean Chamberlain will email board members for class dates/ times and place info on the website.

Continued on page 5

Continued from page 4

Sectional Reports:

East- Gail Houston reports that they are off to a slow season

West- Ed Weiss reports that he and Mary Weiss held training classes in Asheville and that 5 people had applied for their licenses. They are holding a Christmas party for rehabbers in November/December.

- Lee Bolt reports that the Nature Center in Asheville recently held rehab classes for 30 people. Also reports that they have just recently had their first case of rabies in a "neighborhood dog."

- Nina Fischesser reports that Basic rehab classes for Birds will be held the 8th-9th of June at the Wildlife Care Institute of the Blue Ridge. Manual costs \$35.00. Lessie Davis will teach class. Also reported that her center will host 6 interns this summer and that they have recently started hosting a junior intern program for kids from the academically gifted classes at a local school. Internship lasts 1 week and costs \$500 per week. They host 2 kids per week and the kids are housed on site with meals being provided by the center. They are looking into the possibility of these kids being able to receive high school credit in science for their participation in this program.

- Sandra Justus passed out the WRNC brochure and asked for final corrections. Corrections were suggested and she is checking on the prices for printing the brochure in color.

Central-

- Carla Johnson and Jean Chamberlain report that the Basic Wildlife Rehabilitation Course offered through Forsyth Technical Institute had just been completed and that 19 people had successfully completed this course and had applied for their permits. Next classes will be offered starting the beginning of September.

- Melanie Piazza reports a 6-week training class had recently been completed at Bobby Schoppler's center. Their annual "baby shower" netted \$680 in cash and a ton of supplies. The costume party dance was also a big success.

Conference Discussion:

- Board members are in the planning phase of a 1 to 1½ day conference this fall. Lessie Davis has agreed to coordinate the program, with help from Sandra Justus and Jean Chamberlain. For those of you who don't know her, Lessie has been heavily involved in several NWRA conferences, and her experience will be invaluable at WRNC's first conference.

- Possible meeting places include the NC Zoo and wildlife rehabilitation center or a rustic lodge just outside Asheville. Both locations are in the central portion of the state to give rehabilitators from the far reaches of our state the opportunity to attend.

DECREASING THE INCIDENCE OF ROADKILL by Susan McClung

Collisions between animals and automobiles are inevitable, but we can try to lower the numbers by increasing our awareness of wildlife behaviors.

One way to decrease the incidence of collisions is to prevent one road kill from becoming two or more. Road kill attracts scavengers, such as vultures, raccoons, and possums. These creatures are nature's garbage men. They will go into the road or near the road to retrieve dinner, thus risking their own lives. We can help them do their jobs a little easier and safer.

If traffic allows, try to move road kills (dinner) to the shoulder or off into the brush. A short shovel kept in the trunk works well for this procedure. Disposable gloves are handy, too.

Another way to lower the number of casualties is to watch for babies near the impact area,

Continued on page 6

especially during the spring and summer seasons. If mom is hit, the babies may be candidates for rehab and release. Rehabbers, if you are willing and able, check the pouch of dead possums for living babies. The babies may still be viable, even if the mother has been dead for up to 24 hours. It is not a pleasant task, so keep those gloves handy.

The following information addresses specific species. Some of the tips are from Merritt Clifton, editor of *Animal People* (*).

POSSUMS

Possums are scavengers and are attracted to road kill. About 8.3 million possums die on the road a year (*)! Be aware that a lump in the road might be the road kill AND the possum eating dinner. Possums do not always move fast, and will sometimes freeze. Watch for them at night when they feed. Moving carrion off the road also helps.

SQUIRRELS AND CHIPMUNKS

We're familiar with the annoying zig-zag pattern of a squirrel trying to evade a car. This response is how squirrels and chipmunks elude predators on the ground. They perceive a car as a predator similar to a cat or a hawk; so, they keep switching directions, hoping to evade the metal creature. Unfortunately, they zig when they should have zagged. Surprisingly, studies have revealed that the speed of the car at the time of impact is not a significant factor (*). The best way to avoid setting off the reaction may be to slow down well in advance, before coming right up on the squirrel. Allowing time for him to cross may avoid setting off his panic zig/zag reaction.

BEAVERS

Young beavers leave their parents in early summer to find their own pond or stream. They move slowly, usually at night. Expect them near wetlands. They typically try to cross the road at culverts (*).

RACCOONS

Raccoons have a trait that makes them susceptible to becoming road kill. We often see not one, but two or more dead raccoons at the same location. This is because raccoons frequently travel in family groups. If one gets hit, the mother or others try to help, and this compassionate reaction frequently results in their own deaths. Moving the first dead raccoon off the road ASAP may help.

RABBITS

Be aware that a rabbit scared out of the road by the car ahead of you might circle right back into the road. Headlights usually cause them to freeze.

DEER

Deer/auto collisions are as dangerous for the occupants of the car as for the deer. At impact, the deer can be knocked over the hood and through the windshield. More than 100 Americans die each year in deer/car collisions (*). Seventy percent of the time the driver slowed down for one deer, then sped back up and hit another deer(*). Remember that although deer babies can be as large as the mother during the fall months, they will still follow the mother (*). Watch for two fawns following the first deer. Allow plenty of time after the first deer crosses before speeding back up and be prepared to brake again. Also be aware that although deer hide in foliage during the spring and summer, during the fall or winter when the branches are bare, they will run instead of hide. More than half of deer/car collisions occur during October and November (*). Be particularly alert for frightened deer during these two months, especially if you are in a hunting area.

Continued on page 7

Continued from page 6

SKUNKS

In late summer, a mother skunk may be leading seven or more babies across the road, and they may trail up to twenty feet behind her. Watch for them.

REPTILES

Turtles: Turtles migrate in the spring between ponds. Females come out of the water to lay eggs. Be alert for a rounded lump in the road. If necessary and if traffic allows, help the box turtle cross the road by carrying it in the same direction it was facing, and placing it well away from traffic in the same direction it was facing. Snakes: Snakes warm themselves on the pavement. Sometimes they do not notice the approaching car or cannot move fast enough to escape. If you see an object that looks like a stick in the road, assume it is a snake.

BIRDS OF PREY

These birds frequently capture voles and mice from grassy median strips or the roadsides. If you see one "swoop" down ahead of you, slow down. The bird, laden with his prey, may fly low as he comes out of the capture. He may need a few extra seconds and a little more space to get up speed and altitude.

The above tips can be summed up fairly easily- BE ALERT! Watch the road, watch the airspace, and watch the edges of the road for wildlife. If possible, move road kill off to the side. Pass on this information!

ZOONOSIS BASICS by Lee Bolt, DVM, Director Blue Ridge Wildlife Institute

Another season is at hand and I wish you all much success. As we begin to triage the myriad of sick and/or injured individuals it is important to review safety principles. Wildlife rehabilitation poses health risks to anyone that becomes complacent or ignores them. Please take time to review basic safety precautions for you and your assistants.

Aside from obvious physical trauma such as bites and scratches we must protect ourselves from zoonoses. These are infectious diseases, which may be passed from animals to humans or from humans to animals. The following represents just a few of these diseases. Limitations of space preclude describing each disease's symptoms. However, the following web site is an excellent source of information.

<http://www.cdc.gov/health/diseases.htm>

RABIES

Rabies is an extremely serious virus because of its high mortality rate. ***A bite is not necessary to transmit rabies.*** Typically, infection is contracted through exposure to the saliva from infected mammals. Infective saliva may enter through a bite or any unprotected wound no matter how minute. Hygiene and protection are of paramount importance and are the first line of defense.

Since mammals are the carriers, almost every rehabilitator has the potential of being exposed to rabies. Every state has policies regarding working with certain rabies vector species. It is your responsibility to know and follow these laws.

Remember that an animal with an obvious head injury from a vehicle incident **could also be harboring the rabies virus.** After all, why was the animal injured? Could it have been too slow to

Continued on page 8

Continued from page 7

escape due to rabies infection? Always wear gloves and take precautions when handling any animal.

There is no way to test living animals for rabies. The only way to diagnose rabies is from a postmortem examination of the animal's brain. If you have a legitimate reason to suspect that an animal you've handled may have rabies submit the animal to the nearest state diagnostic laboratory for testing. Never take chances.

http://www.cdc.gov/ncidod/dvrd/rabies/bats_&_rabies/bats_and_rabies.pdf

<http://www.schs.state.nc.us/epi/rabies/state.html>

WEST NILE VIRUS

This virus was first discovered in the Western Hemisphere in the New York City area in 1999. Approximately 62 humans were diagnosed with the disease. Previously, it had only been found in the Eastern Hemisphere. Birds, especially crows, were found dead and dying and subsequently the virus was isolated from them. Significant numbers of the Bronx Zoo's birds were affected.

It is surmised that the virus was transported to the United States by migrating birds. Birds which migrate in large groups throughout the eastern part of the country (crows, starlings, and waterfowl) are potential avenues of spreading the virus. In 2000 a total of 18 humans were diagnosed with the West Nile Virus. Mosquitoes transmit the virus by biting infected birds and then biting mammals (humans).

<http://www.cdc.gov/ncidod/eid/vol6no4/contents.htm>

<http://www.cdc.gov/ncidod/eid/vol7no4/contents.htm> <http://www.batcon.org/>

LYME'S DISEASE/ROCKY MOUNTAIN SPOTTED FEVER/HANTAVIRUS/EHRlichia

I make brief mention of these other diseases transmitted by insect vectors since they also present risks. Ticks of various species, fleas, lice and mosquitoes are recognized vectors transmitting these and other infectious diseases. When admitting animals to your facility, make sure to address their external parasite infestations to limit your exposure to biting insects. Remember to check yourself carefully and regularly to ensure you do not become a host to these parasites.

TUBERCULOSIS

In recent years, tuberculosis, a bacterial organism, has seen resurgence. Several different types exist however, the avian strain is the most common seen by rehabilitators. The microorganism may grow in wounds or the lungs.

Several years ago a client contracted tuberculosis in her hand while cleaning a perch in her pet bird's aviary. A splinter entered her hand and subsequently developed into a serious infection. It was several months before she was accurately diagnosed. This scenario is equally possible in the wild bird environment. Wear gloves and masks when handling animals and especially when cleaning facilities.

FUNGUS/ASPERGILLUS/HISTOPLASMA

Birds, particularly waterfowl and raptors, may carry aspergillus, in the lungs and other body tissues. These infections are more prevalent during certain seasons and years. Always wear a surgical mask and gloves when cleaning their mews/cages. If you perform necropsies, obviously it is especially

Continued on page 9

Continued from page 8

prudent to utilize protection.

<http://www.cdc.gov/niosh/hi97146.html>

INTERNAL PARASITES

ASCARIDS - *baylisascaris*, hookworms, other roundworms

Some internal parasites of animals may infect humans if allowed entry into the body. The primary route is the fecal-oral transmission however; hookworms may also directly penetrate the skin, causing skin rashes. Increasing numbers of children are contracting roundworm infections in America each year. Most of these are associated with dog and cat exposure. Some infections have involved the raccoon roundworm *Baylisascaris*, which has killed more than 90 species of birds and mammals in North America. As with most roundworm infections, the parasite wanders throughout the body causing damage to various organs including the brain.

TAPEWORMS (CESTODES) - hydatid Disease

Some species of tapeworms carried by coyotes and foxes may be picked up by exposure to their fecal matter. Once again they damage internal organs in humans.

PROTOZOAN PARASITES

Giardia, *Toxoplasma* and *Cryptosporidium* are single-cell parasites passed in the feces of birds, mammals and reptiles, which humans may contract. Protozoan parasites are invisible to the unaided eye.

MISCELLANEOUS BACTERIA

Tetanus, Pasteurella, Campylobacter, Salmonella, Pasteurella, Tularemia, Leptospirosis and others

Bacteria are everywhere in the environment but some species may concentrate where animals are housed. These are just a few of the organisms we are exposed to. Routine hygiene will do well to protect you from accidental infection

PRECAUTIONS

The objective of this article is to encourage appropriate practices to reduce potential health hazards. First and foremost is cleanliness. The routine use of soap and hot water is imperative. Be sure to wash your hands for a minimum of 30 seconds. Do not eat or prepare human food in the vicinity of your wildlife.

Always use the appropriate disinfecting agents and protocols. Bleach is very inexpensive and effective, but all visible debris must be removed prior to treating the area. Bleach does not penetrate into layers of feces or other body secretions and dirt. Bleach is very damaging to the eyes, so use proper protection.

Bleach is diluted 1:30 with tap water. It needs to be made fresh each day. Never mix bleach with anything other than water. After a thorough cleaning, spray the bleach solution on the surface and allow a minimum contact time of 10 minutes. Routinely schedule cleaning of cages/enclosures to reduce environmental concentration of pathogenic organisms.

Remember sunlight with its ultraviolet radiation is an excellent additional disinfectant.

Continued on page 10