

Working with Owls in UK Collections

I have been working with and training a variety of birds, mammals and reptiles for the best part of the last 18 years and over that time I have worked for several different institutions. Over the years the knowledge we have as an animal training community has expanded exponentially, as has the way this is shared between colleagues, facilities, governing bodies and different countries. My personal experience of this is an encouraging one, especially within the IAATE membership as people from all over the world are striving to ensure their training methods are, as Dr Susan Friedman Ph.D would say ‘the most positive, least intrusive’; which ensures good welfare for their charges, and people are asking questions about how to move towards this strategy if they feel they could do better.

Recently, there has been much discussion about the use of owls in education programs and shows, and the value of these owls as ambassador animals for their species. Owls are very popular in shows and static displays – my perception is that most people think of them as ‘friendlier’ than hawks, falcons and eagles. Something about how fluffy they look, and their large eyes encourages people to want to be close to them. This is great – it means we can use owls to educate the public about ALL birds, especially the ones they might find less visually appealing, and whether the owl is on a glove or perch or in free flight, they definitely have an impact on our visitor experience.

In the UK falconry has long been practised and ‘traditional falconry’ including the use of anklets and jesses, tethering, creances and hacking are all still widely used in this sector. However there are places out there who are moving away from the negative reinforcement training strategies associated with ‘traditional falconry’ and moving towards positive reinforcement training for raptors as well as other bird species. This has proved a challenging learning curve. The first mixed bird species shows were started by falconers who thought they could train parrots the same way they trained their raptors. Once they realised this was probably not going to elicit the best behaviours from their animals, they adopted R+ for psittacines and other species such as toucans and hornbills. This has now progressed to multiple raptor species – not in all collections by any means, there is still a long way to go to achieve that, although it is happening in many facilities.

The one thing which has not changed is the way owls are trained. Since before I started working in the field, owls were the one group of birds that were never housed tethered, and always hand reared if they were to be used for shows or education programs.

Back in 2002 as a relative newbie to the training world I flew my first owl, and just accepted the fact that owls were hand reared and not tethered. I didn’t even question it. That was just the way it was. However it didn’t take long before I became curious as to WHY we didn’t tether owls and yet we tethered other birds of prey, and why we always hand reared owls but never accipiters. I asked lots of questions and received lots of different answers from different people.

The long and the short of it seemed to be circular. We don’t need to tether owls because they are hand reared, and we hand rear because we can’t tether them. The more I delved into it though, the more sense it made.

Owls are by their mostly nocturnal nature, quite secretive and very instinctive. Therefore tethering an owl in the open, even a hand reared one which exhibits comfort behaviours in the presence of people and novel stimuli, can be incredibly stressful. For this reason, ‘static permits’ allowing owls to be tethered for short periods of time for public display are not commonly issued, and the UK has strict guidelines to adhere to in these cases.

The Secretary of State’s Standards of Modern Zoo Practice (available at www.gov.uk), which must be followed in order to comply with zoo licence requirements in the UK, state that owls, vultures and caracaras (along with non-raptor species) should not be tethered. It also states that no permanently disabled wild owls should be on show to the public. In addition the EAZA (European Association of Zoos and Aquariums) Falconiformes and Strigiformes TAG produced a document in 2016 called Husbandry and Management Guidelines for Demonstration Birds (available at <https://www.eaza.net/assets/Uploads/CCC/EAZA-BPG-Husbandry-and-Management-Guidelines-for-Demonstration-Birds.pdf>) which also states that owls should not be tethered and that the training of parent reared owls often results in unacceptable levels of weight management and deprivation as well as chronic constant stress on the bird. Because owls should not be tethered, training a parent reared owl in the UK, without tethering it is almost impossible – without chasing a bird around an aviary to physically restrain it each day which, I’m sure you will all agree would be completely unacceptable to any ethical trainer.

I have often pondered the ethics of pulling chicks for hand rearing, wondering about the impact on the parent birds as well as the young. EAZA has a policy on hand rearing that it should only be done for show/demonstration purposes if there is no undue stress put on the parent birds (Available at <https://www.eaza.net/assets/Uploads/Guidelines/Animal-Demonstrations-2018-update.pdf>) This can be achieved by either pulling eggs for incubation and allowing the bird to double clutch and parent rear, or leaving at least one offspring for the parents to rear naturally. This mimics their wild counterparts where it is unlikely for an entire clutch to survive (depending on the species). Taking this into account I truly believe the benefits of using owls for education outweigh any potential negative impact on the birds, if they are managed correctly.

Wild owls are incredibly elusive, and certainly in the UK, not commonly seen. I myself have only seen 2 of our 5 native species, a barn owl (*Tyto alba*) and a short eared owl (*Asio flammeus*), and both just once! I know there are Little owls (*Athene noctua*) nesting near my house because I have heard them, but never seen them. This, combined with my experience of both hand reared and parent reared owls leads to the knowledge that a human reared owl, introduced to many different novel objects and stimuli from an early age becomes inquisitive and engaged by human activity and enrichment and a parent reared owl actively avoids all forms of human interaction, even flying away from people when they enter the aviary to offer food.

At Paradise Wildlife Park we currently house 10 owls, of 6 species. Eight are hand reared and used in daily shows and experiences. We also house a pair of parent reared spectacled owls (*Pulsatrix perspicillata*). The spectacled owls are exhibit only, and at some point, hopefully will breed. We have exhibited other parent reared owls, (little owls *Athene noctua*, snowy owls *Bubo scandiacus*, tawny owls *Strix aluco*, and burrowing owls *Athene cunicularis*) which were also exhibit only birds. The female burrowing owl was the main feature of an

article published in a 2016 Flyer where I detailed the protected contact husbandry training conducted with her in advance of her move to another collection. She was scale and crate trained with a barrier between her and the keepers so she ‘felt safe’ and had choice to participate in her training sessions.

At Paradise I coordinate the animal training across the whole zoo, whether for shows, husbandry or veterinary behaviours. We as a team always work with the ‘3 C’s’; Choice, Control and Communication. This means we always allow our animals to choose to participate in a training session, whether protected contact with a big cat or a ferret in a show; We give the animal as much control within the session as is possible and safe for them and us; We have an open conversation with the animal and pay attention to their responses to our cues and reinforcement schedule. We adapt our behaviour accordingly to try to ensure the animal succeeds in our goal.

Applying these principles to all of our training means when we work with our free flight birds we are always looking at how we can achieve this and showcase our birds’ natural behaviours for the public. Having a team of hand reared owls allows us to show some really interesting routines, that our owls actively participate in and I would like to share a few case studies with you all – examples of things I don’t believe we could do with parent reared owls.

Those of you who attended the 2016 IAATE Conference in Billings, Montana may be familiar with one of our Barn owls (*Tyto alba*) ‘Sophie’ flying in multidirectional and varying height circuits or loops over our flying arena. This behaviour has been developed over several years, and relies heavily on mutual trust between the trainer and the bird, and the bird actively participating in the flights. This is achieved by positively reinforcing desirable behaviours combined with allowing her the freedom to fly out of her aviary and set off into a circuit in the show when we open the door. If she does not wish to participate, Sophie stays on her station and we close the door again. She is given a second opportunity to come out to fly and if she chooses not to (incredibly rare), she will still receive her food for the day. If she refuses to participate a second or third day in a row we sit and assess any changes which may be affecting her, new staff, a new time of day, the weather etc and help her to get back on track by reducing our criteria as needed.

Stella is a Eurasian eagle owl (*Bubo bubo*). She has been at Paradise since 1993 but we have no idea of her age other than she arrived in adult plumage. So she could have been anything over 4 months old! Stella was causing trouble in a town on the outskirts of London after either being released into the ‘wild’ or escaping her housing. Paradise received reports of a large owl chasing and catching people’s cats on and around a housing estate. This was clearly not an ideal situation for Stella, the residents, or of course the local cat population! Keepers at the time went to investigate and retrieved Stella. She was clearly hand reared as she approached keepers and very quickly settled into life at Paradise. She is used daily in our free flight shows or flown with experience guests such as ‘Shadow a Keeper’ and used for photographic experiences too. Like all of our birds, Stella has no anklets or jesses, is free lofted in a large aviary and joins us for the show by flying out of her open door when cued.

Maple is a 6 year old Great grey owl (*Strix nebulosa*) that joined us as a 6 week old bundle of fluff in 2012. We were told she had been hand reared, however the first few months I had serious doubts about this. Maple was not actively avoiding keepers, but nor was she actively

coming towards us for food or engaging in ‘play hunting’ sessions. I spent a long time wondering if she would ever be the ‘right tool for the job’ as Steve Martin says. The breakthrough came while I was in Tampa for the 2013 IAATE Conference. My team sent me a video of Maple flying free out of her aviary and responding immediately to cues from the keepers. I couldn’t have been prouder – we persevered and now Maple is the star of our show. The thing we changed – jesses. Because she was not 100% steady with us on the glove, we had been walking her on the glove up to the arena, holding her jesses until we wanted her to do a short flight, and then walking her back to the aviary doing the same. This was breaking down our relationship with Maple. By letting go of her jesses and allowing her to take off from the aviary we were able to reinforce the behaviour of her flying to keepers really easily. Shortly after this realisation, Maple’s anklets and jesses were removed.

Skye is a 12 year old barn owl (*Tyto alba*) who has been heavily involved in our outreach program for most of his life. Skye is hand reared and because he was taken on offsite visits he still wore anklets and jesses permanently, complete with a swivel and leash when he was on these outreach programs. Despite his rearing, Skye showed behaviours which led me to believe that these outreach programs were stressful and uncomfortable for him. He would not willingly enter the crate, he had to be placed inside it from the glove. He moved in the box, stamping his feet and vocalising. Our outreach program is not run by keepers, but an Education Officer, who had limited bird handling experience. Whilst reports would come back that Skye had been ‘fine’ on the visit, I grew increasingly uncomfortable with his behaviours in the crate. Skye was taken ill last year and whilst recovering from abdominal surgery the Education team agreed to retire him from the outreach program. Once he was back to full health my team decided he should have a new job. Skye joined the rest of the collection in being free from anklets and jesses and now flies daily in our indoor mixed taxa shows. The biggest problem we had was teaching him (after years of being tied to a glove and not flown), to leave us in order to be reinforced! Some creative thinking from the team, utilising posts instead of a glove for him to fly to/from and we have a little starlet!

I know there are some people who are concerned over aggression directed at humans from hand reared owls however in my experience this can be almost completely avoided by either crèche rearing several owlets together, or ensuring several keepers put in the ground work with the chicks. In all the hand reared owls I have worked with, I have experienced minor aggression on less than a handful of occasions. One such time involved the lovely Stella, mentioned above, who managed to catch herself a wild rat in her aviary overnight. In the morning she had eaten its head (the best bit, obviously) and was clutching the rest of it in her talons. As I approached she went ‘classic angry owl’, fluffed out all her feathers, spread her wings on the ground, ear tufts up, blinking at me like crazy. Unfortunately, the rat was nearly the same size as she was so I waved a lovely mouse at her in trade. She stopped blinking and moved towards me, still with the rat in her foot. She took the mouse and I managed to wrangle the rat from her talons – she was not very amused. However, Stella came to the scales 20 mins later and flew free later on that day, having forgotten all about the stolen rat!

The other occasion I have seen minor aggression was linked to breeding condition last year. We house 3 barn owls (*Tyto alba*) and have a male and female housed closed to each other. In the spring they started screaming to each other which prompted them coming into breeding condition. Both owls had a box to hide in, however we discovered this was not helping so the

nest boxes were removed from each aviary and they were moved farther apart from each other. This reduced the screaming, and the breeding condition and the aggression did not manifest this year.

All of our hand reared owls show the same behavioural repertoire when we approach them. They watch us, call to us as we walk past, when we approach the door they fly towards us or towards their station if cued to do so. When we enter the aviary they fly to us and sit on the glove or a post in front of us. They take food from our ungloved hands (we always feed them straight to the beak), interact with us and any enrichment devices we offer them. They exhibit comfort behaviours in our presence such as preening, bathing and resting.

The parent reared burrowing owl (*Athene cunicularis*) I wrote about in the 2016 Flyer is no longer in our collection, but she is the only parent reared owl I have successfully trained. As described in that article we trained her primarily through protected contact, remaining outside her aviary and throwing reinforcement to her on her station. She quickly picked up the behaviours of going to a station, scale and crate and became very responsive, however I still would not have put her into a show or a program. I feel the success we had with this bird was because of the control we gave her during training sessions and the fact we allowed her space to 'feel safe' while we were outside the aviary. This training was not done on exhibit as she lived off-show, however it would have been an interesting alternative way to showcase owl behaviours and may be an option for some facilities who have parent reared owls on exhibit.

We also house a pair of parent reared spectacled owls (*Pulsatrix perspicillata*) who display completely different behaviours in our presence. These birds were captive bred and have lived in zoos their entire lives, however in my opinion they are still not comfortable in the presence of humans. They are in a large aviary, on exhibit to the public and spend a lot of time sitting on view, but at one of the farthest points from the front of the aviary. When keepers enter the aviary to clean or feed, these birds are not comfortable at all. In the worst case scenario they fly further away from keepers and if they cannot get further away then they will fly back and forward in the aviary until we leave. This reaction is somewhat extreme and is mitigated by careful observation and body language from keepers. If we approach slowly and low to the ground, staying away from the birds resting point they will often remain on the perch but displaying vigilance. We always try to minimise our time in the aviary and have positioned the water bath close to the feeding stations so we can enter the aviary and change the bath and put food in without disturbing them too much. I cannot imagine ever trying to work these birds.

In the UK rehabilitated wild birds rarely, if ever end up in zoological collections because it is perceived that they are not well suited to this environment. There are not very many specialist raptor rehabilitation facilities, however those I know work very hard to do everything they can to release birds once their injuries have healed successfully. If the birds are injured to the point where they would not survive in the wild (non-releasable) the decision may be taken to euthanize them. This is particularly true of severely injured or diseased adult raptors and owls. Having started their lives in the wild, even those who are releasable may struggle with the process of being housed in an aviary to regain fitness before release and it appears to be very stressful. Of course where this is temporary before release it is considered an acceptable stress as the bird will soon be back in the wild, however keeping these birds permanently under human care is not.

The legislation for keeping birds of prey in the UK is much less strict than in the US, which definitely causes its own problems, however the fact that we are able to acquire hand reared owls for use in our programs is invaluable. The amount of people we are able to reach on a daily basis by having owls fly over them or land close to them helps us to deliver the important conservation messages we all strive to get across every time we do a show or an encounter and if we did not have access to these birds I feel this would hinder our process hugely.