

*February 2018, Volume I, Issue I*

# THE TALON



# IN THIS ISSUE

## Welcome!

Welcome to the inaugural issue of the Raptor TAG newsletter! We are so excited for the opportunity to share updates about all things raptor within our community of educators, conservationists, and animal care professionals. Our goal for this newsletter is to facilitate communication within this community and to create a means of sharing achievements, current issues, and different perspectives on the care and conservation of raptors. We included contact information whenever possible for our contributors in the hopes that you can reach out and discuss these topics with each other. We can't wait to highlight all of the wonderful work you all do!

Sincerely,

The Raptor TAG Education Advisors

**Jacque Williamson**, Brandywine Zoo, jacque.williamson@state.de.us, TAG Education Advisor

**Taylor Rubin**, Zoo Atlanta, trubin@zooatlanta.org, Cape Vulture Ruppell's Griffon Vulture, & Hooded Vulture Education Advisor

**Molly Maloy**, Denver Zoo, mmaloy@denverzoo.org, Lappet Faced Vulture Education Advisor

**Erin Stotz**, Denver Zoo, estotz@denverzoo.org, White Backed Vulture Education Advisor

**Chriss Kmiecik**, Cleveland Metroparks Zoo, cdk@clevelandmetroparks.com, Andean Condor Education Advisor

**Lily Mleczko**, Wildlife Conservation Society, Queens Zoo, lmlczko@wcs.org, Burrowing Owl Education Advisor

**Sarah Gemmer**, Buffalo Zoo, sgemmer@buffalozoo.org, Spectacled Owl Education Advisor

**Questions?  
Comments?  
Suggestions? Let us  
know!**

**E-mail us at  
RaptorTAGroup@ gmail.com**

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other boards on **Pinterest.com/RaptorTAG** 

Cover photo of Cape Vulture by Michael Clark, Los Angeles Zoo  
This Issue layout "big thanks" goes to Taylor Rubin, Zoo Atlanta

# TAG UPDATES

## Year of the Bird

**Jacque Williamson**, Curator of Education, Raptor TAG Education Advisor, Ambassador Animal SAG Steering Committee, Brandywine Zoo ( [Jacque.Williamson@state.de.us](mailto:Jacque.Williamson@state.de.us))



## | 2018 | YEAR OF THE BIRD

Are you celebrating Year of the Bird at your facility? 2018 marks the signing of the Migratory Bird Treaty Act, one of the oldest and strongest pieces of legislation protecting wildlife in the USA. Year of the Bird is being coordinated by the Cornell Lab of Ornithology, Audubon, Birdlife International, and National Geographic. Big events you can celebrate are International Migratory Bird Day (May 12) and World Bird Day (October 13), International Vulture Awareness Day (September 1), plus you can host or encourage participation in Hawk Watch counts in the fall, the Great Backyard Bird Count (February 16-19) and Christmas Bird Counts which take place in December.

There's a *Year of the Bird Network* on Facebook for your organization's coordinators to join and you can register your organization on the [BirdYourWorld.org](http://BirdYourWorld.org) website as a partner, where lots of other resources are available, too. We've also been loading resources onto the Raptor TAG website ([RaptorTAG.com/YearOfTheBird](http://RaptorTAG.com/YearOfTheBird)) to celebrate birds (especially raptors!) all year long!

If you've got some great activities or lessons you'd like to share on the TAG Education, IVAD, or YOTB pages, we'd love to see them!

Don't forget to use the hashtags [#BirdYourWorld](https://twitter.com/BirdYourWorld) and [#YearOfTheBird](https://twitter.com/YearOfTheBird).

## Spectacled Owls Call for Participation

**Steve Sarro**, Curator, Raptor TAG Secretary, Spectacled Owl Program Leader & Studbook Keeper, Eurasian Eagle Owl Vice Program Leader, Smithsonian National Zoological Park ([sarros@si.edu](mailto:sarros@si.edu) | 202-633-3242)



Hello Spectacled Owl Enthusiasts,

The Spectacled Owl SSP has a very limited founder base and needs an infusion of new blood to help the long term goals of the captive population. We have been in discussion with the Trinidad Zoo staff about a possible importation. If your institution is interested in either getting into Spectacled Owls, a gorgeous species of tropical owl that does very well in captivity, or would like to bolster your collection with new founders, please contact both Steve Sarro and Ashley Graham to ask questions and get on the list. At this point, we do not know how many juvenile owls we will be able to import at one time but this may not be limited to just one importation opportunity. We have a number of institutions interested already on our list. We are looking forward to moving on this hopefully within 2018.

## African Pygmy Falcon Program Update

**Nicole LaGreco**, Animal Care Manager, African Pygmy Falcon Program Leader & Studbook Keeper, San Diego Zoo's Avian Propagation Center (NLaGreco@sandiegozoo.org)



In January 2017, eight, African pygmy falcons, 3 males and 5 females, left federal quarantine in New York and headed to their new homes. These eight birds represent the first new bloodlines for this species since the 1980's. These birds were captive reared in Europe and held for more than 2 years while we awaited permit approval. Huge thanks to Hannah Bailey from Houston Zoo for organizing this import and to Josh Randle from Universeum in Sweden for holding these birds for us. Three pairs were created and I'm happy to report they have all produced offspring!



*African pygmy falcon chick. Photo by N. LaGreco.*

## African Vulture SAFE Update

**Corinne J. Kendall**, PhD, Associate Curator of Conservation and Research, African Vulture SAFE Program Leader, North Carolina Zoo (corinne.kendall@nczoo.org)



African vultures were recently approved as a SAFE program and we have just completed development of a three year action plan to guide our efforts to conserve African vultures. As the plan and work develops, we will provide periodic updates in the newsletter. For now, anyone interested in joining our efforts should contact Corinne for more information.

Current SAFE program partners for African Vulture SAFE are:



Brandywine Zoo, Cheyenne Mountain Zoo, Dallas Zoo, Denver Zoo, Los Angeles Zoo, North Carolina Zoo, St. Augustine's Alligator Farm, St. Louis Zoo, San Diego Zoo Global, Tracy Aviary, and Zoo Atlanta.

### Attending AZA Mid Year?

Join us at the AZA Mid-Year Meeting on March 25 from 2-3:00 p.m. for the African Vulture SAFE meeting.

## New Program Leaders

### Eurasian Eagle Owl

**Ashley Graham**, Animal Keeper, Eurasian Eagle Owl Program Leader & Studbook Keeper, Smithsonian National Zoological Park (grahama@si.edu | 202-633-3060)



Ashley grew up in Virginia and graduated from Virginia Tech with a degree in Wildlife Science where she assisted in research with black bears. She has participated in animal training, husbandry, and education while working as a zookeeper at various zoological facilities and has worked at the Smithsonian National Zoo since the fall of 2015. She has also volunteered at rehabilitation facilities for marine mammals and raptors.

(CPBT-KA) by the International Avian Trainers Certification Board and is a member of the International Association of Avian Trainers and Educators (IAATE) and the American Association of Zoo Keepers (AAZK). She is also the Spectacled Owl SSP vice-coordinator.

Ashley's true passion is working with birds of prey, although bears are a close second, and she always enjoys training new behaviors and educating the public on the animals she works with. In her free time, Ashley enjoys watching football ("Go Hokies!"), hiking, birding, and kayaking. Ashley has been certified as a professional bird trainer

### Verreaux's Eagle Owl

**Justin Eckelberry**, Keeper III, Verreaux's Eagle Owl SSP Program Coordinator, Zoo Atlanta (jeckelberry@zooatlanta.org)



Hi All, I'm Justin Eckelberry from Zoo Atlanta and I have the pleasure of taking over the Verreaux's Eagle Owl SSP. Although this is a red SSP, I am looking forward to working with all interested institutions on a plan to possibly revitalize the AZA population. While the population has extremely limited genetic diversity, there is a great deal of interest in the species as ambassador birds. I am also happy to announce that Zoo Atlanta has hatched our first owl of the year! How can you not love these little snow balls? Any questions, feel free to contact me.



Photo by Adam Thompson



Verreaux's eagle owl chick. Photo by J. Eckelberry.

## Call for Articles

We are accepting submissions for the next edition of The Talon! The theme for the next issue is Perching & Nesting. If you would like to contribute an article, please contact the point person listed below. The deadline for the next issue is April 6, 2018.

We're looking for the following sections (we received a few articles for some sections not listed below already), but these sections are not meant to be restrictive – so if you have something else you'd like to contribute, feel free to contact this issue's editors: Taylor Rubin ([trubin@zooatlanta.org](mailto:trubin@zooatlanta.org)) & Lily Mleczo ([lmleczo@wcs.org](mailto:lmleczo@wcs.org)). Please Visit [RaptorTAG.com/Newsletter](http://RaptorTAG.com/Newsletter) for full section descriptions.

**Field Updates** Point person: Erin Stotz ([ESTotz@denverzoo.org](mailto:ESTotz@denverzoo.org))

**Species Spotlight** Point people: Molly Maloy ([mmaloy@denverzoo.org](mailto:mmaloy@denverzoo.org)) and Erin Stotz ([ESTotz@denverzoo.org](mailto:ESTotz@denverzoo.org))

**Trending Topics: Perching & Nesting** Point People: Taylor Rubin ([trubin@zooatlanta.org](mailto:trubin@zooatlanta.org)) and Jacque Williamson ([Jacque.Williamson@state.de.us](mailto:Jacque.Williamson@state.de.us))

**Conservation Action** Point people: Erin Stotz ([ESTotz@denverzoo.org](mailto:ESTotz@denverzoo.org)) and Lily Mleczo ([lmleczo@wcs.org](mailto:lmleczo@wcs.org))

**Cover Photo:** If you have a great photo of a raptor on special perching or in a nest that you think would make a great cover, please send it our way! Point People: Taylor Rubin ([trubin@zooatlanta.org](mailto:trubin@zooatlanta.org)) and Lily Mleczo ([lmleczo@wcs.org](mailto:lmleczo@wcs.org)).

## Animal Ambassadors Scientific Advisory Group Update

**Larry Killmar**, WCMC Chair

**Harrison Edell**, WCMC Liaison to AASAG

**Katie Manion**, AASAG Chair

**Tanya Paul**, AASAG Co-Vice Chair

**Jac Menish**, AASAG Co-Vice Chair

Dear Colleagues,

The Ambassador Animal Scientific Advisory Group (AASAG) and the Wildlife Conservation and Management Committee (WCMC) are excited to announce a new resource now available- "Ambassador Animal Guidelines" or AAGs. This new resource will help enhance the animal welfare and education impact of ambassador animals in our care.

The AASAG and AZA staff have created a template and development process that will allow Program Leaders and the AASAG to work together to create clear and consistent guidelines for the care and presentation of animals when an Animal Care Manual (ACM) does not (yet) exist. Both the template and development process for AAGs have been modeled after those for Animal Care Manuals, specifically drawing from the ambassador animal chapter of the ACM template. In the event that an ACM is created for a species after an AAG is already published, this will allow AAG content to be easily folded into the ACM. We look forward to continuing to raise the bar for care and welfare of ambassador animals by sharing our collective knowledge and expertise.

A special thank you to the Tawny Frogmouth SSP for their work to pilot this process. You can find these resources on the AZA website ([www.aza.org/ambassador-animal-guidelines](http://www.aza.org/ambassador-animal-guidelines)). Please do not hesitate to reach out to us with questions or comments.

**Program Leaders:** Please contact Jacque Williamson ([Jacque.williamson@state.de.us](mailto:Jacque.williamson@state.de.us)), who is on the AASAG Steering Committee, as the TAG liaison if you have any additional questions or would like to develop an Ambassador Animal Guideline for your program.

## Submission Guidelines

**Word Count:** 300-750 words (can be over with approval from section point people).

**Photos:** please include at least one photo with photographer name and short caption.

**Contact Information:** please include the email address of all authors, which will be included in the article.

**Organization Logo:** please include a .png or .eps (preferred), or .jpg if neither of those are available, of your organization's logo with your submission.



# FIELD UPDATES

## Stop Poisoning Now Campaign has first success in halting a lion poisoning

Darcy Ogada, The Peregrine Fund (ogada.darcy@peregrinefund.org)



In April 2017 The Peregrine Fund's Africa Program began taking action against rampant wildlife poisoning that has devastated African vulture populations. The new Stop Poisoning Now campaign was started in Kenya and has raised significant awareness about the illicit use of poisons while inspiring grass-roots action to save vultures, predators, and more. A key component of our campaign is hands-on training in order to explain the dangers associated with poison use, its impacts on vulture populations, and to provide individuals with the knowledge to rapidly respond to a poisoning incident. These actions save the lives of vultures, other scavengers, and livestock (which are poisoned after grazing at the scene of an incident).



*Martin Odino training rangers from Samburu National Reserve in May 2017. Photo D. Ogada*

Our team, led by Martin Odino, has trained over 200 people, representing 23 organizations in northern Kenya, including park rangers, policemen, community-conservation groups, and scouts working for wildlife NGOs. Each one-day training is conducted in Kiswahili, and participating organizations are supplied with a Poisoning Kit containing the equipment needed to safely respond to future incidents. The long-term impact of our trainings is ensured through follow-up interventions by field-based members of our team.

In September 2017 we trained Esekon Ekalale the leader of Atonyoutu Community Welfare Group near Rumuruti in western Laikipia. Two months later Esekon intervened to stop the poisoning of lions by Samburu youth who were aggrieved by the loss of two of their cows to the predators. The young men temporarily agreed not to poison the lions and a subsequent meeting between the youth, local village elders and the Chief, and our Project

Assistant, Martin Kahindi permanently halted their poisoning attempt. When our trainer Martin Odino was asked whether he believed Esekon's actions were as a result of his attending one of our trainings, Martin said, "Yes, definitely. I remember him, and initially he was very vocal and skeptical as to whether wildlife poisoning was even occurring". Sadly, since our training Esekon had his dogs poisoned by strychnine.

Another trainee called Martin Odino in the middle of the night after her neighbor's daughter had swallowed Triatix, an acaricide, in an attempt to end her life. The nearest medical help was tens of miles away and there was an ongoing government strike by nurses and doctors. Thankfully, we were able to advise her on the appropriate first aid and the girl's life was saved. These are just two examples of the varied impacts of our trainings.



*Esekon pointing out one of the decomposing dog carcasses, among many others, that he found after coming to our training. Similar carcasses lay near strychnine baits that were not collected and led to the poisoning of his dogs (photos M. Odino).*

Meanwhile information gathered from trainees has reaffirmed that poisoning of wildlife, dogs, cows, and even humans is happening everywhere in Kenya on a daily basis, and this situation is likely to be similar throughout many African countries. Trainings are a significant first step, but require sustained community-level support to have a lasting impact. Step-by-step, we are assembling a small and passionate team, most of whom will be based in their own communities adjacent to wildlife and poisoning hotspots.



*Mary Wanjiku with the poisoning response kit that she received on behalf of her team. She sought our help in a human poisoning case. Photo M. Odino*

***Thanks to our supporters:***

***San Diego Zoo Global, Detroit Zoo, Abilene Zoo, San Diego Safari Park, Puget Sound Chapter of AAZK, Zoo Atlanta, Zoo New England, SeaWorld-Busch Gardens, Hawk Conservancy Trust, Natural Encounters Conservation Fund, the International Association of Avian Trainers and Educators, Cina Forgason, and the BAND Foundation.***

# ENRICHMENT & TRAINING

## Training a Voluntary Eye Medication Application with a Harris Hawk (*Parabuteo unicinctus*)

**Autumn Henry**, Bird & Mammal Trainer II, Texas State Aquarium

**Sean McLaughlin**, Bird & Mammal Trainer II, Texas State Aquarium

**Lauren Wilson**, Bird & Mammal Curator, Texas State Aquarium (lwilson@txstateaq.org)



Maverick is a Harris hawk (*Parabuteo unicinctus*) that flies in the Texas State Aquarium's Wildflight show. Recently, Maverick has been found in the morning with his right eye squinted shut. This is particularly true during periods of low temperature or high wind speeds. Despite numerous veterinarians, including veterinary ophthalmology specialists, examining Maverick, no resolvable issues have been discovered. In order to provide some relief to what appears to be a dry eye issue, it was decided that a medicated eye gel needed to be applied to Maverick's eye twice a day. At the beginning of this treatment, Maverick had to be caught up from glove and physically restrained in order to apply the medication, which negatively affected his husbandry and show training. He began demonstrating clear avoidance behavior of both the glove and the trainers who were responsible for the catch-ups. So his training team decided that a voluntary eye medication application needed to be trained.

First, his training team designated and redesigned a crate for medical use only. This crate has a plastic sliding door with a hole carved into it. The hole is big enough for Maverick to extend his neck and head through but small enough to prevent the trainers from being footed. Then, because Maverick was already trained to crate, he was trained to pass his head through the hole to target to a trainer's hand. This eventually became a station behavior by which Maverick placed his beak into a trainer's hand. By feeding him small amounts of food, the trainer could keep Maverick's head in place while a second trainer gradually approached his eye with the medicated gel. After several approximations, the team was eventually able to place the medication on his right eye while maintaining his head in the correct position.



It is important to note that Maverick is fully able to withdraw his head back into the crate thereby ensuring that he has choice and control during the treatment. Due to his extensive reinforcement history with his crate, Maverick's crating behavior did not diminish in show or during the medication process. After the training and implementation of this husbandry behavior, there was also an observable increase in Maverick's willingness to fly to glove. He also no longer showed trainer discrimination against those who had caught him in the past. Maverick's success has since inspired us to continue to practice more innovative training with the goal of providing our animals with more choice and control in their environments.

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## CONSERVATION ACTION

### Utilizing Zoos and Aquaria to Introduce Sustainable, Bird Friendly Coffee to New York City

**Lily Mleczko**, Coordinator of Volunteers and Visitor Engagement, Raptor TAG Education Advisor, Wildlife Conservation Society, Queens Zoo (lmleczko@wcs.org)



There is good news for our tropical raptors this month, as the Wildlife Conservation Society announced that it will begin selling organic, Bird Friendly® coffee. The Society is working with the "Birds & Beans" coffee brand to bring the sustainable product to their zoos in New York City. They look forward to it first appearing in the Central Park Zoo cafe this spring.



As many of you know, Bird Friendly coffee is a certification created and overseen by the Smithsonian Migratory Bird Center (SMBC) in response to the devastating habitat loss occurring in the neotropics. Coffee (coffee arabica) was traditionally grown under the shade. It wasn't until the "technification" programs of the 1970s that small farms began being replaced by big plantations eager to genetically engineer plants to grow in the sun and increase yield. Today, small farms still exist that grow coffee in the traditional way. SMBC, operated out of the Smithsonian Conservation Biology Institute, is eager to seek them out and give them access to market premiums for adhering to these biodiversity-friendly, sustainable growing methods.

Many of us have heard of "shade grown" coffee, but there is often discrepancy as to what that means. Bird Friendly, certified coffee is the first of its kind to use strict, scientifically-backed standards that ensure optimal habitat for raptors and other wildlife. In addition, it is the only coffee that guarantees that every cup is shade-grown and organic. The Wildlife Conservation Society is proud to follow other zoos in this endeavor like the National Zoo in Washington, D.C. and the Naples Zoo in Naples, Florida. We hope others will join us in supporting this important initiative.

## Teaching with Vultures

**Anna Autilio**, Lead Environmental Educator, Vermont Institute of Natural Science  
(ara73@cornell.edu)



These days, I never know what kind of reaction to expect when I introduce Ogden to our visitors. She gets everything from giggles, to gasps, to murmurs of revulsion. A large black bird with a bald, pink head and poor posture doesn't seem to fit the image promised in the program's title: "Winged Wonders." But as she spreads her one good wing and glances sidelong at the gathered guests, we dive into the task of trying to show them why Turkey vultures (*Cathartes aura*) like Ogden are among the most beautiful creatures on Earth.



As of January 2018, 12 of the world's 23 vulture species are listed as Near Threatened, Endangered, or Critically Endangered by the International Union for the Conservation of Nature<sup>1</sup>. Without the intervention of conservation groups, these species possess a severe risk of extinction. Unfortunately, unlike such charismatic mega-fauna as the Giant Panda or Bengal Tiger, vultures have fewer people leaping to their aid. In the western world today, we are taught to believe that vultures, scavenging birds of the family Cathartidae, are filthy, ugly creatures who subsist on the dead, rotting carcasses of larger animals. They are regarded as cowardly or stupid, benefiting from another's disadvantage. In popular culture, vultures seen circling overhead is an omen of death, and the word "vulture" has become a derogatory term for humans who profit by another's loss.

Ogden, the ambassador Turkey Vulture at the Vermont Institute of Natural Science, was injured as an adult in 1981 in Ogden, Utah (that's right—she turns 37 this year!). Ogden spent most of her life as an educational ambassador at Wildlife Experiences in Rapid City, SD, before being transferred to Vermont to continue her career in 2002. She has a severely fractured right wing which can only spread about halfway open. She is missing the talons on 5 of her toes.

She also has a curious glint in her eye, and long lashes around it. She tugs at towels, sheets, shoelaces, and meanders, daintily and surreptitiously, toward papers and scrub brushes when we are not looking. She is patient when getting her equipment on, and gloriously iridescent in the full sunlight of summer. Without terrific balance, we walk carefully with her on glove, and let her free run of the presentation stage. When she has had her fun, her sun, and her treats, she folds her wings and walks off stage on her own. I want to show this Ogden to my students, and tease their revulsion out into wonderment.

The difference between reading about an animal, steeped in the preconceptions that surround it, and meeting one eye-to-eye is enormous. Dozens have studies have shown that such interactions with live animals lead to longer attention to the presentation, higher retention of knowledge, and more favorable attitudes toward conservation work( 2).



Below are a few of concepts I've found are taught most effectively with a Turkey Vulture at my side:

•**Adaptations.** Vultures may be related to hawks and eagles, but are not predators, and have evolved different physical features.

•**Nutrient Cycling and the Food Web.** All scavengers help matter return to the natural systems that nurture biodiversity.

•**Sentinel Species.** With a wide-ranging diet and habitat, vultures are exposed to a great deal of potential environmental hazards, and can warn of disaster looming.

•**Ecological Niches.** The role of the scavenger is clear to most people, and can help us imagine "roles" for other organisms.

•**Migration and the Physics of Flight.** Vultures are efficient, soaring birds that spend much of their lives on the move.

•**Avian Anatomy.** No better way to get people interested in avian gastrointestinal anatomy than to have them ask, "How do vultures eat rotting meat and not get sick?"

But sometimes toward the end of a presentation, I wrap my story up early, and fall quiet while the visitors, absorbed by Ogden's slow, curious wandering, do the same. We watch her discover, react, and experiment, these things we do ourselves. These moments are the most rewarding of my job, watching people find the simple, beautiful creature encased in her dark feathers.



## References

1. The IUCN Red List of Threatened Species. Version 2017-3. <[www.iucnredlist.org](http://www.iucnredlist.org)>. Downloaded on 08 January 2018.
2. CEC Ambassador Animal Position Statement, AZA. <https://www.aza.org/cec-ambassador-animal-position-statement>. Accessed 08 January 2018.

# TRENDING TOPICS

## Owls as Ambassador Animals

*The following articles originally appeared in the January 2018 Ambassador Animal SAG Newsletter.*

### Training Owls as Ambassador Animals

**Cathy Schlott**, National Aviary (Cathy.Schlott@aviary.org)



THE NATIONAL AVIARY

**Christa Gaus**, National Aviary

To talk about training ambassador owls, one must first define a few things. According to encyclopedia Britannica, imprinting, in psychobiology, is a form of learning in which a very young animal fixes its attention on the first object with which it has visual, auditory, or tactile experience and thereafter follows that object (typically the parent). According to the Collins English Dictionary, hand rearing occurs when an animal is looked after by a person, rather than by its mother, when young. There are ways to hand rear an animal and not have it imprint, but often times hand rearing causes imprinting. For example, using puppets to feed helps animals to not imprint on people. For this reason, imprinting and hand rearing are by definition two different things. However an animal is raised, having a positive reinforcement based training program is critical to success.

The National Aviary's trainers have had the opportunity to work with nine different species of owls, many with different backgrounds. We have used hand raised, parent raised, and non-releasable wild owls for programming. We have also had success breeding our ambassador Eurasian Eagle Owls and have had the opportunity to hand-raise several for other zoos to use as ambassadors. When we hand raise owls, we spend a lot of time desensitizing them to a variety of situations from a young age. We get them use to people, videos, music, traveling in a car, and any other situations that they we think they may encounter as an ambassador. We have found the more things you desensitize them to, the more success you have. The first few hand raised owls we worked with were not as desensitized to the daily environmental stimuli they came into contact with. Some of these owls were not successful in an ambassador program. We have learned that the desensitization process was more helpful then just the hand-raising.

In addition to hand raised owls, we have had equal success working with several non-releasable wild owls. Desensitization with these owls can take longer for several reasons. The first interactions with people are associated with medical treatments and the owls have not experienced all the day to day activity that an animal raised in a zoo would encounter. Some non-releasable owls can be successful as an animal ambassador.

The key is to evaluate the progress and comfort level of the animal. You may find that as you progress an animal may be more successful working in and out of a crate versus sitting on a glove. You have to be able to pick the right job for the animal not the other way around. For this reason some of our owls regardless of history learn to sit on the glove first, while others may learn crating and flights first. For an animal that is more nervous of people, having them do flights allows them to have more personal space while building trust through a positive relationship with their trainer. As the relationship becomes stronger, training the glove becomes easier.

When working with owls consistency is very important. Training the staff to follow a strict set of criteria such as cuing, crating, and stepping up the same way can set a reliable pattern. Owls are very habitual which you can use to your advantage. We have had success with non-releasable owls as well as hand raised and parent raised owls due to a successful training program. We have also had owls from those same backgrounds come to us not work out as animal ambassadors. While every animal is an individual regardless of species, there are two things that are essential to a successful animal ambassador program: having the right animal for the job and a solid positive reinforcement based training program.

# Owls as Ambassadors at the Texas State Aquarium

**Lauren G. Wilson**, M.S., Curator of Birds & Mammals, Texas State Aquarium  
(lwilson@txstateaq.org)



**Autumn Henry**, Bird & Mammal Trainer II, Texas State Aquarium

The Texas State Aquarium in Corpus Christi, Texas, offers a wide variety of animal presentations to the public on a daily basis. These presentations range from the Hawk Wildflight show, a free-flight bird and mammal program, to creature features throughout the aquarium. Our animals are asked to showcase their natural behaviors in front of large crowds, novel situations, and a variety of stimuli. Our collection currently includes four owls: a Eurasian Eagle Owl (Brutus), a Great-Horned Owl (Chance), a Barn Owl (Ripley), and a Barred Owl (Strix). These individuals have different backgrounds that not only allow us to see the pros and cons of each but also force us to think of an animal's background on a spectrum rather than just hand-reared or parent-reared.

Brutus, the Eurasian eagle owl, was hatched in captivity and hand-raised. The pros of his upbringing include him being more open to novel stimuli. He is also extremely comfortable with his trainers and as such learns at an uninhibited pace. However, being extremely comfortable with his trainers also means he may view us as competitors. We have observed increased aggression during mating season and heightened territoriality, which makes training very difficult during these times. His use in programs is based on his choice and control, thus he is often not in programs during this period.

Chance, the great-horned owl, was found injured as an owlet. He was brought into our Second Chances Rehabilitation Program, deemed non-releasable, and found a home with Wildflight. Although he was primarily parent-reared, his young age and time spent with humans during the rehabilitation process caused him to display imprint-like behaviors. After an initial period of desensitization, we were able to train a voluntary glove behavior as well as a target. This allows us to use him during programming. He does occasionally exhibit aggression but we have been able to mitigate it using training techniques.

Strix, the barred owl, and Ripley, the barn owl, were both wild owls who came into Second Chances as adults. They too were deemed non-releasable and entered into our Wildflight training program. They are incredibly skittish animals who display many stress-responses when introduced to new stimuli. Desensitization is a long, slow process. The biggest issues with these parent-raised birds are their habituation to humans and approach-avoidance conflict. Much of our training with these individuals includes long hours waiting for them to eat in front of us and to associate the food with their human caretakers. It has been one year since their acquisition into the program and yet they are still not on glove let alone in programs. This is in part due to our desire to use only voluntary, operant conditioning techniques and working through the medical issues which deemed them non-releasable.

While both hand-reared and parent-reared owls can make good program animals, there are definitely pros and cons when using operant conditioning to train owls on all parts of the spectrum. Currently, we have had the most success with Chance, who is parent-reared but heavily human associated, a moderate or seasonal amount of success with our hand-raised owl, Brutus, and the least amount of success with our parent-raised owls, Strix and Ripley. Given time and adherence to operant training principals, most importantly choice and control over their environment, our hope is that all of these owls will become successful ambassador animals at the Texas State Aquarium.

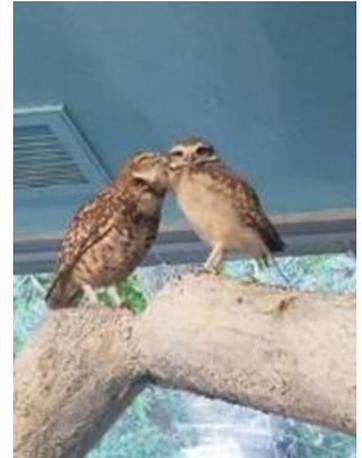
# Burrowing Owl Brothers as Ambassador Animals

Melanie Kuse, Utah's Hogle Zoo (mkuse@hoglezoo.org)



We have 1.1 burrowing owls in the Small Animal Building at Utah's Hogle Zoo. This group of owls is managed with traditional husbandry methods, with limited disturbance or interaction. Exposure is typically limited to quiet, low-impact cleaning and feeding. These birds have historically shown to be flighty and avoidant of staff. In May of 2017, this pair produced a two egg clutch. The plan for these eggs was to create two parent reared ambassador burrowing owls that we hope will (eventually) voluntarily participate in educational programming.

When the two eggs hatched, keepers still quietly went in for daily husbandry, but had no major interaction with any of the four owls in the exhibit. After about two weeks, the owls started to emerge from the burrow. When the owlets were about a month old I—the Lead Keeper of Hogle Zoo's Ambassador Team who had no previous exposure to the owls—began to introduce myself. Sessions were held 1-2x/day and consisted of entering the exhibit, verbal stimuli, and primary reinforcement (bug portion of diet tossed into exhibit). It not only helped them get to know me but vice versa. We were able to learn, read and respond to each other's behavior and learn typical and natural interactions. Often, simply standing outside their exhibit and observing behavior proved helpful.



On July 13th, at six weeks old, the owls were caught up by Small Animal keeper staff, had blood taken for sexing, weighed, and got a physical exam. They were then put in their transport carriers and brought over to their new home in Creekside. For the first couple days, we simply let them adjust to their new surroundings without their parents. That included just quick cleaning and feeding. Their enclosure is located on the first floor of the building, in view of the office and kitchen area. Although this is a one keeper area, there can often be up to four or five relief keepers that rotate through the area each week. During the first week and a half, we had visual barriers on the enclosure to give them privacy. Every few days, as long as the owls remained calm, we took down a portion of the barriers. Light cleaning began after a couple days, working our way up to normal husbandry in about a week and a half, making sure to talk to them during the whole process for desensitization purposes.



In the first two weeks, the owls adjusted much quicker than we expected. At first, they hissed often, and were flighty while cleaning. It was only after a few days that we noted more calm behavior- no hissing, signs of stress, and were eating all of their diet overnight. We then started feeding them early in the morning to desensitize them to eating in front of us. Eventually, they did start taking bites of their mouse and eating bugs with staff present. Once we knew they were comfortable eating in front of us, we started to desensitize them to the glove, with the idea that we can use it during husbandry or programming in order to move the owls around, if needed. The glove was introduced while cleaning, or when working in the area around them.

Things were going well; however, progress seemed to have plateaued. The owls were calm and would watch us curiously while servicing the other enclosures, but were still showing some avoidance and stress behaviors when working in the enclosure. It seemed as if we were intruding on their space, and not giving them choices. In the interest of building a relationship: what if we gave them a CHOICE to be in the same space as us? In August, we developed a new plan and got started. In the mornings, we began allowing the owlets free access to leave their hutch while staff continued with normal

routine (diet prep, office work, and husbandry). Some days, it took them 20 minutes to come out and explore. Other days it took them 40 minutes. They were given access anywhere from 20 minutes to 2 hours outside of the enclosure. When the owls first came out on their own, they usually stayed close to the enclosure. At first, they preferred to stay close to one another, but as they grew confidence, they started to spend time in different locations, always within eyesight. We could assess their confidence levels based on what they did when they were out of the enclosure. In the beginning, they were on high alert, spooked easily when a keeper would walk near them, and would not spend a lot of time exploring. As time went on, they began vocalizing, preening, exploring the entire room, and even sleeping outside the enclosure. Reinforcement was difficult, as they refused to take food from their keepers, so just a verbal "good bird" was used for the time being.



We are currently working toward conditioning positive reinforcement and cues. To get them back into the enclosure, we use a verbal cue of "go home" and a simultaneous visual cue of pointing to the enclosure doors. Once the birds go back into the enclosure, they are heavily reinforced by having their diet available and tossing their bugs into the enclosure. Both birds have shown a lot of progress in very different ways. One of them is very shy; the other is a bit more outgoing. Progress for our "shy guy" looks different because we've had to move a bit slower with him. He did not warm up to his keepers as quickly as his brother has, and in my opinion, is more of what I expected from the process of having owls from a parent-reared scenario. Our more outgoing owl has exceeded expectations in the short couple of months we have had them in our area.

The owls will now come out on their own after only a minute or two of opening the doors. Bugs are offered in a dish near their enclosure, which they do show interest in.

Since starting the "free time" opportunity the owls' confidence has increased, including cooperation with stepping onto the glove and scale, taking food from forceps, and successfully re-entering their hutch on cue for reinforcement. Having parent-reared owls has been a slow and sometimes frustrating process, however, I see a lot of potential in these two little owls for the future of our ambassador animal programming.



## Some Thoughts on Ambassador Owls

**Steve Martin**, Natural Encounters, Inc. (s.martinnei@mac.com)



The conversation about ambassador owls often evolves to discussions about a bird being imprinted or not. With conflicting opinions and varying interpretations of imprinting, i.e., hard imprint, soft imprint, age of chick at imprinting, environmental conditions, etc., it is easy to get distracted from the most important point: the behavior of the bird. In my experience, there is a huge difference in the behavior of an owl raised by humans and an owl raised by its parents in the wild. That's what these thoughts are about.

The behavior and welfare of the bird should always be our most important considerations with any animal in our care. With that as our guiding principle we can better evaluate the best animals to include in our programs.

After more than 40 years of professional experience with a wide variety of owls, I have found owls raised by humans are very often willing participants in handling and training by experienced bird trainers. They are likely to approach a trainer rather than move away and with the right trainer and strategy, they quickly learn to sit on the gloved hand and even fly to a trainer for various forms of reinforcement.

I have also found owls raised by their parents in the wild and brought into human care later in life are extremely poor subjects for handling, training and use in educational programs. They often show a high rate of stress and escape behavior at the approach of a human. Attempting to train a parent-reared owl often involves Flooding, Learned Helplessness, unhealthy weight reduction and overall reduced welfare.

As a behavior consultant, I have an opportunity to observe animal programs at many zoological facilities around the world. With experience at more than 120 facilities, I cannot recall ever seeing an ambassador owl that came from the wild as an adult that voluntarily participated in programs as well as a human-reared owl. I have seen very few owls raised by their parents in the wild that came into human care at a very young age and worked out to be good ambassador animals. In fact, we have two Great-horned Owls in our programs that were found as fledglings and brought to our veterinarian. Both of the birds had neurological symptoms (trauma and possible West Nile infection) and exhibited calm but disorientated behavior, and one had reduced visual abilities. Both birds remained calm and were able to eat on their own and eventually became exceptional glove-birds in our programs as a result of their neurological and vision disabilities.



*Photo by S. Martin*

My main concern is with the acquisition of injured owls from rehabilitation facilities for use as an ambassador animal. These birds simply do not adjust to life in human care and end up with a lifestyle of stress and reduced welfare. There is no training strategy or expert trainer who can help this owl adjust to human care as well as an owl that was raised as a chick by humans.

The board of directors of IAATE have 184 collective years of professional experience training owls, including 64 parent-reared owls and 122 human-reared owls. The trainers on the board reported none of the parent-reared owls were acceptable ambassador animals. Every board member also remarked that they would never attempt to train a parent-reared owl that came in from the wild. This is the reason IAATE is currently drafting an official Position Statement discouraging the use of parent-reared owls as ambassador animals.

With welfare as our guiding principal, I encourage everyone to reevaluate their ambassador owls' behavior with a critical eye for escape and approach behavior. Does the owl move toward or away from you when you approach? Are there ways to increase approach behavior with reinforcers or more sensitive trainers? These questions, and more, may lead to discussions about training strategies, trainer skill levels, and is the bird the right fit as an ambassador animal? That question might lead to a discussion about setting up an exhibit for parent-reared owls, and an accession plan for human-reared owls. Other discussions might involve establishing evidence-based indicators of stress and reduced welfare to better evaluate if the current handling and training methods align with the facility's animal management and welfare goals. Whatever the discussions, the most important step is taking a look and doing the evaluation, then taking action where it is needed.

Maya Angelou said: "I did then what I knew how to do, now that I know better, I do better." We should always strive to do better for our animals.