

Raptor Release The Raptor Center

Spring 2017

Contents

From the Director	2
Leveraging Partnerships for Greater Success	3
Tales from the Trauma Center	5
Volunteer-Donor Partnerships Vital to Success	6
Raptor Academy to Roll Out 12 New Online Offerings	7
What to Do If You Find a Raptor that Needs Help	8
Ambassador Birds Lives Tell Conservation Stories	9
Around The Raptor Center	10
Upcoming Events/Contact Us	11

On the cover

Global connections

Partnerships have always been important to The Raptor Center's work, but they're becoming increasingly global with Raptor Academy, which begins rolling out online courses this summer. Later this year, people all over the world will be able to meet with a TRC instructor online in a virtual classroom. See story on page 7.

From the director

Dear Friends,

Every day I am aware of how dependent our work is on the generosity and contributions of our partners. From the naturalist who travels to Sauk Rapids, Minnesota, to teach fourth and fifth graders about eagles and the ecosystems they live in, to the U.S. Fish and Wildlife Service agent who refers a bald eagle suffering from lead poisoning to our clinic, to the donors who make our work possible, I am amazed at what can be accomplished when people pool their resources and talents for the betterment of all—raptors, other wildlife, and humans.



In this issue of *Raptor Release*, we highlight some of our important partners, both those we collaborate with on a regular basis and those we work with on specific projects.

We have launched three new conservation projects recently, one in partnership with the U.S. Department of Energy. This project could lead to the design of raptor deterrent mechanisms for wind turbines based on raptor hearing and vision. We are conducting another project in partnership with a team of scientists, including a former TRC veterinary resident from Spain, to help protect Old World vultures from the toxic effects of nonsteroidal anti-inflammatory drugs. In the third project, we will evaluate the risk Minnesota birds face from neonicotinoid insecticides in partnership with colleagues from the Minnesota Pollution Control Agency, Minnesota Department of Natural Resources, and Southern Illinois University.

Our longest-standing partnership, however, is with the University of Minnesota. As part of the College of Veterinary Medicine, The Raptor Center has access to experts across the University system—from the Learning Technologies Media Lab, which designs technology-enhanced experiences that transform education, to the Visible Heart Lab, which you'll read about in this issue.

Despite these wonderful partnerships and our commitment to making the world a safer and healthier place, environmental challenges continue to mount. We need to remember that alone we can accomplish great things, but together we can accomplish almost anything.

As always, we are forever grateful for your support.

Sincerely,



Julia Ponder, DVM, MPH
Executive Director

Leveraging partnerships for greater success

By Fran Howard

Over its 40-plus year history, The Raptor Center (TRC) has formed important partnerships that have helped it accomplish far-reaching goals in conservation, veterinary medicine, raptor rehabilitation, and education.

“Partnerships allow us to leverage resources,” says Dr. Julia Ponder, executive director. “We all bring our own experiences to a project, but together we can accomplish a lot more than we can working separately. Partnerships provide an opportunity for us and our partners to have a broader impact.”

TRC partners with volunteers and donors to carry out its day-to-day activities. It also works hand-in-hand with the public, law enforcement officers, the Minnesota Department of Natural Resources, and the U.S. Fish and Wildlife Service to ensure raptors are legally handled and transported. But TRC’s collaborations with government agencies, fellow rehabilitators, zoos and wildlife sanctuaries, environmental organizations, and universities extend far beyond its service area and day-to-day rehabilitation activities.

Global impact

TRC’s reach is global, both in education and conservation. One of TRC’s recent high-profile collaborative projects was the effort to restore and protect endemic species in the Galápagos archipelago. In 2009, Galápagos National Park partnered with Island Conservation, the Charles Darwin Foundation, TRC, and Bell Laboratories to restore populations of the Pinzón giant tortoise and Galápagos land iguana, two endemic species being harmed by invasive rodents.

TRC was instrumental in designing a pilot project to rid Rábida, a small island in the archipelago, of invasive rats, a prey



species of the Galápagos hawk. TRC’s role in the project was to capture, care for, and protect the endemic Galápagos hawk while rodenticides were being used to rid Rábida of rats. In late 2012, the partnership launched a larger project to eliminate rats from Pinzón and Plaza Sur, two islands that provide important habitat for tortoises and iguanas in the archipelago.

By early 2015, both Pinzón and Plaza Sur were rodent-free, and endemic plants and animals have since shown positive signs of recovering. The Galápagos hawk is also thriving, and the team of experts plans to continue collaborating on conservation projects.

“This collaboration exemplifies how a group of experts can come together to achieve conservation goals for the recovery of endangered species,” Ponder says.

National reach

A decade ago, Dr. Michelle Willette, TRC staff veterinarian, coordinated the Clinical Wildlife Health Initiative (CWHI) with a \$100,000 grant from the Legislative-Citizen Commission on Minnesota Resources.

The initiative was designed to fill an important need in wildlife health: “There was no comprehensive, integrated national strategy for the monitoring or surveillance of wildlife health issues in the United

States, and yet there is an increasing need for wildlife health data,” Willette says. Willette built a network of wildlife regulatory agencies and wildlife health professionals, whose first task was to standardize terminology for wildlife rehabilitators. That effort continues today, as the group regularly updates the terminology.

Another goal of CWHI is to create liaisons between individuals and organizations

involved in wildlife health to facilitate research and access to biomaterials and then report on those efforts. For example, CWHI data collected from wildlife rehabilitation centers have contributed to policy and regulations to limit free-ranging cat populations to prevent passerine predation and to monitor birds for West Nile virus and avian influenza.

CWHI also worked to build on an emergency preparedness and response plan developed for zoos and apply it to wild birds managed in other captive situations, such as nature centers, rehabilitation centers, and breeding programs. Willette says that these populations have been overlooked in times of wildlife disease outbreaks and natural disasters. CWHI’s emergency preparedness and response plan will help these facilities prepare for and respond to emergency events.

CWHI collaborators include the International Species Information System, International Wildlife Rehabilitation Council, National Wildlife Rehabilitators Association, U.S. Fish and Wildlife Service, Wildlife Center of Virginia, Wildlife Rehabilitation Center of Minnesota, and Zoo Animal Health Network.

Leveraging state and local partners

Expanding on her CWHI work, Willette recently received a College of Veterinary Medicine populations systems grant

to incorporate captive-managed avian collections into Minnesota's avian influenza response planning, which primarily addresses poultry farms. To do this, TRC is building on the relationships and knowledge it has already established in its work in emergency preparedness for the managed wildlife community. The plan can then be used as a model for other states.

“TRC’s role is to make sure that state boards of animal health and departments of agriculture understand that nontraditional species being kept in their states may be affected by disaster or disease,” Willette explains. “Wildlife rehabilitators, game farms, and others need to be included in any state plans. Nontraditional species are kept in Minnesota for a variety of purposes, and these collections may be affected by disaster or disease. TRC’s role is to facilitate communication between state animal health and regulatory authorities and managed captive avian communities and include them in any state plans.”

Partners on this project include the Minnesota Board of Animal Health, Minnesota Department of Agriculture, and U.S. Department of Agriculture’s Animal and Plant Health Inspection Service.

New partner at the U

One of TRC’s newest local partners, the University of Minnesota’s Visible Heart Laboratory, performs translational systems physiology research, ranging from cellular and tissue studies to organ and whole-body investigations. The lab recently scanned the carcasses of a bald eagle and broad-winged hawk provided by TRC and used a 3D printer to build anatomically correct skeletons of each species.

“Our partnership with the Visible Heart Lab is a new collaboration that is building,” Ponder says. “The lab will be an important and very visible partner in an interactive display that will be featured in our remodeled lobby.”

Fran Howard is a St. Paul-based freelance writer specializing in conservation, veterinary medicine, and science.



TRC clinical intern Dr. Kathleen MacAuley holds a plastic eagle skeleton created by the University of Minnesota’s Visible Heart Laboratory. The skeleton was constructed by a 3D printer based on a CT scan of an eagle. From left are Alex Deakyne, research professional; MacAuley; Erik Gaasedelen, research assistant; and Dr. Paul Iaizzo, professor and principal investigator.

Dr. Michelle Willette helps organize Animals in Disasters Symposium

Dr. Michelle Willette, staff veterinarian, helped organize the “Animals in Disasters Symposium: Veterinary Emergency Preparedness and Response” held at the University of Minnesota College of Veterinary Medicine on February 4.



Teamwork

Organized by TRC staff veterinarian Dr. Michelle Willette, second from left, a nationwide team of veterinarians and other experts gathered to present the Animals in Disasters Symposium at the University of Minnesota College of Veterinary Medicine in February.

Attended by nearly 70 veterinary students, veterinarians, and first responders, the symposium explored how to help animals affected by disasters like floods, hurricanes, earthquakes, and fires.

The presenters, who covered disaster response for small, large, and exotic animals, included Dr. Louise Beyea of Lake Superior Zoo; Anne Duffy, professor of animal health technology at Kirkwood Community College; Dr. Howard Ketover, founder of Wisconsin Large Animal Emergency Response; Dr. Clayton McCook of Oklahoma Large Animal First Responders; Dr. Debra Sime, veterinary medical officer with the U.S. Department of Agriculture; and Dr. Micky Trent, associate professor in the Department of Veterinary Population Medicine at the College of Veterinary Medicine.

The symposium was hosted by the University of Minnesota Medical Reserve Corps and Minnesota Veterinary Reserve Corps in partnership with four student groups — the Student Veterinary Emergency and Critical Care Society, Small Animal Medicine Club, Student Chapter of the American Association of Equine Practitioners, and Zoological, Exotic, Avian, and Wildlife Club.

Tales from the trauma center

By Lori Arent

Last year was quite memorable. We saw 1,058 raptor patients in the clinic, far surpassing the previous record of 914 set in 2013. Will 1,000-plus patients each year become the new normal?

More than likely, several factors contributed to last year's spike. Comparing 2016 admissions to those from the previous six years reveals that in 2016:

- TRC saw a 30–61 percent increase in each of the five most common species admitted: bald eagles, barred owls, Cooper's hawks, great horned owls, and red-tailed hawks.
- There was an increase in admission of both adults (24 percent) and juveniles (59 percent).
- Patient admissions from the seven-county metro area and St. Louis County (58 percent) compared to other counties in Minnesota (42 percent) remained stable.
- The number of admissions from Minnesota (87 percent) and Wisconsin (11 percent) remained stable.

These preliminary statistics do not really shed light on the reasons for the increase, which may include increased public awareness and a response to the call for action.

With an overall increase in environmental consciousness, TRC's relatively high profile and strong outreach, and increased use of portable technology, such as cell phones and tablets, people in our service area seem to be more tuned in to the environment than ever. State and federal wildlife permitting offices; public servants such as state troopers, fire department personnel, and animal-control officers; colleagues at the Veterinary Medical Center and other University programs; environmental organizations, such as nature centers, state parks, and wildlife refuges; wildlife rehabilitators; private industry; and the general public all assisted us to provide raptors with the care

they needed.

Raptors live practically everywhere and intersect with humans in many ways. Every day, we hear and become part of stories reflecting the challenges raptors face in a landscape they share with an ever-increasing population of humans and the development that brings. A few of these stories are brought to public light, but many stories go untold. When a raptor is injured, it doesn't matter what size or species it is—people unite to provide it the help it needs.

Patient highlight

On a warm summer evening, a Winona County police officer was driving down



Dr. Dana Franzen-Klein releases a screech owl in the area in which it was recovered last summer. A moment later, the owl was perched safely in a nearby tree (above).

a rural road when something bounced off the windshield of the vehicle in front of him. He pulled over to investigate and discovered a small bundle of rufous feathers with pale yellow eyes lying in the ditch. He gently picked it up and kept it quiet overnight. The next morning, he contacted TRC for a positive identification



of the victim, a young, female, red-phase eastern screech-owl.

One of TRC's volunteers drove two hours each way to transport the bird to the clinic. Upon admission, the owl, case 16-752, was suffering from a fractured right wing and trauma to both eyes. She was treated by Dr. Dana Franzen-Klein, TRC veterinary resident, who surgically stabilized the fracture, and by the ophthalmology service at the University of Minnesota Veterinary Medical Center, which diagnosed her eye trauma and prescribed treatment.

After two and a half months of care, the patient was ready to go home. Franzen-Klein drove the owl to the location where it was recovered and opened her healing hands to give the small owl one last gift—freedom.

As with many of the stories never publically told, it took the hearts and hands of many people to help this five-inch tall, feathered marvel heal from her trauma and regain her rightful place in the world we share.

*Lori Arent is The Raptor Center's clinic manager and the author of *Raptors in Captivity, Guidelines for Care and Management*, available at www.TheRaptorCenter.org. She is currently working with Amber Burnette on the development of Raptor Academy. (See story on page 7.)*

Average admissions, 2010-2015, and 2016 admissions			
Species	Average, 2010-2015	2016	Percent Increase
Bald Eagle	125	180	44%
Barred Owl	59	93	59%
Cooper's Hawk	110	151	38%
Great Horned Owl	118	190	61%
Red-tailed Hawk	142	188	33%

Volunteer-donor partnerships vital to success

By Ben Wright

Seven years ago, Rachel Hollstadt, then chair of The Raptor Center's advisory board and now an honorary board member, asked me to join the board. Aware of my personal fascination with bald eagles and experience with nonprofit boards, Rachel believed I could become a strong advocate for The Raptor Center. She was right. Today I am chair of the advisory board and a volunteer for the flight crew, which exercises injured birds to prepare them for release back into the wild. Like Marla Kinney, whose story appears on this page, I also volunteer on the transport crew, which transports injured raptors to TRC.

TRC works because of the commitment of 300 loyal volunteers like Marla, people who work on four different morning and afternoon crews seven days a week. These volunteers are supported by the many financial contributors who fuel our work. These donors support our annual fund each year, and many leave a provision for TRC in their estate plans. These volunteer-donor partnerships are essential to making this organization work.

TRC has become an important part of my life. As you will read in "Boxed to Go," it is also important to Marla.



We're having a baby shower

Springtime is baby bird season, and baby raptors have begun to arrive at The Raptor Center. If this spring is like most, we will see about 120 young raptors that need our help.

Please help us help baby raptors by making a special springtime gift to our baby shower fund. If TRC can raise **\$20,000 by June 16**, TRC Advisory Board member Teresa Daly and her husband, Greg Konat, will contribute **\$5,000** to help baby raptors.

To donate, visit
<https://crowdfund.umn.edu/RaptorBabies2017>
or call Ellen Orndorf at 612-624-8457.

Boxed to go

By Marla Kinney

I had retrieved just two injured birds as a transport volunteer when I got a request to meet Dave in Royalton, Minnesota, to pick up an owl with a broken wing. The meeting spot was a Dairy Queen on Highway 10. Volunteering on the transport crew, you quickly learn the best parking lots for raptor handoffs. The Coborn's in Big Lake. The Menards in Rochester. The McStop near St. Augusta. You also get used to handoff comments like, "It's missing an eye, but that's an old injury."

I pulled in behind the DQ and spotted Dave's black Ford pickup. There in a wire crate stood a small great horned owl, prim and indignant, with a decapitated chipmunk at its feet. The head had been a midnight snack.

Dave needed his crate back, so I knocked on DQ's kitchen door to see if they had a cardboard box. I pulled on my welding gloves, transferred the little owl, and delivered it to TRC in a box labeled "5" Plastic Sundae Spoons. Now I keep so many boxes in my car, I look like I work for FedEx.

Mostly you can tell I transport raptors because mine is the car that takes every curve at 15 mph below the speed limit, lest my precious cargo lose their footing. I assume all the importance of an (albeit slow-moving) ambulance, conscious that some of my passengers were once endangered species.

One gorgeous July day I had a chance to see how a peregrine falcon, which can dive for prey at 220 mph, would do with my driving. My job was to transport a rehabilitated peregrine back to its home at the Xcel Energy plant in Oak Park Heights, Minnesota. Upon arrival I quickly learned I would not actually be the one delivering the bird to its nest box, which was 400 feet up the stack.

I sense that releases are rather coveted assignments, but I prefer the pickups, even tough ones like the owl in Austin, Minnesota, snarled up in fishing line. Knowing I'm helping ailing raptors get care at a place as renowned as TRC is one of the greatest privileges of my life.

Marla Kinney has volunteered on TRC's transport crew since 2014.



Raptor Academy to offer online courses

By Fran Howard and Amber Burnette

The Raptor Center is a world-renowned source of training, offering hands-on workshops, residencies, and internships. Now these learning experiences are all part of TRC's training initiative, Raptor Academy.

This summer, TRC will begin rolling out the latest additions to Raptor Academy: online self-study courses for raptor rehabilitators. By year end, Raptor Academy will also begin offering three multi-week, teacher-led courses that will feature live interaction with instructors at TRC and use applied learning in the form of case-based scenarios.

"This is an exciting time for us," says Dr. Julia Ponder, executive director. "We are bringing all of our training initiatives under one umbrella, Raptor Academy, and expanding our offerings worldwide to people who have not been able to access our educational resources—until now."

"The self-study courses are the first raptor-specific, all-encompassing courses aimed primarily at raptor rehabilitators," adds Lori Arent, TRC clinic manager and chief creator of the course content. "These self-directed courses are designed to expand raptor rehabilitators' knowledge by providing them with convenient access to the most up-to-date information in a discipline that is continually changing through the addition of new knowledge."

The new self-study courses (see list above right) can be completed at a student's own pace and are designed for busy professionals looking to increase their knowledge of how to successfully care for raptors undergoing rehabilitation.

In Raptor Academy's teacher-led courses, students will periodically meet online with a TRC instructor and other students for approximately six weeks in a virtual classroom. The teacher-led courses will include:

New self-study courses for raptor rehabilitators

- **Raptor Handling 101** covers handling techniques to keep raptors safe, as well as personal protection for the handler.
- **Raptor Diet and Nutrition** details the proper nutrition to offer raptor patients during different stages of the rehabilitation process.
- **Raptor Anatomy and Physiology, Part 1**, explores key anatomical features that make raptors unique and challenging patients.
- **Raptor Anatomy and Physiology, Part 2**, details the body systems of raptors.
- **Young Raptor Identification** covers features that help to characterize the nestlings and fledglings of different species.
- **Raptor Bandaging** details when and how to properly apply the most common types of bandages used in raptor rehabilitation.
- **Raptor Housing** teaches the best housing options to use during times of critical care, convalescence, and reconditioning.
- **Raptor Species Identification** covers key features for raptor identification, along with species-specific considerations critical to the rehabilitation process.
- **Basic Raptor Physical Exam** teaches students how to conduct a physical exam on a raptor patient.



- Introduction to Raptor Rehabilitation and Basic Emergency Care
- Raptor Medical Care and Management
- Pre-release Conditioning and Release

While these unique courses will increase the knowledge base of those working with captive raptors worldwide, TRC will also benefit from the exchanges.

"These courses extend our commitment to the teaching component of our mission," Arent says. "The number of consults we do over the phone and by e-mail is phenomenal. A lot of people

ask similar questions, so we know there is a need for these courses. We are also hoping to create a stronger community of raptor rehabilitators who will have a robust support network after taking these courses."

Fran Howard is a St. Paul-based freelance writer who specializes in conservation, veterinary medicine, and science. Amber Burnette is TRC's program associate and blog master. She has been instrumental in establishing the course framework and accomplishing all the administrative tasks involved in creating and offering Raptor Academy's new self-study and teacher-led courses.

What to do if you find a raptor that needs help

By Sue McCarthy

With spring comes a new crop of baby birds, including raptors. Many raptors that look like they need help are fine, particularly fledglings, and should just be left alone. As raptors settle in highly populated areas, however, their risk of injury increases. If you come across a raptor that you think needs help, remember the four Cs: check, contact, cover, and calm.

Check: Some baby raptors end up on the ground because they are not successful with their first flight attempts. Most often, their parents are keeping watch over them and feeding them. If you are unsure if a baby or other raptor needs help, take a picture at a safe distance and e-mail it to The Raptor Center's front desk at raptor@umn.edu.

Contact: Call TRC for advice at 612-624-4745 between 9 a.m. and 4 p.m. After hours and on weekends, call 612-702-9924. Always call before attempting to capture an injured raptor.

Cover: If you must handle a bird, cover the injured bird with a blanket or towel to reduce its stress. Wear heavy gloves and safety glasses. The best transport is a pet kennel or sturdy cardboard box with the top closed.

Calm: Help keep the raptor calm by providing it with a dark, quiet, room-temperature environment away from children and pets until you are able to get help for the bird. Never feed an injured or sick raptor.

For more information about helping injured raptors, visit

www.TheRaptorCenter.org and click on Help an Injured Raptor.

Sue McCarthy is an education volunteer at TRC.

The thrill of the rescue

By Fran Howard

Alisha Walden has been volunteering at TRC for more than five years. She started with the flight crew, working with small raptors, and later graduated to flying eagles. For more than four years, she has also worked with transport and rescue. She can tell you about every raptor she's rescued, and she's rescued more than 100. Energized by each one, Walden details them in a journal.

"I'm passionate about rescues," Walden says. "When I get the call, I drop everything if I can. I like to go. I always keep my leathers and my crates in the car."

A volunteer on the transport and rescue crew, as well as flight crew, Walden recalls one rescue in particular that she performed last year.

"I got a call that a young great horned owl was trapped," she says. "When I got there, mom, dad, and the baby were all trapped in an egress window well. The parents must have heard the baby calling and gone in after it."

Walden needed to use a ladder to get the birds out, and the rescue took three hours. Not knowing how long the birds had been trapped or whether they needed medical attention, Walden transported them to TRC for a quick physical.

"They were fine, and I got to release all three that day—which was critical because there was another baby in the nearby nest," she says.

Not only did this rescue end well, but it also provided an opportunity for TRC to educate the public and its volunteers about window wells. TRC used Walden's photo of the trapped birds as an educational tool about window well coverings that prevent wildlife from becoming trapped.



TRC vounteer Alisha Walden shows off the tools of her trade: her "leathers," the heavy leather gloves that allow her to safely grab injured raptors amd transport them to The Raptor Center.



Ambassador birds' lives tell conservation stories

By Gail Buhl

The Raptor Center recently had to humanely euthanize two iconic education ambassador birds—Annie, a peregrine falcon, and Othello, a bald eagle—due to failing health. Their lives reflected TRC's longstanding commitment to raptor conservation.



Peregrine falcons: Annie's story

In the 1960s, three decades before Annie hatched, peregrine falcons had been extirpated from most of North America, primarily due to widespread use of DDT. In the early 1970s, DDT was banned for most uses in the United States, the Endangered Species Act was passed, and the peregrine falcon was listed as endangered.

In 1982, TRC started a project with support from the Minnesota Department of Natural Resources Nongame Wildlife Program and others to restore Midwest populations of peregrine falcons. Between 1982 and 1989, 178 young peregrine falcons were hatched, or gradually released to the wild, in Minnesota alone.

One of those peregrine falcons was Annie's grandmother, Meg, who was released from City Center (formerly Multifoods Tower) in Minneapolis in 1986. Over the next 16 years, Meg laid 60 eggs and fledged 46 young from a nest on

St. Paul's Bremer Tower (formerly North Central Life). Those offspring included Annie's father, Lindee.

Annie and her two brothers fledged off St. Paul's Montgomery Ward tower in 1995. That July, Annie was found injured in University City, Missouri, and brought to TRC for treatment. A cataract in her left eye rendered her unreleasable, and she joined the education team.

In 1999, peregrine falcons were taken off the endangered species list, and Annie had become a regular ambassador at educational programs for all ages. Eighteen years later, she suffered from multiple health problems and was humanely euthanized at age 22.

Bald eagles: Othello's story

Bald eagles were one of the first birds to receive federal protection, with the Bald Eagle Protection Act in 1940. But shortly after World War II, along came DDT. The pesticide and its residues washed into waterways, where aquatic plants and fish absorbed it. Bald eagles, in turn, ingested DDT when they ate the fish. The chemical interfered with their ability to produce strong eggshells; their eggshells were so thin that they often broke during incubation.

By 1963, with only 487 nesting pairs of bald eagles remaining, the species was in danger of extinction. In 1967, the secretary of the interior listed bald eagles south of the 40th parallel as endangered. In 1972, the use of DDT was banned in the United States.

Othello arrived at TRC from Marquette, Michigan, in 1988, nearly 20 years before his species would recover. The hatch-year eagle had a permanently injured wing and joined TRC's education team. He became one of TRC's most well-known, well-traveled education birds.

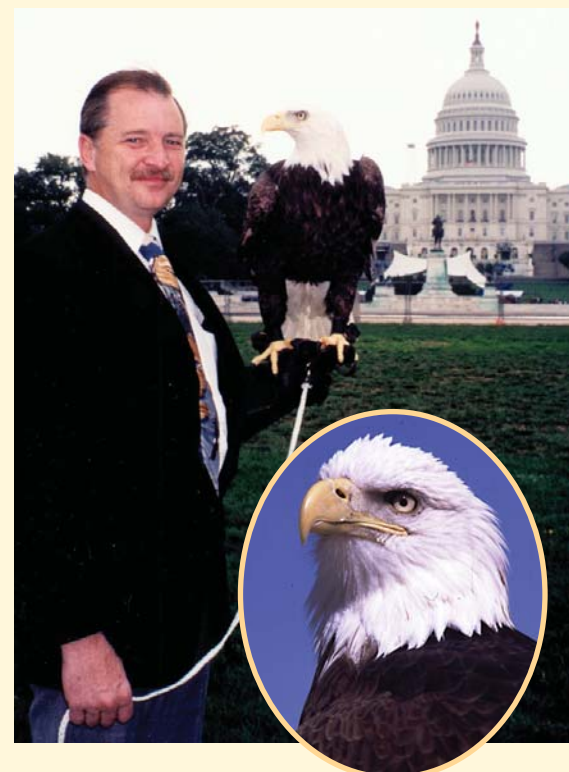
Bald eagles were taken off the endangered species list in 2007, and their population in the contiguous United States is now

estimated to be nearly 10,000 nesting pairs.

After nearly three decades as an education eagle, Othello had severe arthritis and was humanely euthanized at age 29.

Both species are amazing success stories and proof that people working together can make a significant impact on wildlife conservation. TRC was not only an instrumental partner in peregrine falcon restoration in the Midwest, but it is also a leader in raptor health, and its groundbreaking work in lead poisoning continues to play a major role in bald eagle conservation today. As ambassadors for their species, Annie and Othello reached hundreds of thousands of people with their stories via the commitment and hard work of TRC education staff and volunteers.

Gail Buhl is the education program manager at TRC.



In 1999, Othello traveled to Washington, D.C., with TRC cofounder Dr. Pat Redig for a White House announcement of the proposed removal of the bald eagle from the endangered species list.

Around The Raptor Center

Staff news

Libby Bauer

joined the College of Veterinary Medicine and TRC as a stewardship and annual giving specialist in October. Before coming to the University, Bauer worked in donor relations and campaign strategy efforts for Children's Hospitals and Clinics of Minnesota, Livestrong Foundation, Imagine A Way, and the American Heart Association.



Sawyer Boyles, TRC's new marketing intern, assists with donor stewardship, marketing education programs, research, and gift shop marketing projects.

Ian Dorney, TRC's student naturalist and summer camp naturalist, is studying conservation biology at the University of Minnesota. He will work with the education programs and coordinate TRC's 2017 onsite summer camps.

Kelsey Griffin was hired as a full-time interpretive naturalist in September. She first joined TRC in 2011 as a volunteer, became a summer camps instructor in 2014 after graduating from the University of Minnesota with a bachelor's degree in biology, and worked part-time until she joined the full-time staff.

Zoë Plaats, a veterinary student from the Netherlands' Utrecht University, started a three-month research project in February to correlate blood-lead levels with traumatic injuries in bald eagles.

Corryn Vitek, TRC's new full-time veterinary technician, previously worked at a south-metro veterinary hospital. Prior to her work there, Vitek did rotations at TRC and the Wildlife Rehabilitation Center of Minnesota.

Anna Voss, who was TRC's summer camp instructor in 2016, recently joined TRC as a seasonal education interpreter.

Presentations and awards

Gail Buhl, education program manager, and **Lily Carey**, raptor care technician, made presentations at the annual National Wildlife Rehabilitators Association symposium in March. Buhl's presentations included "Training Small Owls to be Educational Ambassadors," "Release Considerations Revisited," "Operant Conditioning Terms Defined," and "Operant Conditioning for Rehabilitation and Education Animals." She also participated in a roundtable for training and operant conditioning questions. Carey's presentation was "Feathers: Form and Function."



Gail Buhl

Dr. Kathleen MacAuley, clinical intern, presented "From Victim to Ambassador: Raptor Rehabilitation, Education, and Outreach" at the Raptor Research Foundation conference in Cape May, New Jersey, in October. In December, she made a presentation about TRC research at the Minnesota Ornithologists' Union paper session, where she received the Brother Theodore Voelker Award.

Dr. Julia Ponder, executive director, made the presentation, "Invasive Mammals Versus Endemics: Who will be voted off the Island?" as part of

the National Center for Earth-Surface Dynamics "Sip of Science" series in October.

Dr. Michelle Willette, staff veterinarian, moderated the avian sections for the Minnesota Veterinary Medical Association's annual conference in Minneapolis in February. Topics included "Egg Binding and Reproductive Disorders in Birds," "Understanding the Respiratory System in Birds," and "Avian Neurology."

Education

In October, 24 people from 15 states and one Canadian province attended the **Care and Management of Captive Raptors workshop**.

In partnership with the College of Food, Agricultural and Natural Resource Sciences, Drs. **Michelle Willette** and **Julia Ponder** developed a new undergraduate minor in wildlife care and management, Managed Captive Wildlife. Various TRC staff participate as guest lecturers.

TRC hosted a two-day workshop in February to explore opportunities to improve welfare for wildlife through a mentoring and granting program.

Conservation

In addition to other new conservation research projects (see page 11), TRC started a study that will provide preliminary data to evaluate the risk to Minnesota birds from neonicotinoids, insecticides chemically similar to nicotine. TRC will document access to neonicotinoid-treated seeds, compare tissue residue in wild birds from agricultural areas and nonagricultural areas, establish nonlethal methods of assessing exposure, demonstrate sublethal impacts of exposure, and assess whether exposure to multiple neonicotinoids worsens their impact.

Upcoming events



Raptor Release

Saturday, September 23, 2017
10 a.m.–3 p.m.

Carpenter St Croix Valley Nature Center, Hastings, Minnesota
See rehabilitated raptors released back into the wild and meet some of The Raptor Center's winged ambassadors. Free and open to the public. No pets, please. For more information, call 612-624-4745 or visit TheRaptorCenter.org.

Care and Management of Captive Raptors

October 10–13, 2017

This four-day intensive workshop orients both the novice and expert bird manager to the finer points of caring for and maintaining captive raptors for educational purposes. For more information and to register, go to TheRaptorCenter.org.

Give to the Max

Thursday, November 16, 2017

On Give to the Max Day, people come together in a heartwarming show of philanthropy. It is one of TRC's biggest fundraisers, and it all takes place within 24 hours. Watch for more information in the Fall issue of *Raptor Release*.

Partnering to protect raptors



TRC has started two new research projects that could have far-reaching implications for raptors. The first study, funded by the U.S. Department of Energy's Office of Energy Efficiency and

Renewable Energy, will help improve technologies that protect eagles from wind turbines. While testing the hearing of red-tailed hawks, TRC will study the hearing capabilities of bald and golden eagles in an effort to understand similarities between species.

The second study aims to protect Old World vultures from the toxic effects of nonsteroidal anti-inflammatory drugs, such as diclofenac. Morris Animal Foundation awarded a research grant to TRC and a team of Spanish scientists to study the exposure of avian scavengers to diclofenac and other anti-inflammatory drugs on the Iberian Peninsula, home to about 95 percent of Europe's vultures.



Contact us

Donations

Gifts, endowments, estate gifts, and grants:
Ellen Orndorf, 612-624-8457
or eorndorf@umn.edu

Sponsor-a-Raptor program:
Sue Wenker, 612-625-0201
or raptor@umn.edu

Educational programs

Field trips, outreach programs, and events
612-624-2756
raptored@umn.edu

E-communications

Want to receive e-communications? Go to www.TheRaptorCenter.org and click "subscribe to e-news" under "connect with us" in the lower-right corner of the page.

E-mail

raptor@umn.edu

Events calendar

TRC public events calendar
<http://tinyurl.com/TheRaptorCenterCalendar>

Fax

612-624-8740

Front desk

Injured raptors; general information
612-624-4745

Gift shop

TRC's online gift shop offers raptor-themed items such as clothing, books, toys, and jewelry. Go to www.TheRaptorCenter.org and click Shop.

Mailing address

1920 Fitch Ave.
St. Paul, MN 55108

Social media

Facebook: www.facebook.com/TheRaptorCenter

Blog:

www.TheRaptorCenterNews.blogspot.com

Volunteer opportunities

Volunteer positions and upcoming training sessions
Nancie Klebba,
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612-624-3928

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Celebrating four decades of dedication to raptors



We're having a baby shower

Springtime is baby bird season, and baby raptors have begun to arrive at The Raptor Center. If this spring is like most, we will see about 120 young raptors that need our help.

Please help us help baby raptors by making a special springtime gift to our baby shower fund. If TRC can raise **\$20,000 by June 16**, TRC Advisory Board member Teresa Daly and her husband, Greg Konat, will contribute **\$5,000** to help baby raptors.

To donate, visit <https://crowdfund.umn.edu/RaptorBabies2017>
or call Ellen Orndorf at 612-624-8457.