



**ASSOCIATION
OF ZOOS &
AQUARIUMS**

Winter 2017

**Ambassador Animal
Scientific Advisory Group**

Newsletter

News from the Ambassador Animal SAG	2
Trending Topics in Ambassador Animals: Introduction	3
Trending Topics in Ambassador Animals: Imprinted vs. Parent Reared Owls Participating in Programs - Perspectives from Four Facilities	4
Ambassadors in Action: Enriching Ambassador Animals	8
Ambassadors in Action Part Two: Development of an Invertebrate Program at Point Defiance Zoo & Aquarium	10
Species Spotlight: Tawny Frogmouth	12

News from the Ambassador Animal SAG

It's hard to believe that the AZA National Conference in Indianapolis was three months ago! It was great to see so much continuing interest in ambassador animals - there were 35 participants at the meeting in addition to Steering Committee members.

If you weren't able to join us in Indianapolis, you can find the minutes from the meeting in the Ambassador Animal community on the AZA network.

Highlights of the meeting included the following topics and discussions:

A brainstorming session on possible session topics for the 2018 National Conference. There were many great ideas discussed, including collection planning, welfare assessment, empathy development, and more.

Updates on several animal-ambassador-related research projects. Be sure to see the minutes for more details on those!

An update on the Principles of Program Animal Management (PPAM) course, which includes topics such as collection planning, AZA accreditation, training, and conflict resolution. The course took place November 2017 in St. Louis. Keep an eye on the AZA website for updates and announcements.



A discussion of the Ambassador Animal Care Guidelines (AACG) document in development for tawny frogmouth. The group working on that document, led by Tanya Paul, is proceeding thoughtfully because it will serve as a template for AACGs for other species.

A reminder that we streamline our communications by having an Institutional Contact at each AZA facility that receives news and updates from the AASAG. Do you know who yours is? Please feel free to contact me if you'd like to know who your IC is or if the contact information needs to be updated.

Katie Manion
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Trending Topics in Ambassador Animals: Introduction

First of all, we would like to thank you for the overwhelmingly positive response we've received for this new section. We've received so many great suggestions for topics to cover in future issues as well as several thoughtful and well-written pieces for this issue. THANK YOU all for your willingness to contribute and to engage in productive conversation!

Because this is the inaugural Trending Topics section and we wanted to showcase all of the great submissions we received, this section will be a bit longer than it will be moving forward. We want to make sure we are able to represent a diversity of perspectives and experiences (as many as we can get) without ending up with a newsletter that is too long to read! In future newsletters, we will be publishing short, abstract-style representations of each author's submission and providing a link to a longer piece that you can read if you're interested in learning more. We will house these long-version articles on the AZA Network in the Ambassador Animal group. Since one of the goals of this section was to spark discussion within the Ambassador Animal community, we will also be starting a new thread on the Network that corresponds to the topic covered in each issue. That way, the long format opinion pieces and discussion posts will all be in the same place for anyone to peruse at their leisure. We're clearly still working out the organization of this new section, and we always welcome feedback or ideas for how we can make this better FOR YOU.

Call for Articles

The topic for the next issue will be the **use of domestic dogs and cats** as ambassador animals. We're interested in both the messaging aspect as well as animal welfare considerations. If you would like to submit an opinion on this topic, or if you have any suggestions for future topics or how we can make this section better, please don't hesitate to contact us.

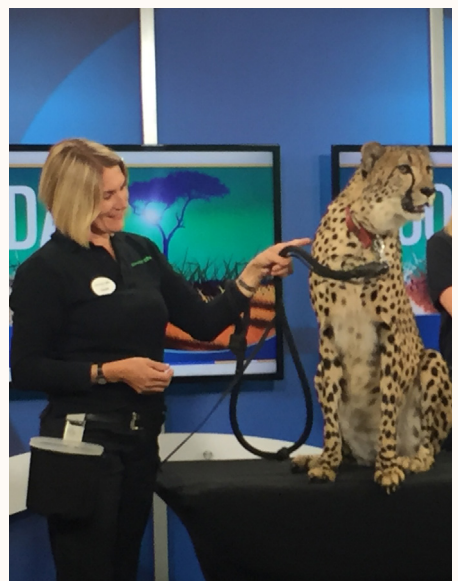
Guidelines

Future submissions for the Trending Topics section should be in the following format:

- Short, abstract-style summary of your opinion piece to be published in the newsletter (250 words max)
- Longer, more detailed opinion piece describing your position on the topic or practices and experiences from your institution (800 words max)
- Author name, title, institution, contact information
- Photos (if possible). Please submit as separate .jpeg files (not embedded). Recommended size is 5x7 and 300dpi.

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Trending Topics in Ambassador Animals: Imprinted vs. Parent Reared Owls Participating in Programs - Perspectives from Four Facilities



National Aviary

-Cathy Schlott and Christa Gaus

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 hand rearing often 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 used to people, videos, music, traveling in a car, and any other situations that 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 encountered. Some of these owls were not successful in an ambassador program. We have learned that the desensitization process was more helpful than 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 of 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. 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.

Texas State Aquarium

-Lauren G. Wilson

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, a great-horned owl, a barn owl, and a barred owl. 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 principles, 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.

Natural Encounters, Inc.

-Steve Martin

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.

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.

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.

With welfare as our guiding principle, 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.



Utah's Hogle Zoo

-Melanie Kuse

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 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 we began to introduce staff. Sessions were held 1-2x/day and consisted of entering



the exhibit, verbal stimuli, and primary reinforcement (bug portion of diet tossed into exhibit).

At six weeks old, the owls were caught up 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 in view of the office and kitchen area. At first, they hissed often, and were flighty while cleaning. It was only after a few days that we noted more calm behavior, and 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 as well.

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? We began allowing the owlets free access to leave their hutch while staff continued with normal routines. 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.

We are currently working toward conditioning positive reinforcement and cues. Overall, 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 more slowly 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.

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.

Ambassadors in Action: Enriching Ambassador Animals

At the South Carolina Aquarium, we are always striving to educate our public about the outstanding animal care provided by zoos and aquariums. While we could talk endlessly about the passion and dedication of our entire staff to research, conserve, and educate about the natural world, the real impact on our guests comes from directly engaging in the care we provide. In an effort to create a more impactful guest experience, our Education team has developed multiple shows a day that involve guests in an important aspect of animal welfare - enrichment. These shows provide many benefits to not only our animals, but also our guests.

Our Enrichment shows are done daily at noon and typically involve just one of our program animals. We also have an enrichment show at 2:00 pm that rotates throughout the building, focusing on a different exhibit every day of the week. The South Carolina Aquarium has a primary focus on exhibiting and educating about wildlife native to South Carolina. Most of our ambassador animals are reptiles and amphibians, which are certainly not the first animals that come to mind when talking about enrichment. These shows have been an excellent opportunity for us to show our guests the amount of care and effort we put towards all our animals (even the ones that don't react at all to their enrichments).

Through our enrichment shows, we have developed a number of different ways to elicit natural behaviors from our program animals. Occasionally, our enrichment shows are simply training sessions with our alligators or otters. Involving our guests in these training sessions provides us a chance to explain how training our animals can benefit us and them. We can dispel the perceptions that training animals is for pure entertainment by teaching our visitors that we might be training to make medical procedures less stressful, or even voluntary in some cases. Or we can explain to our guests that through training we can lessen aggression at feeding time.

Many of our enrichment items result in a food reward when the animals interact with them, which is a highly effective way to engage some of our reptiles. Our bearded dragon is particularly motivated by crickets and we have found that cat weight-loss toys are an excellent vehicle to provide those crickets. As the ball is pushed around, the crickets shake loose and are quickly consumed. Dundee, our female





bearded dragon, has learned that she can simply wait by the opening and the crickets will come right to her. We offer a similar enrichment to our striped skunk, Sassafras, though we use mostly fruits and vegetables. She has learned to push the weeble wobble all around her pen to shake all of the food out. In these cases, we are successfully encouraging these animals to exhibit the natural behaviors of hunting and foraging for their food.

In the case of our snake enrichment shows, we want to make sure we do not associate any food with their handling. We base most of our snake enrichment items on each species' natural behavior and habitat. Like many facilities, we use rack systems for our program snakes and to keep their enclosures as sanitary as possible, we use paper as substrate. We offer many enrichment items in their backup enclosures, but by offering enrichment during a show, our setups can be larger and more involved. For our ground dwelling species, we have a large bin, filled with mulch and soil, as well as a few types of "hides". Our Florida pine snake, Spruce, always does a great job of maximizing the enrichment items we give him, and will occasionally even bury himself completely. For our more arboreal snakes, we have a large tree branch that we let them explore throughout the show. In this setup, the snakes have the option to dig through the mulch, or climb the tree and as you can see here, Husk the corn snake, prefers climbing.



While presenting enrichment to our ambassador animals, our Education team stresses the purpose of why it is important to animal welfare. Our team of educators are all trained to be exceptional interpreters and they always find great ways to relate enrichment to our visitors. By simply pointing out that their trip to the Aquarium is enrichment, we help our guests make the connection to its importance. It is our goal to educate the public about the effort and thought that goes into each individual enrichment, as they are tailored to meet each animal's specific behaviors. The shows begin with a brief introduction about the animal, before we offer the enrichment and focus on the interactions we observe. Involving the guests in shows like these is paramount, so we ask that they interact with us throughout, and voice the behaviors they see. By encouraging the guests to be an active observer of the animal's behaviors, we give them an opportunity to feel as if they are contributing to the animal's care. Our guests are often delighted by witnessing our program animals act naturally and freely with their enrichment items.

We have found that through these enrichment shows, we are better able to convey the exceptional care we provide for these animals. By encouraging natural behaviors from our program animals through these enrichments, we are educating our public about the roles these animals play in their ecosystems, and why they are so important to conserve. Rather than just looking at an animal being held by a staff member, our guests are engaged by the behaviors these animals are exhibiting and they become a much more captive audience, eager to learn.

Josh Zalabak
Herpetologist
South Carolina Aquarium

Ambassadors in Action Part Two: Development of an Invertebrate Program at Point Defiance Zoo & Aquarium

Visitors are polarized by invertebrates. People are fascinated or repulsed, or sometimes both. While the smaller members of our Animal Ambassador team may not have the immediate appeal of their counterparts with spinal cords, they are captivating and deserve an opportunity to be showcased, if not for their essential roles in our ecosystems, then for their amazing biodiversity. In the spring of 2016 Point Defiance Zoo & Aquarium began developing its first formal presentation based around our arthropod ambassadors, *Bugs Alive!*

Our initial goals with the launch of *Bugs Alive!* were to connect visitors to less charismatic animals and to provide some of our youth volunteers with leadership opportunities. To achieve the first goal, we incorporated research-based best practices for generating empathy including: referring to arthropods by names, modeling caring behaviors towards bugs, reinforcing children when they demonstrated caring behaviors, and closely observing and interpreting animal's movements and behaviors. The messaging framework separated the presentation into four categories (gardener/primary consumer, predator, decomposer, and pollinator) demonstrating how invertebrates fit into our world.

To achieve our second goal, we enlisted our Youth Volunteer Animal Handling Team as presenters for the *Bugs Alive!* program, an unprecedented collaboration. We selected a group of five youth who then underwent general invertebrate biology training, as well as presentation training, and animal handling training, which included teaching them to handle hornworms during guest interactions. These high-school-aged volunteers also memorized scripts for the presentation and learned how to engage visitors informally. Although the youth volunteers were responsible for conducting the programming, they were always paired with a staff member or experienced adult volunteer as a second presenter. Empowering the youth volunteers through this program boosted their confidence as public speakers and gave them valuable opportunities to present and handle ambassador animals, which solidified their commitment to conservation education. They were all very enthusiastic and appreciative of the experience the program offered and hopefully are inspired to be future educators!



Bugs Alive Program



Two of the Youth Volunteer Animal Handling Team

The youth volunteer presenters utilized a Lumens Ladybug document camera connected to a large screen TV so that all visitors could get a good view of the small ambassador animals. One presenter ran the camera, while another focused on speaking and interacting with guests. The macroscopic images of living insects captured with this camera, especially when they were active, were very cool!



Camera 1-Lumens Ladybug document camera, Scorpion tv- The camera projects a macroscopic image of the scorpion onto the TV



As with any new program, there were some challenges to overcome. During the first season, we encountered scheduling issues due to the frequency of the program and availability of staff and adult volunteers to accompany the youth while they presented. In the second year, we relieved this pressure by reducing the program offering to once per day and changed the time the presentation was offered. Even with these changes, visitor attendance remained high.

The other major challenge was staffing time for husbandry. We added several species new to our collection to accommodate this program as we didn't know exactly which would work the best in this context. To reduce the amount of time spent on husbandry, this year we reduced the number of species and made some slight adjustments to make husbandry more efficient. The species we chose as our touchable ambassador, the tobacco hornworms, were the most time-consuming species to care for. However, hornworms are great ambassador animals, so we opted to keep them in the program in the future.



A Youth volunteer helps a guest handle a hornworm

Overall the program was well-received by guests. In 2016 an average of 55 visitors attended the morning presentations and 25 attended the late afternoon presentations. The presentation area was sometimes filled to the brim with over 100 people. The 2017 season continued to be popular, drawing even larger crowds. Our Youth Volunteers Animal Handling Team did a great job presenting and handling animals, and contributed a dynamic element as enthusiastic role models for our young guests. One visitor, whose daughter was first in line to hold a hornworm after a *Bugs Alive!* program, said the first time her daughter saw *Bugs Alive!* she was scared to hold the hornworm, but with the guidance of the teen presenter she decided to do it. Ever since that experience her daughter has been fascinated by bugs! We are excited to continue to offer this opportunity for youth to lead visitors in learning about how to live in harmony with amazing arthropods.

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Species Spotlight: Tawny Frogmouth



Frogmouths generally eat large ground-dwelling insects and other arthropods, though they will often hunt small vertebrates as well. Unlike owls, frogmouths do not have strong feet and sharp talons; instead they take their prey off the ground with their large beaks. Frogmouths nest in trees during the day, using their cryptic plumage to blend in with the tree trunk. If they feel threatened, they will take the mimicry one step further and stick their beaks into the air, slick down their feathers, and close their eyes in order to look almost exactly like a broken branch. Conversely, when tawny frogmouths feel comfortable, they fluff out their feathers, crane their heads far to the side, and spread their wings to bask in the sun. In a zoo setting, frogmouths have also been observed to enjoy misting, spreading their wings, and rotating their bodies on a perch to ensure that the water covers them evenly. Their call is an intriguing low “oom-oom-oom” sound that brings to mind something mechanical.

If you want to add a tawny frogmouth (*Podargus strigoides*) to your ambassador animal collection, you should prepare yourself now for the broad range of questions you are likely to field from visitors, including:

“Is that an owl?”

“Look at that owl!”

“What kind of owl is that?”

“Why is that owl awake during the day?”

“Is that one of the owls from Harry Potter?”

“Make the owl hoot!”

Clearly, the tawny frogmouth often suffers from a case of mistaken identity. However, the frogmouth’s relatively straightforward husbandry and handling requirements, as well as its interesting natural history, make it a great addition to many institutions’ ambassador animal programs.

The tawny frogmouth is a nocturnal bird native to Australia and Tasmania and is usually found in forests and woodlands. Their cryptic coloration and large eyes, which are adaptations for nocturnal hunting, often lead observers to believe that they are a type of owl. However, they are related to nightjars and potoos, which are also nocturnal insectivores.





The space and husbandry requirements for this species should not be difficult for most ambassador animal programs to meet. Frogmouths, like most avian species, require a range of perching options that vary in diameter, texture, and height. The Association of Zoos and Aquariums (AZA) Tawny Frogmouth SSP recommends that frogmouths should have a minimum of 6'x4'x6' of space for one tawny frogmouth, which would give the bird room to fly and display other natural behaviors. Their dietary needs can be met by offering a wide range of feeder insects, including mealworms, crickets, waxworms, silkworms, butterworms, hornworms, and grasshoppers. They can also eat small vertebrate prey, such as pinky mice, hopper mice, or adult mice cut into pieces. Some institutions dust feeder items with a vitamin supplement designed for birds of prey before offering them. Tawny frogmouths do experience fairly extreme fluctuations in weight and appetite that seem to be related to seasonal changes. Hand feeding is an excellent way to maintain positive relationships with ambassador frogmouths,

but it's also a great idea to allow the birds to feed within their enclosures to encourage exercise and expression of species specific behaviors.

Frogmouths are a fairly tractable species of bird that often adjust well to being handled in a variety of settings. They are usually amenable to being handled by several different presenters, including properly trained seasonal staff and volunteers. All handlers should be trained to recognize the signs of stress in birds in general and the individual frogmouth in particular. Presenters should also be aware that frogmouth legs are not as strong and stress-resistant as birds of prey (such as owls), and that handling should be adjusted to account for that. Jesses could put stress on leg joints if a bird tries to fly off while wearing them, so evaluation of each individual bird's behavior must be part of determining the correct method for handling.

The tawny frogmouth is a Green Species Survival Plan (SSP) animal, which means that institutions should be willing to work with the SSP coordinator to

acquire appropriate individuals for ambassador programs. The birds will be subject to the breeding and holding recommendations made by the SSP. Being a part of the SSP is a fantastic opportunity for messaging about the ways that zoos are participating in conservation efforts. Plus, the green designation indicates that the frogmouth population in AZA zoos is healthy and sustainable, which makes it more likely that an institution that wants an ambassador frogmouth will be able to find a suitable individual to add to its collection. So, come on and repeat after me: "No, it's not an owl!"

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