

# GRANTS

## Awarded by the National Wildlife Rehabilitators Association (NWRA)

The National Wildlife Rehabilitators Association Grants Program awards research grants in the field of wildlife rehabilitation, including wildlife medicine and wildlife education. Proposals funded in past years are listed below, along with publication citations in which research or study results are reported.

### 2018

Michele Kneeland, DVM, (ME), \$2,700, in partial support of her study on Feather Corticosterone as a Marker for Evaluating Common Loon Captive Rearing Techniques.

Sarah Reich, DVM, (IL), \$1,500, to partially fund her study on Hemoparasitic Infections in Raptor Species in a Rehabilitation Setting.

### 2017

Mark Pokras, DVM, Cummings School of Veterinary Medicine, Tufts University (MA): \$3,000  
Modeling Gastric Breakdown of Fishing Gear in the Common Loon

Dr. Tamara L. Johnstone-Yellin, Bridgewater College (VA); \$3,000  
Effects of Drying and Storage Methods on Nutritional Content of Acorn Masts for Wildlife Rehabilitation Patients

### 2016

Karli Chudeau, (CA): \$1,675  
The Physical and Behavioral Effects of Enrichment in Rehabilitating Eastern Pacific Harbor Seals

Presented in the Research Session of NWRA Symposium 2017, Williamsburg, VA

Andreas Eleftheriou, DVM, University of Montana (MT): \$800  
Stress Effects of Anthropogenic Disturbance on Pathogen Prevalence in Wildlife Species

Dana Franzen, DVM, Wildlife Center of Virginia (VA): \$3,500  
Epidemiology of Box Turtle Adenovirus-I in Eastern Box Turtles (*Terrapene carolina carolina*)  
Presented to a Virginia Wildlife Rehabilitation Center

### 2015

No grants awarded

## 2014

Sharon Reilly, Northwoods Wildlife Center (WI): \$3,000  
Salmonellosis in Wintering Finches: Monitoring, Prevention and Rehabilitation

Julia Whittington, DVM, University of Illinois College Of Veterinary Medicine (IL): \$1500  
"Evaluating the Effect of Isoflurane Anesthesia on the Leukogram of Free-Living Raptor Species

Jacqueline Edmunds, Dane County Humane Society's Four Lakes Wildlife Center (WI): \$1500  
Use of GPS Surveillance to Measure Long Term Success of Rehabilitated Raptors in Dane County

## 2013

Dr. Kathy Orr, Liberty Wildlife (AZ): \$1,600  
Endangered Species and Native Raptors Lead Poisoning

Wendy Hall, Adirondack Wildlife Refuge and Rehab Center (NY): \$1,500  
Mitigating Non-Target Poisoning of Endangered and Threatened Raptors in the Adirondack Park and Northern Forest Region  
(funds returned to NWRA, unable to do the project)

## 2012

Dr. Sue Carstairs, Kawartha Turtle Trauma Centre (Ontario, Canada): \$2,000  
Post Release Monitoring of Blanding's Turtle Hatchlings

Michelle Willette, The Raptor Center (MN): \$1,500  
Characterization of Starvation in Raptors Presented to Wildlife Rehabilitators

## 2011

Stephanie Herman, PAWS Wildlife Center (WA): \$3,000  
Alternative Piscivore Gavage Diet

Florina Tseng, DVM, Tufts Wildlife Clinic (MA): \$3,000  
Opioid Receptor Distribution in Red-tailed Hawks

## 2010

Tri-State Bird Rescue & Research, Inc (DE): \$4,800  
Pharmacokinetics of Injectable Meloxicam Dosed orally and Determination of pH of the Proventriculi of Native Wild Birds

International Bird Rescue Research Center (CA): \$1,200  
Effects of Crystalloid and Colloid Therapy on Indirect Blood Pressure in California Brown Pelicans

## 2009

University of British Columbia Animal Welfare Program (BC, Canada): \$4,000  
Improved Feeding of Orphaned Harbour Seals

Friends of Wildlife (MI): \$1,000  
Red Squirrel Alopecia

Marathon Wild Bird Center, Inc. (FL): \$1,000  
The Study of Hand-rearing Least Terns

## 2008

Julia Whittington, DVM, University of Illinois College of Veterinary Medicine (IL): \$5,000  
Ophthalmic findings in birds of prey using electroretinography, ultrasonography, and direct exam techniques

## 2007

Lauren Palmer, DVM, Marine Mammal Care Center (CA): \$4,968  
Radiographic study and techniques for pinnipeds

## 2006

Florina Tseng, DVM, and Maya Kummrow, Wildlife Clinic, Tufts Cummings School of Veterinary Medicine (MA): \$1,575  
Pharmacokinetics of buprenorphine after single-dose intramuscular administration in red-eared sliders (advancing the use of pain reducing drugs with turtles)

Hillojyoti Singha, PhD, Aaranyak, Society for Biodiversity Conservation (India): \$3,425  
Rescue and rehabilitation of endangered greater adjutant storks in Assam, India

## 2005

Donald L. Burton, DVM, Ohio Wildlife Center (OH): \$2,520  
Establishing a baseline health index for Midwest urban/suburban Virginia opossums (*Didelphis virginiana*)

Sarah Kilgriff, and Trudi Chepey, DVM, Minnesota Wildlife Assistance Cooperative (MN): \$1,339  
Conservation officer outreach packet (information, educational materials, and resources for enforcement field officers)

A sample packet was provided to NWRA.

Corina Hines, PAWS Wildlife Department (WA): \$1,140  
The efficacy of environmental enrichment in wildlife rehabilitation, phase 1

## 2004

Melvin Sunquist, PhD, and Maena Voigt, University of Florida (FL): \$2,820  
Post-release survival of rehabilitated Brazilian free-tailed bats (*Tadarida brasiliensis*)

Voigt, M. C. 2006. Post-release Survival of Rehabilitated Brazilian Free-tailed Bats (*Tadarida brasiliensis cynocephala*). *Wildlife Rehabilitation Bulletin* 24(2):19–26.

Florina Tseng, DVM, and Tara Rittle, DVM, Tufts University Wildlife Clinic (MA): \$2,180  
Investigation of West Nile virus in raptors  
(funds returned to NWRA due to lack of birds admitted with WNV)

## 2003

Wendy Sanborn, PhD, Hawk Watch International (UT): \$3,000  
Wildlife lead poisoning reduction program

Sanborn, W. 2003. Lead Poisoning of Wildlife from Hunting Ammunition and Fishing Tackle: Annual Update. *Wildlife Rehabilitation Bulletin* 21(1):30–38.

Dominique Shimizu, Volunteers for Wildlife (NY): \$1,600  
An ongoing assessment of health, geographic movement, and population dynamics of Eastern box turtles in Long Island, NY

Shimizu, D. 2005. Post-release Study Methods for Eastern Box Turtle (*Terrapene carolina carolina*). Pp. 88–91 in *Wildlife Rehabilitation*, vol 22 (D. Nickerson, ed.). National Wildlife Rehabilitators Association: St. Cloud, MN.

## 2002

Sara Dubois, University of British Columbia (Vancouver, BC): \$3,800  
Measuring success in wildlife rehabilitation

Dubois, S., and D. Fraser. 2004. Defining and Measuring Success in Wildlife Rehabilitation. Pp. 123–132 in *Wildlife Rehabilitation*, vol 21 (B. Orendorff, ed.). National Wildlife Rehabilitators Association: St. Cloud, MN.

Catherine Brown, DVM, Cape Wildlife Center (MA): \$1,200  
Examine the possibility of a correlation between infection with Canine Distemper Virus in striped skunks (*Mephitis mephitis*) and development of septic arthritis

## 2001

Kathy Michell (NY): \$2,000

Radio–telemetry study to determine long–term survivability of rehabilitated turtles

Heather Reid, DVM, Toronto Wildlife Centre (Ontario, Canada): \$1,500

Minimum standards for wildlife veterinary hospitals

Reid, H. 2004. Minimum Standards for Wildlife Veterinary Facilities. Pp. 106–115 in *Wildlife Rehabilitation*, vol 21 (B. Orendorff, ed.). National Wildlife Rehabilitators Association: St. Cloud, MN.

Mark Pokras, DVM, and Katherine Ziegerer, Tufts Wildlife Clinic (MA): \$1,500

Impacts of antibiotic use on wildlife in a rehabilitation study

Ziegerer, K. M., F. S. Tseng, and M. A. Pokras. 2002. Impact of Antibiotic Use in a Wildlife Rehabilitation Clinic. Pp. 69-83 in *Wildlife Rehabilitation*, vol 20 (D. Ludwig, ed.). National Wildlife Rehabilitators Association: St. Cloud, MN.

## 2000

NWRA Veterinary Committee, John Huckabee, DVM, Chair: \$3,000

Preparation of illustrations for the NWRA Wildlife Medicine Course manual for veterinary colleges

The manual is currently in use for the instruction of veterinary students through the NWRA Wildlife Medicine Course.

Mark Pokras, DVM, and Sally Beckwith, Tufts School of Veterinary Medicine (MA): \$1,950

Development of a computerized record–keeping system for wildlife rehabilitators

*Wildlife Recordkeeping*® is offered on the NWRA website as a free download <[www.nrawildlife.org](http://www.nrawildlife.org)> Click on Miscellaneous under the Resources button. NOTE: This item is no longer offered on the NWRA website.

## 1999

Stuart L. Porter, VMD, Blue Ridge Community College (VA): \$3,500

Production of a CD of wildlife blood cells, fecal parasites, and cytology

Porter, S. L. 2002. Wildlife Under the Microscope. *Wildlife Rehabilitation Bulletin* 20(1):21–26.

A CD entitled “Wildlife Under the Microscope” is available for sale through NWRA; more than 1100 slides containing over 800 color images concerning different aspects of diagnostic testing in animals.

Michael D. Cox, Vermont Raptor Center (VT): \$1,500

Post–release survival and dispersal of barred owls with unilateral ocular disorders

## 1998

Edward J. Gentz, DVM, Wildlife Center of Virginia (VA): \$720

Comparison of total protein determination in birds of prey by refractometry and the biuret method

Gretchen E. Kaufman, DVM, Wildlife Clinic, Tufts University School of Veterinary Medicine (MA): \$750

Antibiotic resistance patterns of *Pasteurella* organisms cultured from domestic cats (a study to find the best therapeutic alternatives for treating cat-bite infections in wildlife)

Jonna Mazet, DVM, Wildlife Health Center, University of California, Davis (CA): \$1,800

Assessment and comparison of the health status, survival, and behavior of recently-weaned free-ranging and rehabilitated southern sea otter (*Enhydra lutris nereis*) pups

## 1997

Blair Joselyn, Minnesota Department of Natural Resources (MN): \$500

Publication of wildlife rehabilitation and examination study guides that may be used as a standard for other states developing regulations

A two-book set was completed in 1999 and is available through Minnesota's Bookstore <[www.minnesotasbookstore.com](http://www.minnesotasbookstore.com)>. One set was provided to NWRA.

Marek Smith, University of North Carolina, and the Carolina Raptor Center (NC): \$1,000

Evaluate survivorship, dispersal, and diet in wild and captive-reared barn owls

Robin Roscoe, DVM, Lynwood Animal Hospital and Wild Bird Care Center (Ontario, Canada): \$1,500

A study on avian head trauma

## 1996

Jay Holcomb, International Bird Rescue Research Center (CA): \$2,000

Development of warm water pools to maintain waterproofing in seabirds

Mark Pokras, DVM, Wildlife Clinic, Tufts School of Veterinary Medicine (MA): \$1,000

Develop a web home page for NWRA and communication links for wildlife rehabilitators

Janette Ackermann, DVM, The Raptor Center, University of Minnesota (MN): \$500

Neurological evaluation of avian patients and their correlations to electromyographic (EMG) examinations

## 1995

Lance Morgan, Marine Mammal Center, and Michelle Lander, Moss Landing Marine Laboratory (CA): \$1,000  
Behavioral comparisons between rehabilitated and wild harbor seal pups off the Central California Coast

Lowell W. Adams, PhD, National Institute for Urban Wildlife (WV): \$1,000  
Movement and mortality patterns of translocated urban and suburban gray squirrels

Adams, L. W., J. Hadidian, and V. Flyger. 2004. Movement and mortality of translocated urban–suburban grey squirrels. *Animal Welfare* 13:45-50.

## 1994

Barbara Dell, Audubon Park Zoo Wild Bird Rehabilitation Center (LA): \$1,000 (funds returned to NWRA)  
Post–release survivability of hand–reared common nighthawks comparing three methods of pre–release housing and exercise

Curt Clumpner, and Jennifer Tobias, HOWL Wildlife Center (WA): \$1,000  
Use of passive microchips to identify small mammals in a wildlife rehabilitation center

Tobias, J. 1995. Use of Microchips for Identification of Small Mammals. Pp. 39–43 in *Wildlife Rehabilitation*, vol 13 (D. Ludwig, ed.). National Wildlife Rehabilitators Association: St. Cloud, MN.

## 1993

Michael Fry (MN): \$1,000  
Orphaned bat rehabilitation and release

Fry, M. 1994. Infant Insectivorous Bat Rehabilitation. *NWRA Quarterly* 12(4):1-4.

Teresa Morishita, DVM, Raptor Center, University of California, Davis (CA): \$500  
Raptor endoparasitism and its significance to raptor health at rehabilitation centers (continuation of study partially funded in 1992)

Morishita, T. Y. 1997. Parasites of Raptors and Developing a Parasite Monitoring and Prevention Program. Pp 119–133 in *Wildlife Rehabilitation*, vol 15 (D. Ludwig, ed.). National Wildlife Rehabilitators Association: St. Cloud, MN.

Baker, D. G., T. Y. Morishita, J. L. Bartlett, and D. L. Brooks. 1996. Coprologic Survey of Internal Parasites of Northern California Raptors. *Journal of Zoo and Wildlife Medicine* 27(3):358-363.

Jimmy Pichner, and Peregrine Wolf, DVM, Minnesota Zoological Gardens (MN): \$500  
Investigation of morbidity and mortality of the common loon

## 1992

Teresa D. DeLorenzo, Northwest Ecological Research Institute (OR): \$700  
Post-release study of rehabilitated pond turtles

Joanne Cameron Slaughter: \$400  
Survival of fostered starlings

Patricia Johnson, University of Missouri (MO): \$400 (funds returned to NWRA)  
Breeding behavior of captive Mexican wolves

Teresa Morishita, Raptor Center, University of California, Davis (CA): \$250  
Survey of endoparasites in raptors and prevention (see also 1993)

Mike Link, Audubon Center of the North Woods (MN): \$250  
Use of human-made nest structures by rehabilitated raptors

## 1991

Daniel J. Decker and William F. Siemer, Cornell University (NY): \$1,000  
Understanding Wildlife Rehabilitators and Wildlife Rehabilitation related activities (a regional study to gain information on the nature and motivation of rehabilitators and the perceptions of the public and state officials toward wildlife rehabilitators)

Siemer, W. F., and T. L. Brown. 1992. Wildlife Rehabilitators' Attitudes and Motivations: Insights from New York. Pp. 205–220 in *Wildlife Rehabilitation*, vol 10 (D. Ludwig, ed.). National Wildlife Rehabilitators Association: St. Cloud, MN.

Siemer, W. F., T. L. Brown, and P. P. Martin. 1994. Characteristics of Wildlife Rehabilitation Cooperators in New York. Pp. 227–246 in *Wildlife Rehabilitation*, vol 12 (D. Ludwig, ed.). National Wildlife Rehabilitators Association: St. Cloud, MN.

Martin D. and Karolann Keminosh Longo (AK): \$1,000  
Animal Rehabilitation Information System (ARIS) database record-keeping system for wildlife rehabilitators



## 1990

Stephen J. Taft, PhD, Biology Department, University of Wisconsin, Stevens Point (WI): \$1,000  
Production of an illustrated guide for the identification of raptor parasites

Taft, S. J. 2000. Host Lists of Ecto- and Endoparasites Common to North American Raptors, Along with Useful Scientific Literature. *Journal of Wildlife Rehabilitation* 23(3):3-7.

Taft, S. J., E. A. Jacobs, and R. N. Rosenfield. 1997. Hematozoa of Spring- and Fall-Migrating Northern Saw-Whet Owls (*Aegolius acadicus*) in Wisconsin. *Journal of the Helminthological Society of Washington*. 64(2):296-298.

Taft, S. J., K Suchow, and M. Van Horn. 1993. Helminths from Some Minnesota and Wisconsin Raptors. *Journal of the Helminthological Society of Washington*. 60(2):260-263.

Taft, S. J., R. N. Rosenfield, W. S. Seegar, and T. L. Maechtle. 1998. Paucity of Hematozoa in Peregrine Falcons (*Falco peregrinus*) in West Greenland and Coastal Texas. *Journal of the Helminthological Society of Washington*. 65(1):111-113.

## 1989

No grants awarded

## 1988

George Heinrich (FL): \$1,000

A post-release study of shell fracture repaired chelonians (12-18 month radio-tracking study of turtles and tortoises with repaired shells)

Mark Pokras, DVM, Tufts University School of Veterinary Medicine (MA): \$1,000

The avian shoulder: fulcrum of flight (a study to improve understanding of the avian shoulder joint and develop new treatments)

Pepscoe, V. A, M. A. Pokras, E. N. Gillespie, S. D. Janeczko, and D. Davis. 2001. Detection and Diagnosis of Avian Scapular Fractures. *Wildlife Rehabilitation Bulletin* 19(2):35-41,50.

## 1987

Lynne Frink, Tri-State Bird Rescue & Research, Inc. (DE): \$1,000

Avian clinical pathology—cholinesterase inhibition (three-year study to monitor organophosphate levels in suburban birds)

Frink, L., and S. C. Welte. 1987. Research Grant Award Annual Report: Study to monitor organophosphate levels in suburban birds. *NWRA Newsletter*, 5(3):5,7.

Welte, S. 2000. Avian clinical pathology: cholinesterase inhibition. *NWRA Quarterly Journal* 18(4):8-10.

## 1986

Paul D. and Georgan Z. Kyle, Driftwood Wildlife Association (TX): \$1,000  
Investigation of the relationship between the parents' saliva and immune competence in young chimney swifts

Kyle, G. Z. 1987. Research Grant Award Annual Report: Chimney Swift saliva transfer project. *NWRA Newsletter*, 5(3):4.

Kyle, P. D., and G. Z. Kyle. 1990. An Evaluation of the Role of Microbial Flora in the Saliva Transfer Technique for Hand-rearing Chimney Swifts (*Chaetura pelagica*). Pp. 65–72 in *Wildlife Rehabilitation*, vol 8 (D. Ludwig, ed.). National Wildlife Rehabilitators Association: St. Cloud, MN.

## 1985

Paul Beaver, PhD, Quabaug Bird Sanctuary (MA): \$300  
Effectiveness of bird skins in imprinting orphaned birds

Betsy Jones, Wild Bird Rehabilitation and Research Center (NJ): \$300  
Preparation of a fundraising brochure

Sally J. Bradbury–Zito, Utica Zoo (NY): \$150  
Funding for an outdoor rehabilitation cage for birds

Eric Kowalczyk, Woodland Park Zoological Gardens (WA): \$250  
Radio-tracking study of rehabilitated bald eagles

## 1984

James M. Fitzpatrick and Julie Lee, Carpenter St. Croix Valley Nature Center (MN): \$1,000  
Radio tracking study of rehabilitated bald eagles