



Hartlaub's duck, Photo Credit: Keith Lovett

THE DUCK POND

Association of Zoos and Aquariums Anseriformes Taxon Advisory Group
 Summer 2021 · Volume 1, Issue 2

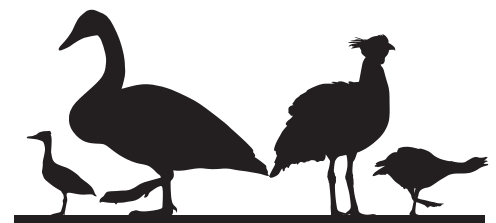
2021 MIDYEAR MEETING—A REVIEW

On Tuesday, March 23, the TAG held its (virtual) meeting at AZA Mid-Year. TAG Chair, Keith Lovett presided, beginning with an overview of the TAG's managed programs: 13 Yellow SSP's, 3 Red SSP's, 3 Candidate Programs, and 7 Monitored Populations.

The most recent Regional Collection Plan was briefly discussed, highlighting a chart that offers species recommendations for zoos and aquariums to consider as replacements for "Phase Out" populations that they are holding or considering. Following the overview, committee updates were presented on Social Media and Marketing (Ian Shelley), Fundraising and Grants (Joanna Klass), and Education (Keith Lovett).

Following the committee updates, attendees heard presentations from Kristen Pelo of the Alaska SeaLife Center regarding their Arctic Waterfowl Program which promotes the conservation and research of Arctic waterbird species. Kristen's presentation was followed by Pinola Aviary's Jacob Kraemer who provided detailed information on his facility's innovative designs and set ups for duckling rearing. Finally, Kristen and Jacob took the opportunity to announce a new professional development opportunity, a "Waterfowl Externship" that would offer candidates training at both of their facilities.

We look forward to hopefully meeting again with everyone – in person, this time – at our next TAG Meeting, hosted by the Aquarium of the Pacific in the spring of 2022!



WATERFOWL

Taxon Advisory Group

**ASSOCIATION
 OF ZOOS &
 AQUARIUMS**

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Laysan duckling, Photo Credit: IUCN

SPECIES FACT PROFILE: LAYSAN TEAL

The Laysan teal (or Laysan duck), *Anas laysanensis*, is named for the 1.6 square mile island to which they are native. Endemic to the Hawaiian Islands, this species inhabits less than 10 square kilometers within the National Wildlife Refuges of Papahānaumokuākea Marine National Monument. They have one of the smallest ranges of any waterfowl species.

Due to their exceptionally small range (and extreme population fluctuations), the Laysan teal is currently listed as a Critically Endangered species by the IUCN. These birds were once found throughout the Hawaiian Island chain, but their numbers decreased drastically with the arrival of humans and introduced mammalian predators and competitors, such as rats, pigs, and rabbits. Having evolved in the presence of overhead, flying predators, Laysan teals adapted to freeze in place in response to a threat, which made them vulnerable to the introduced terrestrial mammals.

By 1912, the population was reduced to 7 adults and 5 juveniles. Fortunately, Laysan Island is now federally protected, and population numbers were estimated at 600 birds in 2004. From these, 42 birds were relocated to Midway Atoll National Wildlife Refuge to establish a secondary wild population. By 2007, that population had more than doubled in size to approximately 100 birds.



Laysan teal, Photo Credit: Keith Lovett

LAYSAN TEAL

Anas laysanensis

Range: Hawaiian Islands

Program Status: TAG
Monitored Population

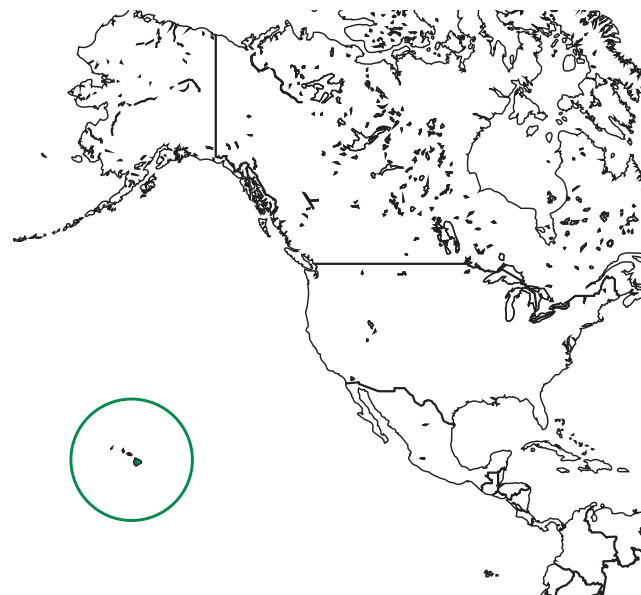
Program Leader: Veronica Schmidt

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TAG Appeal: Charismatic, curious, mix well with other waterfowl species... Laysan teal add excitement to any collection. They are low maintenance and can be housed in small aviaries with smaller pools, as well as larger aviaries, where they can dabble along the shore and in the mud.

Unfortunately, sea-level rise, outbreaks of avian botulism, and a tsunami strike in 2011 have threatened the numbers of this duck, both on Laysan Island and on Midway Atoll.

Although they are a “Little Brown Duck,” Laysan teal have an incredible history of survival and conservation. The addition of Laysan teal to any facility would bring conservation to a focal point and provide a spotlight on an imperiled, endemic bird.



Range Map Credit: Sean Silva



Laysan teal, Photo Credit: Ian Gereg

“Hawaii is known as the “Endangered Species Capital of the World”; which makes working and being able to be a part of helping the current population of Laysan teals that much more special. Although many other endemic birds of Hawaii were not as lucky, I am proud to be able to help and hopefully prevent the Laysan teals from becoming extinct.”

- Veronica Schmidt, Bird Keeper 1 and Laysan Teal Monitored Population Leader,
Honolulu Zoo

QUESTION AND ANSWER – WATERFOWL TRIVIA

Saint Cuthbert of Northumberland instituted special laws to protect these ducks from harm; as a result, they are sometimes called Cuthbert’s or Cuddy’s ducks. What species is it?

Answer on Page 9



MANAGING DIVING DUCKS IN AN AQUARIUM

William Robles, Curator of Birds

Audubon Aquarium of the Americas

In our first issue I went over some of the benefits of having a mixed-species exhibit in an aquarium. In referencing the Gulf Shores exhibit at the Aquarium, I stated “It features Atlantic stingrays on the river’s floor, spade fish and catfish swimming throughout and hooded mergansers on the shore, swimming, and diving. This saltwater exhibit has so many levels it can be compared to the levels of the rainforest – emergent, canopy, under canopy and forest floor.” With this compelling description, who wouldn’t want to add another dynamic element to their exhibit? Of course, mixed-species habitats can create some challenges, and I will cover some of these issues in this article.

One of the most obvious questions to ask first is “how do you manage diving ducks in a habitat which features fish?” Secondly, “how does one feed those fish without having a fish-eating species like hooded mergansers impact these feedings? This is where we turned to positive reinforcement, kennel, target, and station training with high reward items as a solution. What we at the Aquarium discovered early on was that when it was time for the fish to receive their broadcasted feed of silversides and krill, the ducks would go crazy for them as well. The ducks would dive through the fish not only taking their food items, but also scaring them off to the point that the fish would not eat. To say the least, this left our fish-focused aquarists very frustrated with the birds and their dedicated bird keepers. After some brainstorm sessions among the bird team, we decided to use one side of the exhibit as the area the birds would station to keep them apart from the fish feeding area. This station area has quickly become the “high reward” area for the ducks with bird keepers using crickets as the reinforcement of choice. Three times a week, the bird keepers and aquarists meet at the front of the exhibit, go to their respective stations, and feed the animals they are caring for simultaneously. More often than not, this simple process of creating a station for each set of animals has worked flawlessly. In addition, the aviculture team at the Aquarium has used this area to introduce a “lollipop” target and a small kennel to start target and kennel training the ducks for husbandry related purposes. It only took a few sessions for the birds to pick up on the target training and while kennel training is still in progress, we are pleased with the results we are experiencing. As demonstrated in the photos, part of our process was to “float” the kennel to give the birds an easier transition in and out of the kennel. The logic behind this plan is that since swimming is a natural behavior for waterfowl, we surmised they would feel more comfortable swimming into a crate, rather than walking in on dry land.

In zoos and aquariums waterfowl often get overlooked as training candidates, even though training programs in these birds can help reduce stress, increase enrichment opportunities, and encourage voluntary participation in husbandry care. When setting goals for waterfowl, there is no reason this cannot be applied as it would be with taxa for whom operant conditioning and enrichment is standard practice. Welfare standards are changing within the field and with the inclusion of AZA accreditation standard 1.5.0, formal evaluation of welfare should consider opportunities for training and enrichment regardless of the species.



AROUND THE POND

Zookeepers, aquarists, curators, veterinarians, educators, registrars, program leaders—managing waterfowl species within AZA takes a village. Every issue, we introduce you to a different member of our waterfowl community.

JENNIFER TORPIE

Curator of Education
Anseriformes TAG Education Advisor
National Aviary

“Hello! My name is Jenn Torpie and I’m excited to join the Anseriformes TAG as the Education Advisor. I currently serve as the Curator of Education & Public Programs at the National Aviary where I get to share my curiosity about the natural world and passion for conservation with visitors of all ages. Prior to this role, I worked as the Evaluation Coordinator at the San Antonio Zoo, assessing the impact of a variety of conservation education programs on visitor conservation attitudes and behaviors. My interest in the impact of zoos also drives my academic career; I received my MA in environmental anthropology in 2014 from the University of Texas at San Antonio, where I am currently a Doctoral Candidate exploring the role of zoos in shaping public perception of animals, nature, and conservation.

My experience working in and researching the field of zoo education has allowed me to see firsthand the special role zoos play in helping people forge connections with animals and the natural world, and the Anseriformes TAG is uniquely positioned to help facilitate these connections in our institutions and beyond. Waterfowl species can be found within our exhibits, but also in our own backyards. Ducks and geese are some of the first animals that kids can engage with and identify and waterfowl often hold a special place in the hearts and minds of our visitors because of these interactions. The ubiquity of waterfowl in our environment is an incredible opportunity to educate and inspire the public, whether that’s in our zoos and aquariums or taking a stroll in the park. In my role with the TAG I look forward to working with you to help forge these connections.”



IOWA’S TRUMPETER SWAN RESTORATION PROGRAM—CREATING A CONSERVATION TRIUMPH THROUGH COLLABORATION

- Tiffany Mayo, Trumpeter Swan Program Leader,
Cleveland Metroparks Zoo

The start of Iowa’s trumpeter swan story is similar to that of many states in the Midwest. Prior to the settlement of Iowa, trumpeter swans nested throughout the state. Wetland drainage and unregulated hunting extirpated the species from the state with the last nesting swan observed in 1883. It took nearly 115 years until a trumpeter swan would again nest in Iowa.

In 1993, the Iowa Department of Natural Resources (DNR) developed a plan to restore trumpeter swans to the state. There were two primary objectives with this plan. The first objective was to restore a self-sustaining, migratory population of trumpeter swans to its former nesting range in Iowa. This was accomplished by acquiring swans for restoration purposes in several different ways including zoos, private propagators, other state swan projects, and any other sources that might have available swans. Since the inception of the program, 1,218 swans have been released into Iowa, with hundreds of those being donated from 26 zoos across the country. In addition to supplying cygnets, zoos also provided fertile eggs and funding for travel and other related expenses. This zoo involvement played a significant role in trumpeter swan restoration success in Iowa.

The second objective of Iowa’s restoration plan was to use the swans to “Trumpet the Cause for Wetlands”. To date, the Iowa DNR has completed over 350 swan releases with the public, school groups and media invited to attend. The unique educational aspect of the releases was spear-headed by now retired DNR staffer Ron Andrews and continued with Wildlife Technician Dave Hoffman. Before the swans were released, DNR staff educated the attending public on the biology and conservation of trumpeter swans along with the positive impacts of having healthy wetlands.



Photo Credit: Margaret Smith

“We believe it is extremely important to engage and connect the public with the swans and their habitat. These connections with the swans often spark a passion and a sense of ownership and empowerment to protect, enhance, and restore trumpeters and their habitat.”

- Dave Hoffman, Wildlife Technician, Iowa DNR

The participation of zoos in this second objective has helped by providing education at their own locations. This includes creating educational kiosks, live swan programs, educational handouts/activity books, news releases and social media engagements with their audiences. Additionally, zoos also became involved with the on-site releases, which gave their staff a chance to interact with the public and answer questions alongside the DNR. In 2019, the educational component of the releases expanded with the assistance of Kansas City Zoo’s Education Department bringing several hands-on activities to an elementary school for children to learn about swans and bird adaptations. Other zoo staff attending the releases were able to help work the different activity tables and interact with multiple groups of students.

The positive effect that participating in Iowa's restoration program had on zoo staff was undeniable. It allowed staff to observe first-hand the results of zoo-based conservation work, collaboration, and connecting people to their environment. These experiences strengthen the conservation narrative which helps engage zoo visitors and inspire action.

"As a zookeeper, I often find myself in conversation with guests about the conservation work that zoos do and how it benefits animals in the wild. Getting the opportunity to be a part of a conservation program from start to finish was a pivotal moment in my zoo career. I gained a new perspective and appreciation for the programs currently in motion by participating in the trumpeter swan release in Iowa. I feel as though speaking from experience gives me the chance to have an even greater impact on guests and provide further evidence of the hard work accomplished by zoos across the country. It was an experience I won't forget!"

- Katelyn Newell, Animal Keeper, Maryland Zoo in Baltimore

Due to the great success the program has achieved, 2021 was likely the last year for swan releases in Iowa. Though it is always bittersweet when a program comes to an end, it signifies yet another stable population of trumpeter swans in North America. The challenge now becomes keeping the trumpeter swan conservation story alive and finding ways to continue inspiring people to protect swans and their habitat. While the future looks bright for trumpeter swans, there are still populations that need help and swans are still susceptible to major threats like power line collisions, lead poisoning, and habitat loss.



Photo Credit: BEarth Images

Moving forward, the Trumpeter Swan SSP will be focusing on restoration efforts out west. In 2022 the program will be working on reestablishing zoo participation with the Oregon restoration program. Additionally, work will continue with the Greater Yellowstone reintroduction program. As always, working together with AZA facilities and other organizations on wetland conservation and education initiatives is a top priority for the SSP.

For more information on Iowa's restoration program and other trumpeter swan conservation efforts, visit www.trumpeterswansociety.org



Photo Credit: Tiffany Mayo

"It was a life-changing experience to watch captive-born swans swim away to their future as wild birds."

- Kelly Schouten, Educator,
Kansas City Zoo

THE INTERNATIONAL WILD WATERFOWL ASSOCIATION

Supporting waterfowl conservation in the wild and in managed collections

By Clayton Botkin, IWWA President,
claytonbotkin@hotmail.com

international wild waterfowl association

The International Wild Waterfowl Association (IWWA) was founded in 1958 by a group of aviculturists and conservationists. The organisation was formed by several prominent individuals at the time, including Dr. Jean Delacour, who presided over the association until 1983, Dr. S. Dillon Ripley, Mr. Randall Maybey, Dr. George Allen and Sir Peter Scott. These individuals were aware of declining populations of waterfowl and formed this strong international group to connect those working on both wild and captive waterfowl.

In its early days, IWWA and its programs supported the efforts in conserving the whooping crane and trumpeter swan. Both species have faced tremendous hurdles in their recovery, but also seem to be at a point with a much more positive outlook than in the past. The IWWA and its members have played a significant role in this success and contributions to these, and similar projects continue even now.

IWWA directors have the opportunity to take part in a number of committees: governance, regulations, fundraising, communications, and conservation & grants. The committees each have their own specific purpose and areas of responsibility which ultimately support the mission of the organisation. Often, committees include non-director members as well to ensure there is broad participation, engagement, and perspectives.

The IWWA partners with Sylvan Heights Bird Park to offer its annual publication, Words on Waterfowl, as well as recently beginning to print its own yearbook, profiling the various projects and initiatives it supports independently. In 2020-21, the IWWA supported several initiatives:

- Providing a letter of support to Birdlife South Africa recognizing their efforts to re-name the blue-billed teal
- Contributed funding to the publication of a new version of Waterfowl of the World
- Ongoing contributions to funding the work of Sylvan Heights Bird Park with the white-winged duck



“Participants and host of the 2020 Waterfowl Conservation Workshop in Barneveld, the Netherlands. This workshop is hosted by IWWA and partners every three years”-Clayton Botkin, Photo Credit: Jan Harteman

Normally, the IWWA hosts an annual conference, rotating between the US, Canada, and global locations. These have been suspended due to the COVID-19 pandemic, but plans are beginning to take shape for future years. Every three years, the organisation and its partners host the Waterfowl Conservation Workshop. This conference is one of the largest global events in the avian professional field, connecting work in wild and captive waterfowl conservation, propagation, and management. The next Waterfowl Conservation Workshop is planned for the Pacific Northwest of North America in 2023.

The IWWA maintains an active awards program, which seeks to recognize those who contribute to waterfowl both in- and ex situ, conservation, and the sharing of knowledge. In 2020, IWWA recognized Lynn Dye by inducting her into the Waterfowl Hall of Fame for her continued and ongoing support of the organisation and her efforts with managing the collection of hers and her late husband. The organisation offers a large number of awards, which span regions and purposes. A complete and renewed list of awards will be available online later in 2021. Nominations are encouraged from anyone who may be deserving, although some awards are restricted to members.

The IWWA has benefitted from the commitment of its founders and directors throughout its rich history to ensure it remains a viable and well-established global foundation, poised to continue supporting waterfowl conservation initiatives well into the future. The recent addition of several new board members from varying backgrounds, including five from AZA facilities, creates renewed leadership and diversity that will offer a novel and innovative approach to the organisation and ensure it continues sustainably and in perpetuity. Traditionally, waterfowl populations have relied heavily on private sector breeders for the success of species not only in managed collections but in the wild as well. The success of both in- and ex-situ waterfowl populations does not rest solely on the shoulders of one organisation, but rather relies on collaboration and cooperation.

To learn more about the IWWA, its programs and initiatives, please visit wildwaterfowl.org

WATERFOWL HABITATS IN ZOOS AND AQUARIUMS

Southern screamers in mixed species habitat at Buttonwood Park Zoo

- Jessica Martinho, Zookeeper, Buttonwood Park Zoo

One of the challenges of smaller zoos is creating habitats that both engage zoo visitors and meet the physical and behavioral needs of animals all while keeping within a more compact space. Though difficult, with some creative thinking and strategic planning, even the smallest of zoos can design eye-catching and impactful exhibits. In 2020, the Buttonwood Park Zoo embarked on construction of a new mixed-species habitat for its existing pair of Chilean (southern) pudu and a new species to the zoo, the southern screamer.



To minimize cost and time, construction of this new habitat was performed solely in-house with the zoo's maintenance, keeper staff, and volunteers all pitching in to turn this previously unused expanse into a lush environment peppered with flowering trees and complete with a shallow pond and small rock waterfall. In addition to providing both species with ample space on exhibit, special care also needed to be taken to protect these South American species from the harsh New England winters. To do this, an old, underutilized outdoor bear holding adjacent to the new space was retrofitted to accommodate the pudu pair and a spacious holding area was also constructed for the southern screamers. Both areas provide the animals with a heated, predator-proof space to spend the night or retreat from any inclement weather.



In August 2020, the exhibit was completed and open for public viewing. While the habitat is currently home to the pudu and southern screamers, the space has also lended itself well to a variety of South American species including yellow-footed tortoises and Andean geese. Through its elongated viewing, the exhibit has allowed for flexibility in training demonstrations, allowing even the most reticent of animals to be seen interacting with its keepers. The main focus of this undertaking was to showcase smaller, lesser-known species that could thrive in a smaller zoo, and thus far the hard work has paid off. Both species have been thriving in their new environment and have become favorites of many zoo visitors. It is the hope of the zoo that both species will be breeding in the near future.



ANSERIFORMES TAG MISSION STATEMENT

The mission of the AZA Anseriformes Taxon Advisory Group (TAG) is to provide leadership in the captive management of ducks, geese, swans, and screamers in North America. The TAG is committed to maintaining sustainable captive populations, improving the welfare of waterfowl within AZA, and raising awareness for conservation of waterfowl worldwide.



FUNDING OPPORTUNITIES AVAILABLE!

ANSERIFORMES TAG GRANTS

Would you like to expand your knowledge of waterfowl care and husbandry? Do you have a vision for how to make a difference towards the conservation of ducks, geese, swans, or screamers in the wild? Do you wish you could do more for waterfowl, but don't know where to begin?

Here is your chance!

The AZA Anseriformes TAG is pleased to be offering not one, but two grants in the amount of up to \$500 US each. One grant is designated for Conservation and Research, the other one is for Professional Development.

For application materials, or to request more information, please contact TAG Steering Committee members Joanna Klass (Joanna.Klass@Zoo.org) and/or Ian Shelley (ian.shelley@marylandzoo.org).

Applications are accepted on a rolling annual basis.



Blue-winged teal, Photo Credit: Keith Lovett

Trivia Answer: Common Eider