

HackBack

The Newsletter of RAPTOR Inc.

Celebrating 40 Years



Summer 2018

SAFER WIND POWER

By Alison Bewley, Volunteer

Audubon's Birds and Climate Change report makes it clear that human-driven climate change is one of the largest threats facing birds today. Fifty-three percent of the 588 species modeled in the Audubon's assessment will lose more than half of their geographic range by 2050 unless greenhouse gas emissions are rapidly reduced. One way to reduce emissions is to transition to renewable energy, including wind power.

But an increased reliance on wind power is not without its own risks. Current studies estimate that turbine collisions are responsible for anywhere from 140,000 to 500,000 bird deaths per year. Worse, statistical models predict that this number could grow to 1.4 million birds/year as wind energy capacity increases to meet the Department of Energy's goal of wind supplying 20% of the country's total demand by 2030. Songbird collisions are the most commonly reported, but diurnal raptors like hawks and eagles are also especially vulnerable due to their soaring flight and life history traits. While careful siting of wind turbines has been crucial in reducing collisions, an increasing number of technologies are being developed and tested to curb the number of casualties.

Strategies to prevent bird deaths fall into two major categories: deterrents, and detection and curtailment. Under the first strategy, the goal is to keep birds (and bats) away from turbines entirely, generally through the use of proximity-triggered audio deterrents. For example there is the 360° camera system that DTBird® utilizes to detect birds and mitigate their collisions with both onshore and offshore turbines. If the audio deterrents fail, a few of these systems have backup curtailment measures in place.

The goal of the detection and curtailment strategy is to monitor when birds approach and temporarily shut down

turbines until the birds are out of range. Methods of detection include radar monitoring, thermal imaging, GPS/radio tracking (for tagged California condors), cameras, and artificial intelligence (AI).

IdentiFlight, for example, uses high-precision cameras and AI to detect and identify incoming raptors. Using the raptor's flight path and speed, the software calculates whether there is a risk of a collision; if there is, it generates an alert to shut down that specific turbine until the raptor has passed. The software can make these calculations and determinations within five seconds of bird detection at a kilometer out, which gives wind farm operators plenty of time to prevent collisions. Duke Energy beta-tested four IdentiFlight units in 2016, and the results of those tests convinced the company to purchase 24 additional units for its Top of the World project. The official results of third-party testing are awaiting publication, but so far IdentiFlight looks promising.

The rise of more sophisticated detection and curtailment technologies, combined with data that increase understanding of the best places to site wind farms, are a glimpse into a bright future that runs on clean energy and protects the lives of our birds. There is plenty of wind to sustain both birds and humans; it's only a matter of learning how to share the sky.

For more information on how you can help to make that vision a reality, visit the Audubon's website at <https://www.audubon.org/conservation/advocacy>. To help closer to home, check out RAPTOR's site at <http://raptorinc.org/> for ways to donate or volunteer your time or talents.

For further reading, check out:

- <https://goo.gl/je9udk>
- <https://goo.gl/8X7zjk>
- <https://www.identiflight.com>



Meet Our Veterinarians: Dr. J. Peter Hill, DVM

As a volunteer organization, RAPTOR Inc. depends on the time, talents, and generosity of many individuals to fulfill our mission. Some of our most dedicated volunteers are our veterinarians. These highly trained professionals provide essential services to our organization at little to no cost. Their services include treating our rehabilitation patients and avian ambassadors, establishing our treatment protocols, providing us with medications and medical supplies, and signing off on our state and federal permits. In this and upcoming HackBack issues we will feature our awesome attending veterinarians and share some of the amazing contributions they make to our organization and our community at large.

Dr. J. Peter Hill, DVM

Dr. J. Peter Hill hails from Lancaster, OH, south of Columbus. He knew he wanted to be a veterinarian from an early age. He loved the outdoors and spent numerous hours exploring the creek beds, studying exotic and wild animals, and watching the birds in the trees near his home.

Dr. Hill received his Bachelor's degree in Animal Science and a Master's degree in Dairy Science with a focus on Reproductive Physiology from The Ohio State University. He continued his veterinary education at the University of the Philippines College of Veterinary Medicine and was awarded his Doctorate of Veterinary

Medicine in 1983. He enjoys keeping up-to-date on the latest veterinary medical techniques and attends frequent continuing education programs.

Dr. Hill was interested in treating birds from the beginning of his career. While in veterinary school, Dr. Hill partnered with Antonio de Dios to help create a state of the art parrot breeding facility near Manila, called Birds International Inc. Setting up this facility in a third world country wasn't easy. Everything had to be brought in, including trained staff (with 5 veterinarians) and all of the specialized laboratory and surgical equipment. The facility has bred over 150 different species and housed over 6000 individual birds, including rare species such as Spix macaws, Hyacinth macaws, and golden conures. He considers the establishment of this facility as one of his greatest accomplishments.

After graduating from veterinary school he moved to Cincinnati and joined the staff at Grady Veterinary Hospital in 1984. In 1992 he became owner of his own practice, named PetCare Animal Hospital. In June of 2008 Dr. Hill and his staff opened a new satellite location in the Loveland area. Dr. Hill began serving with RAPTOR Inc. shortly after coming to Cincinnati. In those early days the organization was based at the home of RAPTOR Inc.'s first Board President, Bill Moring.

See Dr. J. Peter Hill, DVM, on the following page

2018 RAPTOR Inc.

Members' Meeting & Picnic

Saturday, October 6, 2018, 4 pm till dark
 Member's meeting at 4:30 pm | Food served at 5 pm
 961 Barg Salt Run Road, Milford, Ohio 45150

Raptors will be on display!



RSVP to: raptor@raptorinc.org by Oct. 1 | Please bring a dish to share; we will provide grilled food, drinks, and the RAPTOR Inc. cake



Thank You!

Thanks to Wild About Birds for hosting another great fundraiser!

Donations to RAPTOR Inc. supports local raptor conservation.

Dr. J. Peter Hill, DVM, continued

Dr. Hill enjoys contributing to cutting-edge research projects. He is currently collaborating with Dr. Peter Scheifele, Director and Principal Investigator of the University of Cincinnati's FETCHLAB. The lab investigates animal audiology, hearing management in canines, animal vocal mechanisms, noise impacts to animal hearing, and bioacoustics. Dr. Hill invited RAPTOR Inc. to participate in the study, so we submitted a Cooper's Hawk, a Red-tailed Hawk, and a Great Horned Owl for testing. We are looking forward to the published results of the study.

In addition to his full-time schedule at PetCare Animal Hospital, Dr. Hill is the Director of Veterinary Services at the Newport Aquarium. He regularly treats animals such as penguins, otters, shark rays, turtles, and other exotic species. Dr. Hill is a member of the Association of Avian Veterinarians and the Cincinnati Veterinary Medical Association. He enjoys participating in outreach

programs with schools and donates countless hours to non-profit organizations such as RAPTOR Inc. Dr. Hill loves being a veterinarian because it is a rewarding profession. He enjoys the daily challenge of the profession and doing different things each day with different animals and different people.

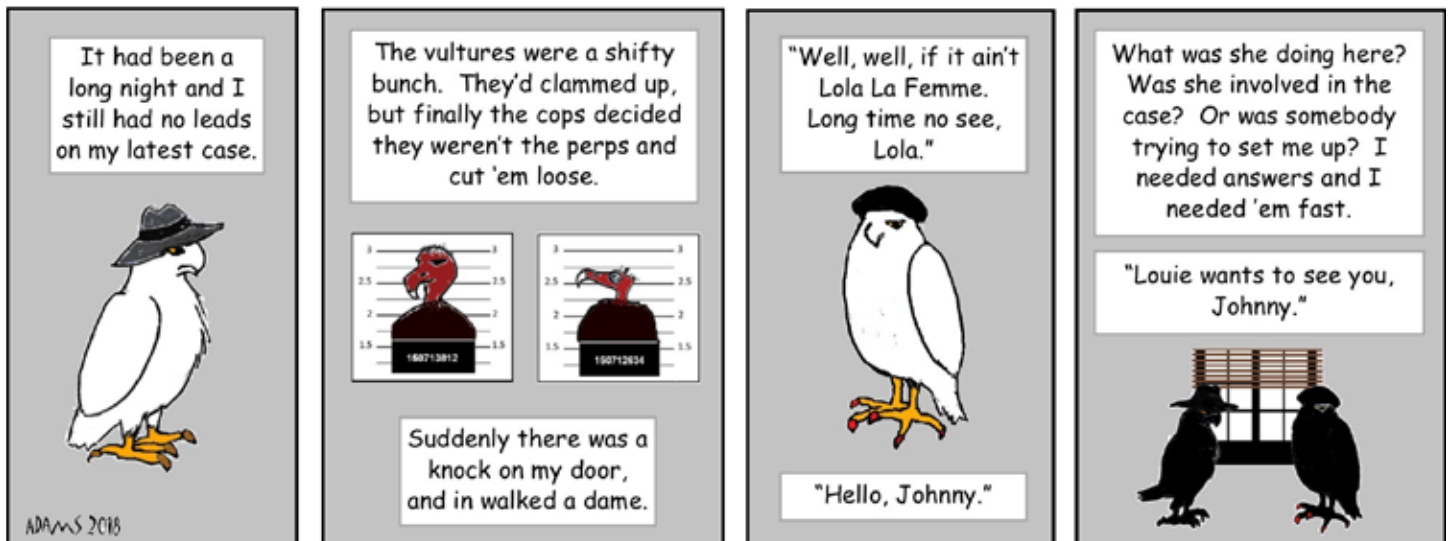
Dr. Hill and his wife, Julie, are the proud parents of a daughter, Lily, who is attending Loyola University. Their family also includes three dogs named Lucy, Bella, and Mia, four parrots named Gigi, Largo, Toby, and Cotton, and a tank full of fish. When he's not caring for animals at the hospital, Dr. Hill enjoys golfing, eco-traveling, scuba diving, going on hikes, cooking, and collecting rare and vintage wines.

We wish to thank Dr. Hill for his generosity and expertise, and for sharing in our mission to conserve our magnificent native birds of prey.



Raptor Ink

by Catherine Adams



A DAY IN THE FIELD: RED-SHOULDERED HAWK STUDY

By Carly Dovale, Intern

The red-shouldered hawk study in the Greater Cincinnati area of Ohio began in 1997. The central focus of the study has been to understand the ecology of the species, specifically how the birds have continued to survive despite an ever-increasing urbanization. Researchers compared nest sites in Hocking Hills (rural area) to nest sites around Cincinnati

(urban area) and found that the nest sites generally have the same characteristics regardless of the area. The nest sites are usually found in areas with lots of larger than average tree growth near some either seasonal or permanent body of water.

In the 20-year study, over 2,500 red-shouldered hawks have been banded. During the study the birds have been measured and banded to allow researchers to study the behavior of adults and nestlings. The researchers also can study the prey selected to feed the young, their delivery rates of food to the young, plants chosen to line the nests, causes of mortality, nest selection factors and dispersal distances from the nest sites.

Researchers in the photos are Cheryl Dykstra, Ph. D., Jeff Hays, graduate student Anna Wrona, and Field Assistant Ann Wegman.

For more information: <http://www.redshoulderedhawkstudy.com/Research.htm>



The tree climber, Jeff, climbs the tree in which the nest is located and carefully removes the nestlings. After lowering them down from the nest, they will be measured, banded, and have blood samples taken for their current study on extra-pair paternity.



Cheryl measures the primary and secondary feathers to estimate age range. This brood is 1½ to 2½ weeks. She will also band one leg with a colored band that is lettered and numbered, and one leg with an aluminum USGS band.



In this photo Jeff and Ann are removing an adult female from a hawk trap. These traps are essentially a concave cage with prey inside, and the traps have small loops attached to the surface to snare the talons once an interested bird comes by. Jeff and Ann are able to detach the hawk, get measurements and blood samples, and band her as a neighbor takes photos.



Jeff and Ann are working with an adult male at a nest site to measure its primary and secondary feathers, to get a blood sample and to band it. In addition to measuring wing feathers, they will also measure talons. Towels are usually placed over the eyes of adult birds to ease stress and lessen the risk of being bitten.



Three young are nested in a small sycamore tree approximately 30 feet off the ground. These young were banded, measured and then returned to their nest. Red-shouldered hawks usually hatch between late April to early May and generally stay in the nest for 6 weeks before fledging.

This nest contains of different species of greenery and twigs from trees, such as red cedar, red oak, red maple and silver maple, spruce and white pine. Oddly enough, this nest has an abundance of horse hair in it as well. Raptors are known to use greenery to line nests, which can be used as natural deterrents to ward off potentially threatening insects.



Anna is setting up a mist net beside a robotic Great Horned owl that moves its head and moves its wings. Great horned owls are predators of red-shouldered hawks, and prey on their young. The hawks will dive at owls, therefore making this a great mechanism for trapping the hawk.



The blood samples are being used to study extra-pair paternity research in this mostly monogamous species. There are many theories as to why monogamous pairs would copulate outside of their pair bond. One theory is that it allows the birds to produce more genetically diverse offspring.



Near a nest site, a male and female are spotted. From a photo, the band on the male's right leg can be read: Orange P4. Researchers know from the mass and the size of the foot that the bird is male. The overall size of males is smaller than females.

Mark Your Calendars for our Upcoming RAPTOR Public Appearances!

Sat, Sep 1	12pm-3pm	Potter in the Park, Stagge Marr Park,	6662 Goshen Rd., Goshen, OH 45122
Mon, Sep 3	12pm-4pm	Farbach Werner Nature Preserve	3455 Poole Rd., Cincinnati, OH 45251
Sat, Sep 15	2pm-3pm	Little Miami Conservancy	211 Railroad Ave., Loveland, OH 45140
Sat, Sep 29	2pm-3pm	Little Miami Conservancy	211 Railroad Ave., Loveland, OH 45140
Sun, Sep 30	1pm-4pm	Open House	961 Barg Salt Run Rd., Milford, OH 45150
Tue, Oct 16	6pm-7pm	Milford Miami Twp. Library	5920 Buckwheat Rd., Milford, Oh 45150
Sat, Oct 20	2pm-3pm	Little Miami Conservancy	211 Railroad Ave., Loveland, OH 45140
Thu, Oct 25	6:30pm-7:30pm	Highland Cemetery Chapel	2167 Dixie Highway, Ft. Mitchell, KY 41017
Sun, Oct 28	1pm-4pm	Open House	961 Barg Salt Run Rd., Milford, OH 45150
Sun, Nov 25	1pm-4pm	Open House	961 Barg Salt Run Rd., Milford, OH 45150

2018 Admissions

American Kestrel: 17	Saw-whet Owl: 0	Rough-legged Hawk: 0	2018 Dispositions	
Merlin: 0	Snowy Owl: 0	Northern Harrier: 1		
Peregrine Falcon: 2	Short Eared Owl: 1	Turkey Vulture: 10		
Eastern Screech Owl: 14	Sharp-shinned Hawk: 0	Black Vulture: 1		
Barred Owl: 23	Cooper's Hawk: 11	Osprey: 0		
Barn Owl: 0	Broad-winged Hawk: 0	Golden Eagle: 0		
Great Horned Owl: 17	Red-shouldered Hawk: 39	Bald Eagle: 0		
Long-eared Owl: 0	Red-tailed Hawk: 17	Total 153		
				<i>Released : 34%</i>
				<i>Under Care: 32%</i>
			<i>Transferred: 1%</i>	
			<i>Died: 16%</i>	
			<i>Euthanized: 17%</i>	

RAPTOR Wish List

RAPTOR Inc. needs the following items for our bird care facility. To donate any of these items, please email RAPTOR at: raptor@raptorinc.org or call 513-825-3325.

- Latex or Nitrile exam gloves (any size)
- Lowes Gift Card
- Lysol Disinfectant Spray
- Paper towels
- Pine bedding
- Office Max Gift Card
- Stamps (Forever)

Thank you for all of your donations!

Amazon Wish List

RAPTOR Inc. is now listed on the Amazon Wish list. For a complete listing of all of the items we use for rehabilitation and to provide our volunteers with all of the necessities, please visit <https://goo.gl/s0LVpG>.

If any of these wish list items is purchased, it is shipped directly to our RAPTOR facility in Milford.

How easy is that?!

Thanks to the following individuals and groups for their recent financial contributions to RAPTOR Inc. for the first quarter of 2018.

Andrews MD, Michelle
 Asper, Linda M
 Auer, Mary
 Bernstein, Sarah
 Bressler, Mr. & Mrs. Thomas
 Cubbison, Mr. & Mrs. Chris
 Dykstra, Mr. & Mrs. Robert
 Eisele, Thomas
 Eppley, Susan
 Fernandez, Kathy
 Fidelity, Charitable
 Hodge, Sheryl
 Kelly, Ryan & Cindy
 Ladd, J. Lee
 Marks, Neil Bruce
 McIlwraith, Sarah
 Menke, Catherine

Miller, Mr. & Mrs. John
 Policastro, Mr. & Mrs. Dan
 Pravel, Mr. & Mrs. Charles
 Profitt, Mr. & Mrs. Daniel
 Rockwell, Mr. & Mrs. William
 Ruck, Lena
 Rudick, Molly
 Ruggiero, Mr. & Mrs. Christopher
 Steinhilber, Mr. & Mrs. Norman
 Stryker, Mr. & Mrs. Gregory
 Stuempel, Mr. & Mrs. Allen
 Terlau, Mr. & Mrs. Timothy
 Wood, Mr. & Mrs. Michael

Falcon Level \$500 to \$999
 Gast, Allen
 Hild, Donald

Osprey Level \$1000 and up
 Garber Foundation
 Garber, Ethel & Sam

In-kind Donations from April 1 to June 30, 2018
 Angels Rest Animal Sanctuary
 Anonymous
 Bray, Jackie
 Dahlhausen, Bob, DVM
 Dogwood Pet Cremation Services
 Einson, Steve
 Federick, Chad
 Glassmeyer, Matthew
 Hall, Michelle
 Hughes, Elizabeth
 Lucas, Joseph

Kohrs Family
 Manharth, Ane, DVM
 Morsbach, Donna
 Perdue, Julie
 Rose, Juli
 Rowe Arboretum
 Serio, Mike
 Spring Grove Cemetery
 Wood, Mike
 Wright, Dee

In Memory of
 Gioffre, Patrick (Lena Ruck, Donor)
 Engel, Billie June (Dennis and Diane Phillips and William and Nan Dillon, Donors)

RAPTOR Inc. Board, Spring 2018

President: Marc Alverson
 Vice President: Jeff Hays
 Treasurer: Robert E. Smith
 Secretary: Alice McCaleb
 Trustee: Rosie Ayers
 Trustee: Dan Begin
 Trustee: Bob Dahlhausen, DVM
 Trustee: Joe Lucas
 Trustee: Gary Denzler
 Cindy Alverson, Executive Director
 Jackie Bray, Associate Director

The Board of Trustees generally meets the third Wednesday of each month, at 7:00 P.M. All RAPTOR members are welcome to attend.

Contact Marc Alverson at marcalverson@cinci.rr.com for meeting time and location.

Thank You To Our Veterinarians!

Bob Dahlhausen, D.V.M.
 (513) 576-1990
 Joseph Grossi, D.V.M.
 (513) 772-6060
 D.J. Haeussler, D.V.M.
 (513) 374-3963
 J. Peter Hill, D.V.M.
 (513) 793-3032
 Vanessa Kuonen Cavens, D.V.M.
 (513) 561-0069
 Paul Levitas, D.V.M.
 (513) 871-8866
 Ann Manharth, DVM
 (513) 248-0904

Communications

Gary Young, Newsletter Editor
 To submit articles or pictures for consideration in HackBack, email the article to:
raptor@raptorinc.org
 or by mail to:
 RAPTOR Inc.
 961 Barg Salt Run Road
 Milford, Ohio 45150

To report an injured raptor in the Greater Cincinnati area call RAPTOR Inc.: (513) 825-3325

Mission

Since 1978, RAPTOR Inc. (Regional Association for the Protection and Treatment Of Raptors) has been dedicated to “the rehabilitation and return of raptors to their natural environment, the education of the public on the importance of raptors, and the preservation of their natural habitat”.



RAPTOR Inc. Membership

Renewal notices are sent out at the end of the year for annual collection for the following year. Dues paid after September 1 will be credited for the following year.

Please use the form below to become a member or update your contact information. You can also become a member online at our website: www.raptorinc.org

If you don't need the membership form, pass it on to someone who might be interested in becoming a member of RAPTOR Inc.

Your membership dollars provide for care, treatment, and feeding of our birds as well as the continuation of our education programs.

Mark the membership level you request. All membership levels include electronic (default) or postal delivery of the newsletter, as well as an invitation to the Fall Picnic. Members are also invited to attend Board meetings and may nominate candidates to serve on the board.

\$10 Student Membership
 (1 year - up to age 18)

\$25 Hawk Membership
 (1-year)

\$50 Owl Membership
 plus receive stunning Raptor Notecard Set

\$100 Eagle Membership
 plus receive Charley Harper designed T-Shirt

\$500 Lifetime Membership
 plus personalized tour for 5

Eagle and Lifetime Memberships, please indicate T-Shirt Size: (S, M, L, XL, XXL) _____

Eagle and Lifetime Memberships also include perks from the level(s) above.

Date: _____

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Email: _____

Check if you prefer postal delivery of HackBack

Mail this completed form with your check or money order to:

**RAPTOR Inc., 961 Barg Salt Run Road, Milford, Ohio 45150
 Attn: Membership**

Thank you for your support of RAPTOR Inc.!

Sponsor a Banded Raptor

Since the fall of 1994, RAPTOR Inc. has been banding most rehabilitated birds released back into the wild. Over a long period of time, this will help us determine how successful our rehabilitation efforts are. You can get involved with our "Sponsor a Banded Raptor" program. Sponsors will receive a fact sheet on the selected species and a certificate with the following information:

- Species and date of release
- Age (if known)
- Weight at time of release
- U. S. Fish & Wildlife band number

If the bird you sponsor is recovered, you will be notified of the date and location of the recovery.



Yes, I would like to sponsor a banded bird of the species checked below:

- American Kestrel: \$25
- Eastern Screech Owl: \$25
- Cooper's Hawk: \$25
- Barred Owl: \$25
- Red-shouldered Hawk: \$25
- Great Horned Owl: \$25
- Red-tailed Hawk: \$25

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Email: _____

In the event your selection is not available, we will contact you to arrange an alternative. Sponsoring a bird is tax deductible. All proceeds benefit RAPTOR Inc. Complete this form, enclose a check or money order, and mail to:

RAPTOR Inc., 961 Barg Salt Run Road, Milford, Ohio 45150

Thank you for your support of RAPTOR Inc.!