

NEWSLETTER FOR WILDLIFE REHABILITATORS OF NORTH CAROLINA

Volume 5

June 2001

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.

PLEASE NOTE THE NEW MAILING ADDRESS!

Minimum Standards for Wildlife Rehabilitation (3rd Edition)

Erica A. Miller, DVM, editor

National Wildlife Rehabilitators Association,
St. Cloud, MN, 2000
77 pages; 7.00
ISBN 1-931439-00-1

Expanded, updated, and newly revised, this edition of the Minimum Standards for Wildlife Rehabilitation (Minimum Standards) is a "must have" for all wildlife rehabilitators.

All areas of the second edition of Minimum Standards have been expanded. Chapter 1, Minimum Standards for Rehabilitation Process, provides a chronological outline of the rehabilitation process, record keeping and reporting requirements, veterinary policy and self-evaluation of facilities with the appropriate form in the appendix.

Chapter 2, Disease Control, provides extensive information on prevention of disease transmission, public health responsibilities, release considerations, disposal of carcasses and animal wastes, as well as extensive information on disinfection with a comparison table of disinfectants.

Chapter 3, Basic Requirements for Housing Wild Animals in Rehabilitation, is an overview of caging requirements based on medical status of the animal, mobility, natural history and behavior, as well as considerations for indoor and outdoor caging.

Expanded in detail, Chapters 4, 5, and 6 provide overviews as well as extensive information on construction materials, flooring and furnishings as well as minimum housing guidelines and requirements for specific types of birds: songbirds, waterfowl, and raptors (chapter 4), mammals (chapter 5) and reptiles (chapter 6). This information is invaluable for all future cage building or housing of various species of animals in rehabilitation.

Next General Meeting of WRNC:

Where: APS of Orange
County in Mebane, NC.

When: Saturday, Sept.
15th, 2001 at 12 noon.

Directions:

From I-40/I-85, take
exit 154 (Mebane Oaks
Rd) and proceed south
for 6 miles. Turn left on
Nick's Rd. The APS
entrance will be 0.5
miles on your left.

Call Bobby Schopler at
(919) 304-2337.

A Board Meeting will
precede the General
Meeting. If you have
any questions for the
board to discuss, please
contact a board member
well in advance of the
meeting.

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Final Disposition, Chapter 7, provides guidance on release standards as well as euthanasia. There is valuable information on acceptable euthanasia methods as well as those methods considered inhumane and/or unacceptable.

The Appendices are equally useful to the new or experienced wildlife rehabilitator. Appendix A, Facility Review, provides a means for rehabilitation facilities as well as individual rehabilitators to do a self-evaluation to ensure that the wildlife in our care receive the most appropriate care and treatment. There are also Sample Admission and Sample Patient Examination forms, which many would find useful when in the process of revising forms. Also new to this edition is a list of references, suggested reading, and a conversion chart.

As stated in the Message from the presidents of the National Wildlife Rehabilitators Association and the International Wildlife Rehabilitation Council, "This cooperative effort represents the most current knowledge, expertise and techniques in our field." It most certainly is a usable document containing invaluable information. Some wildlife agencies have chosen to use all or parts of the Minimum Standards in their permitting processes. However, the presidents stress that "the information must be kept in context and used to improve the rehabilitative care of wildlife."

Minimum Standards was created by and for wildlife rehabilitators. "It is intended to help increase the number of rehabilitated wildlife that are successfully returned to wild populations by providing: a) standards and guidelines for care, b) self evaluation; and c) recommendations and information regarding wildlife care."

This "must have" for wildlife rehabilitators would make a wonderful gift for veterinarians, volunteers, board members, or anyone with an interest in wildlife rehabilitation.

Review by Elizabeth Hanrahan

Program for the general meeting in September

Dr Laurel Degernes, a Board-certified Avian Veterinarian at NC State University's Veterinary Teaching Hospital and former Staff Veterinarian at The Raptor Center in Minnesota, will be our guest speaker.

Dr Degernes is an excellent speaker with many years of experience in avian medicine – you don't want to miss this opportunity!

Continuing Education

The IWRC's (International Wildlife Rehabilitation Council) 24th Annual Conference will be held November 14-17, 2001 in Lake Buena Vista, Florida. Contact the IWRC at 4437 Central Place, Suite B-4, Suisun, CA 94585-1633 or call 707-864-1761.

The IWRC will hold a 1AB Basic Skills Seminar in Asheboro, NC on Saturday and Sunday, September 29-30, 2001, 8:30 am – 5:30 pm, both days. Contact The IWRC at iwrc@inreach.com Call at (707) 864-1761, Fax at (707) 864-3106.

The IWRC will hold an Advanced Skills Seminar entitled Wound Management, in Knoxville, TN on Saturday, September 22, 2001, 8:30 am – 5:30 pm. Contact The IWRC at iwrc@inreach.com Call at (707) 864-1761, Fax at (707) 864-3106.

Visit WRNC'S Web Site

- For wildlife news
- For a list of members
- For a list of local organizations & centers
- For information on becoming a member
- For information on training & courses being offered

<http://ncwildliferehab.org>

The School of Veterinary Medicine at NC State is mailing a Rabies Vector Species Survey to all rehabbers in the state. When you receive your copy, please take 5-10 minutes to fill out the questionnaire as it may effect the rehabilitation of thousands of animals. Please return the questionnaire promptly. Remember there is a lot at stake with this issue so your opinion is needed.

Deadline for submissions for the next newsletter will be August 20, 2001.

Thank You to:

- Bobby Schopler and APS of Orange County for the use of their facility to hold the board meeting in March and the upcoming General Meeting
- NC Zoo and Joan McMurray for arranging for the previous meeting rooms.

If you have interesting cases, innovative techniques or any other tips you would like to share with the readers, please send us the information.

All submissions will be edited for clarity and content, and suggested revisions will be sent to the author for approval prior to printing.

Important Phone numbers

USFWS Atlanta

Permits Carmen Simonton (404) 679-7049
 Michelle Outlaw (404) 679-7055
 Francis Randall (404) 679-7051

To report violations

Sandra Allred (919) 856-4786
Ted Curtis (828) 258-2084

NC Wildlife Resources Commission

Permits Randy Wilson (919) 773-2881 x313
To report violations 1-800-662-7137

Disposition of Raptor and other bird carcasses

NC Museum of Natural Sciences John Gerwin (919) 715-2600
Nat'l Eagle & Wildlife Repository Dennis (303) 287-2110 x228

Necropsies (especially Endangered species)

USFWS Health Lab

Kathy (608) 270-2445
Kim (608) 270-2448

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.

Rabies and quarantine periods by Bobby Schopler, DVM

Rabies is a disease of concern in North Carolina. There are several species of mammals that we, as rehabilitators, are not allowed to rehabilitate (Raccoons, Skunk, Bats, and Fox). We are currently the only state on the east coast that does not allow rehabilitation of rabies vector species. This law may or may not last, but it is none-the-less important that we understand as much as possible about this fatal zoonotic disease. In this issue I will try to clarify the quarantine issue and why it exists and its implications.

There are two quarantine situations with domestic animals. One is where a dog, cat or ferret bites a person, and the other is where a dog, cat or ferret is bitten by a suspected rabid animal.

DOG, CAT OR FERRET BITES A PERSON

On the basis of new information regarding rabies pathogenesis and viral shedding patterns in ferrets, ferrets are now considered in the category with dogs and cats rather than as wild terrestrial carnivores (1). A healthy domestic dog, cat, or ferret that bites a person may be confined and observed for 10 days. Any illness in the animal during confinement or before release should be evaluated by a veterinarian and reported immediately to the local public health department. If signs suggestive of rabies develop, the animal should be euthanized and its head removed and shipped, under refrigeration, for examination by a qualified laboratory. If the biting animal is stray or unwanted, it should either be observed for 10 days or be euthanized immediately and submitted for rabies examination (2). The 10 days is felt to be the maximum time a dog, cat or ferret could shed the rabies virus in their saliva before becoming symptomatic.

DOG, CAT OR FERRET IS BITTEN BY A SUSPECTED RABID ANIMAL

The unvaccinated animal that is bitten by an animal suspected of having rabies must be quarantined for six months. The virus cannot be spread from animal to animal, and does not cause symptoms until it has reached the brain of an infected animal. For the virus to spread from a bite wound into the nervous system and up to the brain can take up to six months. In this case the animal is in quarantine to see if it develops the disease, not because it has bitten a person.

These periods of quarantine are only for dogs, cats, and ferrets. Other animals may react differently to the virus. For example, an opossum or raccoon requires 10,000 times the virus inoculum to contract rabies compared to a dog or cat. The opossum is therefore much more resistant to becoming infected. The fox has been documented to shed rabies virus 17 days before showing symptoms of the disease. Bats can carry rabies for over a year before developing symptoms of the disease. Therefore there are not known quarantine times for wildlife. Caution should be used when handling rabies vector species. Furthermore, anyone handling them should be vaccinated with a pre-exposure series of rabies vaccines. In the case of a bite from a rabies-vector species, a rehabilitator should get a booster vaccine and submit the head of the offending animal to the state diagnostic lab for testing. We have no known quarantine time for wildlife.

(1) CDC. Imported dog and cat rabies -- New Hampshire, California. MMWR 1988;37:559-60.

(2) CDC. Rabies learning series: the removal of animal brains for rabies diagnosis {videotape}. Atlanta, GA: Centers for Disease Control and Prevention, 1997.

Two vultures board an airplane, each carrying two dead raccoons. The stewardess looks at them and says, "I'm sorry gentlemen, only one carrion allowed per passenger."

Selected Notes from the NWRA symposium in Lake Tahoe, March 2001 by Mathias Engelmann
(These notes are by no means meant to be a complete summary of each presentation. Look for the proceedings to be published by the NWRA in 2002 with selected, complete papers)

○ **Cages for Raptors – Gail Kratz, Rocky Mountain Raptor Program, Ft Collins, CO.**

Space at their facility is limited, so they have developed flexible flight cages: large cages that can be subdivided into smaller cages, using large sliding doors. Doors are about 8' by 10' and operated by pulley systems.

Currently they have 4 large cages (two at 15' x 42' and two at 20' x 55'), 2 medium cages (10' x 50') and 14 small holding cages (6' x 12' up to 6' x 20'). They also have constructed smaller holding cages within the larger ones, since the birds in the large cages usually only occupy the upper portion of their cages. They use pea gravel as flooring, about 12" deep. Wild skunks present some problems. The predator barrier consists of extruded plastic sheets (4' by 8') about 1/4" thick, buried 2' deep to prevent digging into the enclosures. They do not use sand because strong winds cause it to become airborne and get into the bird's eyes and wounds. Their largest cage is 152' long, if all divider doors are opened.

Here is an idea for heating outdoor perches for birds sensitive to cold weather or prone to frost bite: Use a 2" PVC pipe, wrap the inside with heat tape and then fill the pipe with concrete, which acts as a thermal mass. Simply plug the perch in for a few hours, then unplug – it should stay warm overnight.

Their flat perches used for Peregrines are not level, but rather angled about 15 degrees down from the horizontal. This forces the birds to sit with the tail hanging over the edge and prevents feather damage. They also use horizontal bow perches, attached to walls, made from PVC pipe and wrapped with rope.

○ **Scavengers and Pack rats - Lake Tahoe Wildlife Care, Inc.**

This wildlife rehabilitation group has had great success approaching local hospitals for outdated supplies. They suggest talking to purchasing departments, emergency room nurses, and medical warehouses. Assemble a complete list of your needs, make an appointment to meet and talk to the appropriate people, establish a good relationship with the people in charge, and you may get unlimited supplies for years to come. They brought a whole truckload with them to distribute to attendees at the symposium – what a feeding frenzy!

○ **Reducing Stress on Release Day – Kevin Mack, PAWS Wildlife Department, WA.**

Many factors will place additional stress on the animal to be released. **At the center**, prepare all needed supplies ahead of time. Use experienced people for final capture. If the animal/bird has to be examined, banded, etc., have all items ready. **During transport**, reduce motion of container, eliminate noises in the vehicle so you can hear if the animal/bird does something unusual, eliminate smells (for mammals), choose the right temperature – should be the same as the ambient (outside) temperature to eliminate the stress of temperature change. **At the release**, people are the number one cause of stress. Instruct visitors and media ahead of time if possible. Have written guidelines or information ready. Watch for cats, dogs, and natural predators – if possible, evaluate site ahead of time. This may also alert you to construction or development occurring at the site. Consider all unfamiliar sights, sounds, and smells, all of which will stress the animal/bird. Tools to reduce stress:

- Written guidelines for volunteers.
- Standardized checklist.
- Designated release personnel – make sure they are comfortable with the situation.
- Release kits – boxes, bands, paperwork, permits, gloves, First Aid kit, press info.
- Have a contingency plan if things go wrong – keep the animal's/bird's health in mind.

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○ **Database for Wildlife Rehabilitators by Lisa Borgia, NWRA president**

This Database has been developed at no cost, with input from a number of rehabilitators. The computer demonstration showed various screens with many fields and associated drop-down menus. Fields include animal information in great detail (weights, treatments, surgery, daily entries), state and federal reports and donor information.

The Database can be downloaded very soon from the NWRA website at no charge, if anybody wants to experiment with it. The database can be changed by experienced personnel, if fields need to be modified/added/etc. The NWRA and the designer are looking for additional ideas and suggestions for further refinement.

○ **West Nile Virus Video – National Wildlife Health Center, WI**

This short video showed 9 infected crows housed with 7 control (healthy) crows in a mosquito-proof room. All infected crows died within 8 days and 5 of the 7 healthy crows died within 21 days. Symptoms include bloody mutes, inability to stand and perch, and labored (open-mouth) breathing. Birds were alert and responsive. The question at this point is how the virus was transmitted from bird to bird without the mosquito vector. To test for WNV, a carcass has to be less than 48 hrs old and refrigerated, not frozen.

NEW MINIMUM STANDARDS FOR WILDLIFE REHABILITATION by Nina Fischesser

Most of us wildlife rehabilitators are presently up to our eyeballs in orphans. If you're like me, you'll run into many situations during the busy baby season where you'll ask yourself what to do in a given situation, be it disinfecting after an outbreak of a virus or parasite, or judging release criteria for a new, unfamiliar species. If you have come up for air long enough to read this, please don't hesitate to order the new Third Edition of **MINIMUM STANDARDS FOR WILDLIFE REHABILITATION** by the National Wildlife Rehabilitators Association, and the International Wildlife Rehabilitators Council. Edited by wildlife veterinarian Erica Miller DVM, there were many knowledgeable people who took part in compiling and updating the material in this book.

The purpose of the "Standards" is to provide rehabilitators with guidelines, a mechanism for self-evaluation and recommendations and information regarding wildlife care.

All of us are at different levels of learning. Wildlife rehabilitation is a profession in which one never stops learning. Even the known experts continue to learn every day. NWRA President, Elaine Thrune states, "this book is not a static textbook, but a living document that changes constantly as the field of wildlife rehabilitation grows and improves, and as the needs of individual animals demand".

Areas covered in Minimum Standards are: Minimum Standards for Rehabilitation Process, Facility Review, Disease Control, Sample Patient Forms, Basic Requirements for housing animals, Conversion Tables and Final Disposition.

Most professions have a Code of Ethics that provide basic rules of conduct for people to incorporate into their practice. 'Our' Code of Ethics is based on the principles of honesty, integrity, responsibility, and treating others, as we would like to be treated. When I read these, personally I feel pride and a strong desire to live by these principles in my personal life as well. Cost should not be an issue with this great resource. It costs \$6.50 plus 3.50 S/H for non-members and members alike. You can

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obtain a copy from both NWRA and IWRC at the following addresses:

National Wildlife Rehabilitators Association
14 North 7th Avenue
St. Cloud, MN 56303-4766
(320) 259-4086
nwra@cloudnet.com
www.nwrawildlife.org

International Wildlife Rehabilitation Council
4437 Central Place, Suite B-4
Suisun, CA 94585-1633
(707) 864-1761
iwrc@inreach.com
www.iwrc-online.org

Results of the WRNC Animal Count Survey for the Year 2000

Species	Number		
American Coot	1	Eastern Tufted Titmouse	7
American Crow	3	European Starling	24
American Goldfinch	4	Field Sparrow	1
American Kestrel	25	Finch species	3
American Robin	52	Fish Crow	1
Baby Bird (Unkn. Sp.)	2	Garter Snake	1
Bald Eagle	4	Goose species	6
Barn Owl	30	Gray Catbird	5
Barn Swallow	2	Gray Squirrel	311
Barred Owl	175	Great Blue Heron	2
Black-backed Gull	1	Great Crested Flycatcher	4
Black Vulture	5	Great Egret	1
Blue Grosbeak	1	Great Horned Owl	70
Blue Jay	48	Greater Shearwater	1
Box Turtle	1	Herring Gull	8
Broad-winged Hawk	25	House Finch	14
Brown Pelican	1	House Sparrow	11
Brown Thrasher	8	House Wren	1
Brown-headed Cowbird	5	Killdeer	4
Canada Goose	3	Laughing Gull	5
Carolina Chickadee	12	Least Tern	1
Carolina Wren	6	Long-eared Owl	1
Chickadee species	3	Mallard	67
Chimney Swift	13	Merlin	1
Chipmunk	2	Moscovie Duck	2
Chipping Sparrow	3	Mourning Dove	69
Chuck-will's-widow	3	Mouse species	8
Common Grackle	31	Northern Cardinal	21
Common Loon	4	Northern Flicker	3
Coopers' Hawk	75	Northern Gannett	3
Dark-eyed Junco	3	Northern Harrier	1
Double-crested Cormorant	3	Northern Mockingbird	24
Eastern Blue Bird	11	Orchard Oriole	2
Eastern Cottontail	179	Osprey	9
Eastern Kingbird	2	Palm Warbler	2
Eastern Screech-owl	94	Prothonotary Warbler	2
		Purple Martin	8
		Red-bellied Woodpecker	1
		Red-headed Woodpecker	3
		Red-shouldered Hawk	52
		Red Slider Turtle	4
		Red-tailed Hawk	140
		Ring-Billed Gull	9
		Rock Dove (Pigeon)	17
		Scarlet Tanager	1
		Sharp-shinned Hawk	20
		Snapping Turtle	1
		Song Sparrow	1
		Southern Flying Squirrel	14
		Sparrow species	1
		Swainson's Warbler	2
		Turkey Vulture	6
		Virginia Opossum	150
		Wood Duck	3
		Wood Rat	6
		Wood Thrush	3
		Wren species	2
		Yellow-bellied Sapsucker	1
		Yellow-shafted Flicker	2
		Total:	1983

This data only represents a handful of individuals/centers. Hopefully next year's numbers will represent a more accurate count of the actual numbers of animals taken in across the state. Please remember to keep records.