

RAPTOR REPORT



Defining Legacy Birds: A Crucial Step Toward Better Welfare

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Photos courtesy of authors.

What is a “legacy” bird? While we are not certain who first coined the phrase, we hope that by attempting to formally define it we will have a common language to help us move forward as bird trainers and caregivers and increase the welfare of these birds. Our interpretation of the phrase is that it is a gentle way to describe birds who have extreme physical disabilities, aversive training histories, or both. The disabilities and training histories of these birds often include flight restriction, whether inherent due to disability or through the improper use of tethering equipment. Additionally, their mobility challenges and training histories often have limited their ability to make choices. We choose this word because it recognizes the history of raptor training and education without placing blame on those who did what they could with what they knew.

The existence of legacy birds is due in large part to the absence of strict and thoughtful acquisition guidelines. Many U.S. zoological facilities now have acquisition criteria built into their collection plan for adding new birds to their collection, and current collection plans moving forward should include criteria for non-releasable raptors, leaving the creation of legacy birds in the past. But what is to be done about legacy birds who are already part of the collection? One common solution is for these birds to be “retired.”

For many legacy birds who are “retired” out of ambassador work, their new job is to simply exist on exhibit. This can mean that these individuals are, thankfully, not grabbed by the jesses or netted for programs and may even be allowed to perch high now that they are not required to be within reach for a program appearance. It is arguable that this improves welfare, at least to a degree, as they are no longer required to share space if it makes them uncomfortable. However, this exhibit existence lacks in many of the basic welfare tools that we would never consider eliminating for the other ambassador birds on our team. Once placed in an exhibit-only situation, these birds’ medical care now relies on semi-regular (if the facility schedules it) netting or chasing, grabbing, and restraining to assess their overall health. Legacy birds in many facilities, therefore, may have serious medical conditions that

go undetected for much longer than necessary.

Cascades, like other facilities, has several legacy birds in its care. Some of these legacy birds naturally took to programming work; voluntarily participating in meeting guests with trainers in different capacities. However, not all birds were good candidates for this level of human interaction. During our early period of transition in training methodologies (from force to choice), many birds who were once forced to the glove for programming were transitioned to exhibit-only (sometimes referred to as static display). At the time, this transition was a preferable existence in our minds for these legacy raptors. These birds were free fed, cleaning of their exhibit space was carefully monitored by staff, and they were on a schedule for routine wellness exams and coping. However, during these routine exams we were finding medical concerns which we would not have missed with any of the working ambassador birds who we casually examined up-close daily. As some of these medical concerns were preventable or treatable at earlier stages, we felt that we were not providing the best welfare for these exhibit-only individuals.

These discoveries began our journey towards the end of the static-display-bird-age at Cascades. The first step for this new transition was to no longer co-house any birds. Several of our exhibit-only birds were co-housed with other legacy individuals. While there may be some social benefits resulting from co-housing, we found that for raptors who are primarily solitary hunters and less social than other birds, the cost of co-housing outweighed the benefits. Competition for resources, including food theft and displacement likely caused unnecessary stress. These raptors who were now housed individually were much more comfortable with the beginning stages of training as they no longer experienced competition and conflict from their housemate, and it allowed for the use of their diet during training sessions.

We began focusing first on training these birds to approach us. This voluntary approach behavior allows us to visually examine the birds daily. For especially fractious birds (i.e., those prone to escape and avoidance behaviors), approach behavior can be trained protected-contact, allowing them the safety of a barrier between bird and trainer. These visual inspections now allow us to monitor wing tips on birds who have amputations and watch for any changes in mobility. For many legacy raptors, disabilities will worsen over time. For one Bald

Eagle (*Haliaeetus leucocephalus*), we were able to discover an issue with one of his toes which we would have never seen until his annual exam as an exhibit-only bird.

The approach behavior quickly was transitioned into a voluntary scale behavior. We are now able to monitor these birds' weights daily and have decreased the ever-present obesity that we were battling with free-fed raptors. Our experience both with our ambassador birds and raptors in our wildlife hospital is that they will eat almost all food presented to them, to the point of obesity. For example, we have seen raptors in our wildlife hospital become so obese they are no longer able to fly due to their body weight. Conversely, an unusual drop of weight might be the first clue we have for an individual who has a treatable medical condition that we would miss without that daily weight data.

Next, we focused on voluntary crate behavior for the exhibit-only birds who showed promise. In the past, if repair work or routine maintenance needed to happen on a bird's aviary or a neighboring space; these exhibit-only birds would be chased, grabbed, and restrained to move for the work. These were stressful projects to accomplish for both the birds and the staff and sometimes they were delayed because of the intrusive methods we used to secure birds. Now with fluent crate behaviors, these once static birds will load into their crate, either hold in their crates or unload in a different aviary and wait. Once the work is complete, they reload in their crates and head home.

Now, we are working on training to a hand-crafted nail trim or foot care perch₁ for these formerly static display birds. Preventable and treatable foot issues were one of the most common medical concerns we would discover during exams of these individuals. A fluent foot care perch behavior will allow us to do preventive work on the feet such as trim talons, apply moisturizer, and allow us to observe and document any changes before they become serious medical issues.

An unexpected (but in hindsight unsurprising) side effect of the training and opportunities given to these exhibit-only birds is the dramatic change in behavior we have observed in all of them. Birds who once exclusively used far back perches are now using the entire aviary space, bringing them closer to guests. We have observed them bathing while guests watch them and exhibiting other natural behaviors. These used to be birds who rarely even ate their diet while guests were in front of their aviaries, today they no longer even hesitate to share their personal space with trainers with large groups of people outside their aviaries watching. We interpret this as increased confidence and resilience from learning to control their environment. To see these birds as active participants in their daily care has been well worth the time invested in their training.

The time invested in their training is worth emphasizing as it has been significant. Our experience has been that legacy birds often take much more time, flexibility, and skill to train than birds without extreme disabilities and aversive training histories. We recognize that eliminating the exhibit-only approach is an endeavor that will take time and dedication. Not every legacy bird will have the capacity to learn even basic behaviors. Over time, improving acquisition standards and training practices will help to ensure that all education birds can be expected to work safely and voluntarily.

1. <https://naturalencounters.com/wp-content/uploads/2020/04/TrimmingTechniquesKarenaMarrero2015.pdf>



*Above: One of the authors celebrates the first crate ride of a Rough-legged Hawk (*Buteo lagopus*) who had been exhibit-only for 22 years.*

*Below: An 18-year-old Western Screech Owl (*Megascops kennicottii*) learned to voluntarily load into her transport box for safe movements.*





Above: Training an approach behavior allowed trainers to see a swollen toe on an eagle who had spent 27 years as an exhibit-only bird.

*Below: Training to a foot care perch, allowed trainers to visualize a suspected toe injury to a Snowy Owl (*Bubo scandiacus*) without restraint.*



*Above: A Gyr Falcon (*Falco rusticolus*) with past foot concerns, now gets weekly treatments on a foot care perch.*

Below: A serious puncture wound was only found on an exhibit-only eagle when it was restrained for a scheduled exam.

