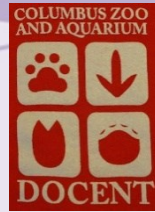


April 2023

The Columbus Zoo and
Aquarium Volunteer
Newsletter

ZooNews





Editor-in-Chief

LINDA CASTNER

Layout Editor

CINDY WESNEY

Copy Editors

KATHY GOLDSMITH

KELLY HANLIN

CATHY SHADE

CINDY PAYNE

Staff Artist

CHRIS LUTMERDING

Team

SUE ALLEN

JULIANN BREEDING

KAREN LINN

NANCY MULHOLAND

DEBORAH POLING

MARY ROSE

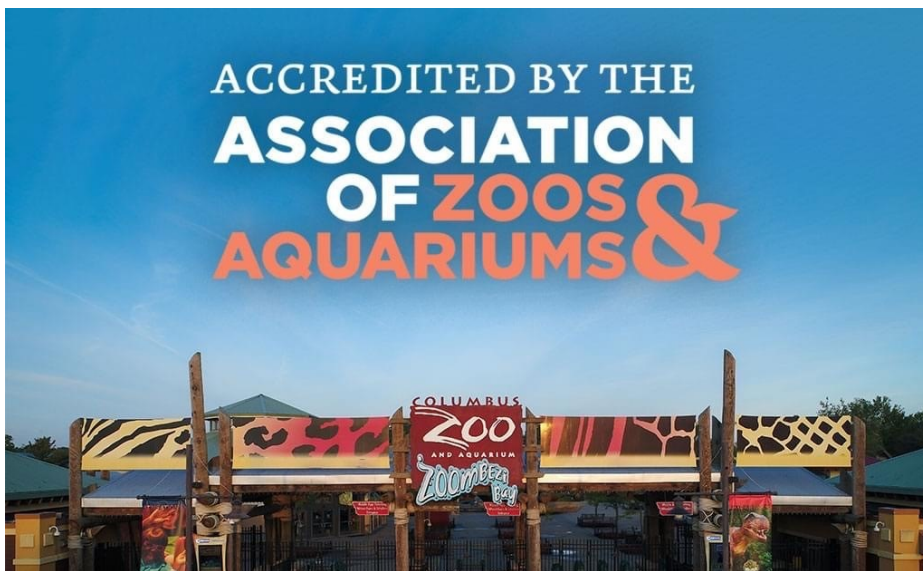
SALLY RUDMANN

The mission of ZooNews is to promote awareness, education, preservation and conservation of our natural world.

To submit an article, please email us at: cbuszooneews@gmail.com

this issue

From the President /CEO	2
Communiqué	3
Hoo-Knew	3
"Weedies" are Here!	4-6
Pertaining to Penguins...	7-11
Animals' Effects on Ecosystems	12-13
The American Golden Plover	14-15
Congratulations Docents!	16-18



FROM THE PRESIDENT AND CEO



Greetings Volunteers,

As I am sure many of you know by now, On March 27, the AZA accreditation commission voted unanimously to restore our accreditation. This continues our long history with the AZA; we were first accredited by the AZA over 40 years ago. While there are multiple organizations that provide this kind of service, AZA is the leader, having been in existence nearly as long as the Columbus Zoo. There are currently about 235 facilities that are accredited by the AZA, most of which are located in the US. There are seven accredited facilities in Ohio, and that includes The Wilds.

As a reminder, to be AZA accredited, the Zoo underwent a thorough review to assure it is meeting or exceeding the rising standards in every aspect of our operations, including animal care and wellbeing, veterinary medicine, governance, wildlife conservation, and research, education, finance, and safety. AZA requires facilities to complete this rigorous accreditation process every five years.

During our inspection a few months ago, the accreditation team inspectors recognized 12 points of particular achievement, including the Zoo's animal acquisition and disposition policy. That policy was identified as a concern during our previous inspection in 2021. The outcome of our recent inspection really demonstrates how far we have come. I am so proud of our teams; they have worked diligently over the last 18 months to make sure that we are in full compliance with every AZA standard.

The timing for our accreditation is fortuitous as we are hosting the annual AZA conference this year. That conference will take place September 9-14, so stayed tuned for more information as our planning continues.

Thanks

Tom Schmid, President/CEO

Communiqué

Spring is in the air! The ice has melted, the snow has disappeared and everything is new and green. At the Zoo new and green can refer to many different things: plants, animals and volunteers. There will be about 60 fresh, new faces in the animal contact areas. Welcome aboard to our new Adult Volunteers!



Spring is also the time to welcome our new docent class! You will find their pictures and bios on pages 16-18. This wonderful group was hard at work in February and March, learning about policies, procedures, regions, animals and everything else Zoo-related.

ZooAide applications are coming in steadily. We will interview approximately 150 teenagers this month. Once chosen, the new ZooAides will be trained in April and May and be ready to go in June.

Volunteer Appreciation Week is April 16 to April 22. Hopefully you all know you are appreciated each and every day for everything you do to make the Zoo such an amazing place! We will have tokens of gratitude for you all in the lobby throughout Appreciation Week; when you are here for your shift, you can check it all out and pick yours up. Thank you for all you do for the Zoo! The Columbus Zoo and Aquarium has the best volunteers and we are lucky to have you!

The Volunteer Team,

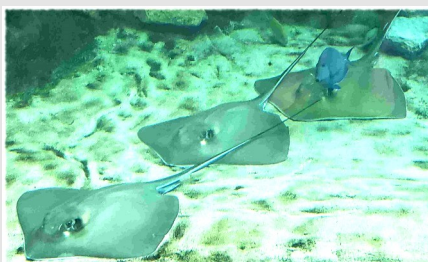
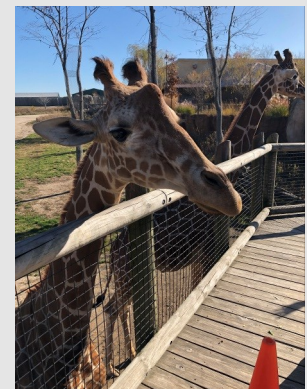
Ginger, Carole, Mary, Kathy and Rachel



HOO-KNEW?

Giraffe Feeding

Did you know that giraffes can survive for 2-3 days without water because they get their water from their food and dew on the plants?



Stingray Bay

Did you know that stingrays give birth to live offspring rather than laying eggs?



Having a scientific name that seems to sound like a dinosaur, the weedy seadragon (aka common seadragon), *Phyllopteryx taeniolatus* now inhabits the nocturnal building of Australia and the Islands. This strikingly beautiful fish is in the family Syngnathidae (syn = “together”, gnathos = “jaw”) with other seadragons, seahorses and pipefish. Their appearance is that of drifting seaweeds. This is a camouflage strategy that makes seadragons hard to spot in their sea grass meadows and kelp-covered rocky reef habitat on the southern coast of Australia and the north and east coast of Tasmania. Seeming to be a bit of floating seaweed, they successfully prey on mysid shrimp, small crustaceans, plankton and small larval fish.

Phyllopteryx is Greek

Phyllo = leaf pteryx = feather wing

(therefore ... appendages similar to leaves)

Taeniolatus is Latin

Taenis = “ribbon”

(therefore ... “with small ribbons” referring to the purple bars of color on the body)

Weedies have no scales. Under their skin are tough, jointed plates covered in bony rings and hard dorsal spines. They are very colorful: red and orange with light yellow spots and bluish-purple stripes. Their maximum length is about 18 inches. They have small leaf-like appendages on their head, body and tail. Their snout is long and tube-like, without teeth. They create a strong suction, heard as a click, to suck in their food, which they swallow whole. They do not have a stomach and have to eat frequently as a result. Every two hours our weedies are fed mysid shrimp that have just fed on larval brine shrimp.

Weedy seadragons are weak swimmers. They have a transparent dorsal fin low on their back for propulsion and two pectoral fins on their neck for steering. An air bladder allows them to adjust their position in the water column. Their tails are not prehensile as in seahorses.

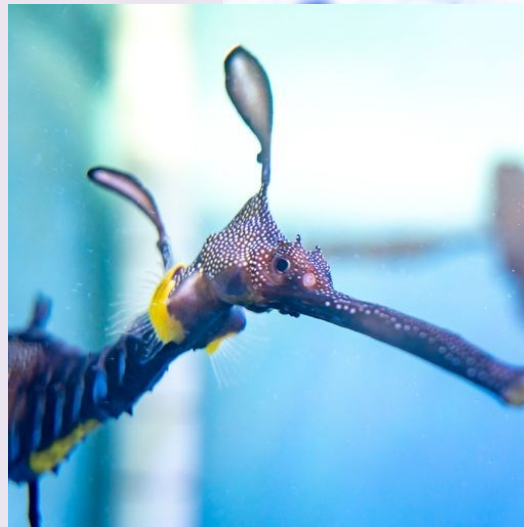
Males are slenderer while females have deeper bodies. In human care they can live about 10 years and in their native waters for possibly five to seven years.



Continued on page 5

Reproduction

Weedies mature at about age two. Breeding season is in Australia's early summer months. Courting couples do a mirrored dance for several weeks. At the end of the courtship dance, the male curls his tail and the female lays about 250 or so eggs which are immediately fertilized and stick to the male's vascularized brood patch behind the anus on the sides and under his tail. (Seadragons don't have pouches like seahorses.) The brood patch then hardens around each bright pink egg like a cup to hold them for six to eight weeks of incubation. During hatching the male releases a few eggs at a time and it may take several hours or even several days to release them all. The short-snouted young hatch tail first and settle on the bottom, living off the still -attached egg capsule for several days until their snouts lengthen and they are ready to hunt zooplankton and other small prey.



Some Complicated Requirements

Our Zoo hopes to someday be another of just a few institutions who have successfully bred offspring. But first, keeping weedy seadragons requires lots of work and attention. In their native waters, they live in temperate coastal waters. Photoperiod (length of day) and chilly water temperatures have to be carefully adjusted month to month to imitate seasonal living conditions in their native range. Constant feeding can be difficult, as seadragon appetites can change. The size and depth of the habitat is important in courting behaviors. Cleaning debris must be done daily. Avoidance of sudden stress-inducing light changes during power outages requires working battery backup until generators engage. All hands must "be on deck" to assure success. That includes relaying important information to our guests about how special weedy seadragons are.

Conservation Information

The IUCN Red List status of weedy seadragons is listed as "Least Concerned" (See box with IUCN quote for explanation). Seadragons are fully protected in Australia and licenses are required to export them. In Tasmania, there are populations that have locally gone extinct. Fears of seadragon population decline have inspired citizen scientists to photograph seadragons while diving (or even deceased ones in the environment), and sending the photos and their location to the Seadragon Search project. The spot patterns (which are unique to each individual) are analyzed with facial recognition software, each dragon is named, and the images are stored in a data bank.

Loss of over 200 seadragons in a mass wash-up event from February to April of 2022 associated with heavy rain storms and rough seas has spurred on concerns of decline. Conservationists also worry about the loss of sea grass

Continued on page 6



meadows and seaweed beds due to development, pollution and fertilizer runoff. And there are worries of climate change possibly altering water temperatures. Perhaps our Zoo's mission statement, "to lead and inspire by connecting people and wildlife" will help us share the importance of our weedy seadragons' story.

—Chris Lutmerding

Note: Here is a video for you to watch: Weedy Seadragon—Behind the News <https://www.youtube.com/watch?v=BJU64Vm0T-U>
Check out the Beastly Banner Spring, 2023 issue for more information: <https://online.flippingbook.com/view/516076568/i/>

Quote from IUCN Red List page: Least Concerned 16 May 2016

JUSTIFICATION

Phyllopteryx taeniolatus is a coastal marine seadragon that inhabits rocky reefs with algae and sandy areas with seagrass. The species is threatened by habitat degradation and loss due to pollution and sedimentation, especially in urban areas. A large portion of the species' range does however occur in some less populated areas that are not at risk. Therefore, this species is listed as Least Concern.

<https://www.iucnredlist.org/species/17177/67624517#assessment-information>



Weedy Sea Dragons Talking Points and Fun Facts' can be found on the portal under the "SHORES" and "AUSTRALIA AND THE ISLANDS" tabs.

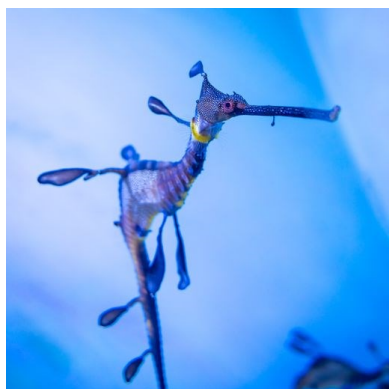
References:

Aaron Jeskie, Senior Aquarist, Shores Region

Weedy Seadragon. Aquarium of the Pacific. (2023) Retrieved on 3/7/2023 from https://www.aquariumofpacific.org/onlinelearningcenter/species/weedy_seadragon1/

Giuseppe Mazza. *Phyllopteryx taeniolatus*. Monaco Nature Encyclopedia. Retrieved on 3/7/2023 from <https://www.monaconatureencyclopedia.com/phyllpteryx-taeniolatus/>

Video: Weedy Seadragon – Behind the News. YouTube. Retrieved on 3/7/2023 from <https://www.youtube.com/watch?v=BJU64Vm0T-U>



Photos courtesy of Grahm S. Jones, Columbus Zoo and Aquarium

Pertaining to Penguins ... Preschool and Particulars

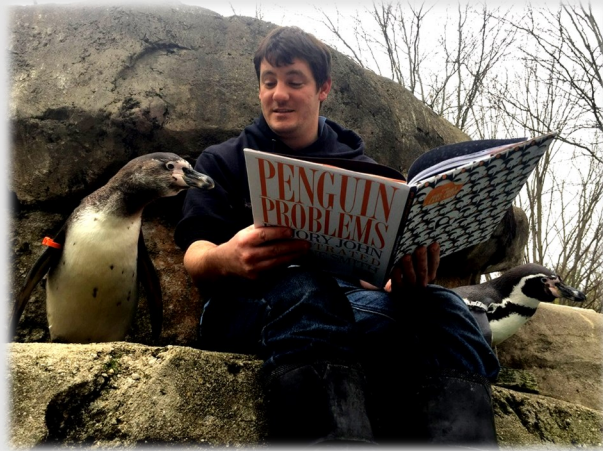
The Columbus Zoo and Aquarium's colony of 14 Humboldt penguins offers fascinating and fun information to share with guests. Taylor Hann, assistant curator, and Kevin Kollar, animal care staff, willingly gave of their time to share their expertise and knowledge of our colony and its individuals.

Guests appear to engage with "stories" about our animals as well as "fun facts." Who would guess that there is such a thing as "Penguin Preschool"? Well, Kevin shared about that, and guests will love the story. Penguin Preschool is teaching a chick how to be a penguin in a zoo.

The main goal of Penguin Preschool is for chicks to be comfortable enough with keepers to willingly hand-feed, as all birds are hand-fed to meet individual nutrition needs. Fish fed in a zoo have been frozen, and some natural nutrition is lost with freezing, so vitamins are given along with food. As for types of fish, a wide variety includes lake smelt, capelin, herring, anchovies, ocean smelt and trout. Trout is their favorite, smaller trout the absolute favorite. They are able to eat a 6-8-inch trout if they want it badly enough and will gladly take it if available. Penguins are fed twice daily, first thing in the morning and around 2:30 or 3:00 pm. Birds that are parenting are offered food at noon as well.

The first attempt to try Penguin Preschool here was while the chicks were still in the nest box. A keeper held a

chick, fed it a couple of fish and returned the chick to its parents. This did not prove to work well, as the chick was often not hungry when this was attempted. So, parents continued to be the primary "feeders."



The penguin animal care team altered their strategy. They began pulling chicks right after hatching, attempting to feed formula and putting the chick back with mom and dad. There had been issues with chicks pulled at day 55 taking too long to eat. The hope was to get them used to eating readily from keepers before the chicks were pulled completely. However, the

same issue occurred, since chicks were often simply not hungry when pulled for feeding.

In 2016, current Penguin Preschool procedures came into play. Oswald hatched to Gunter and Ava. Ava was a new mom and stepped on the egg as it was hatching, which caused Oswald to be stuck in the egg. Keepers therefore had to take him out of his shell and then hand-rear him for a week.

Also, that year, Ziggy and Pippa hatched. While a nesting season may be amended for things like painting the pool, the care team try to not alter a nesting season in progress. The Penguin Pool did need to be repainted in 2016. This meant that the season had to be ended sooner than usual. The 3 chicks were all about 55 days



old at the time. The plan was to hand-rear once the penguins were removed for pool painting.

Once hand-reared, those chicks were tractable, which means they could be handled and able to be fed by keepers. As this was the goal for

all penguin chicks, it became the normal practice to pull the chicks at 55 days and hand-rear from then on. This procedure continues to work well, even with some bumps in the road.

Some parents are just as glad to have chicks “out of their hair” and raised by keepers, but not Ava and Gunter. In 2020, Charmin was hatched. Because of Covid, the penguin colony was located in a place not suitable for hand-rearing. Ava and Gunter became “helicopter parents” and started feeding Charmin again while the keepers were also hand-rearing.

Prior to the beginning of hand-rearing at 55 days, the chicks are checked every 3 days until they weigh about 1 kg or 2.2 lb. This includes a check by a veterinarian every 3 days. Adult penguins weigh about 4 kg and are under 100 g when hatched. Chicks grow very fast. For example, Charmin weighed 86.9 g when hatched on March 16, 1000 g on April 3 and 3.2 kg on May 11. Penguins are considered full grown at 2 months old.

The goals of penguin preschool are that chicks eat from keepers, are safe when swimming, can get out of the pool and are able to get away from other possibly aggressive penguins.

Chicks must be introduced to the colony. This means they must be able to interact appropriately as well as get away when necessary. Pool introduction must also occur and varies by bird. Penguins can be mean to each other. The first time a chick is in the main pool, a staff member in a wet suit is in the water to make sure the chick is safe. To “graduate,” the chick must swim well, be able to get out of the pool, be willing to come to the keepers for food and be able to get away from other birds.

As Kevin explained, penguins are like every other species in that there are distinct “personalities.” There are friends and enemies in the colony. He compared it to a “little soap opera” and there tends to be a lot of drama. Penguins form bonded pairs. Our 5 bonded pairs have the same color bands, with the female’s being on the left and males on the right.

- Watson and Tressel – pink
- Hans and Katja – dark blue
- Gunter and Ava – yellow
- Oswald and Bertha - grey



When an egg is laid, all the other birds come around to look at it. They are curious about each other's nest boxes. Each pair "decorates" their nest box differently using rocks, moss, ice chips, anything they find around the habitat. They are known to "steal" decorations from another pair's box. Décor is also offered by keepers. Some examples are rocks, twigs, dried lavender, car wash strips, cut hoses. The keepers have found things such as chap stick that had been dropped in the habitat by a guest and dead fish. Anything they find can become their personal nest box décor.



When asked about individuals and their "quirks," Kevin's remarks are too perfect not to quote, so in his words ...

Watson is the oldest of our penguins and tends to be a little more on the anxious side especially during nesting season. Whenever a bird wanders by his nest box, he stands inside and yells at them through the window. Most of the birds pay little to no attention to him.

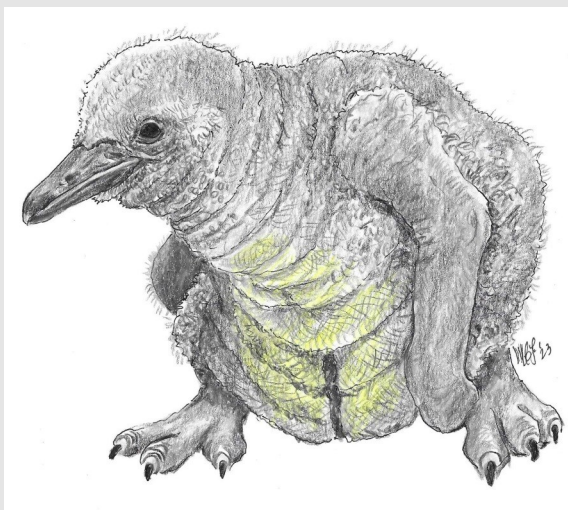
Tressel was named after Coach Jim Tressel after Ohio State won the National Championship in football in 2003. She tends to walk in a hunched position and gets a lot of her mannerisms from her mother, Katja. She is known to be a picky eater and has no problem biting birds that get in her way with little nips.

Gunter is the strong silent type. He tends to mind his own business as long as others don't bother him. He does protect his nest box better than any other penguin and will often be guarding it before the other penguins even realize the nest

Continued on page 10

boxes are in. He has been one of our most devoted parents. He is one of 3 remaining birds that came over from Germany in 1998 and is the second oldest penguin.

Ava is one of the nicest and most unassuming penguins in our colony. She tends to be the last one to settle into her nest and lay eggs (which we believe may annoy Gunter a little bit) and is not at all opposed to Gunter doing the majority of the work incubating eggs and caring for the chicks. She is, however, a very attentive mother to her chicks and has successfully raised several youngsters. Although she is probably one of our nicest penguins, she has no problem tackling other birds to get fish if she is hungry. It is between her, her sister Malia and her son Oswald as to who is the most overweight of all the birds. Big bones run in the family.



Hans and Katja – I have to do these 2 together because they are pretty much inseparable. Katja is by far the most quirky of all of our birds and can often be seen doing things that are very unusual for a penguin. Hans, however, puts up with it and has his own little quirks. Hans can sometimes be seen going for morning runs through the exhibit during the summer. The two of them really enjoy yelling at other birds and calling to each other. Hans also likes to keep tabs on Katja and can be seen calling for her, which most of the time she ignores. These 2 have been a couple the longest; they got together in 1998 when they both arrived from Germany.

Oswald Cobblepot is a relatively calm bird, but has no problem letting all the other penguins know that he is a tough penguin and not to mess with him. He has been known to chase other penguins around after they've wandered too close to his nest. Oswald was named after the penguin villain in Batman, and started life in a rough situation, hand reared by keepers for the first week of his life. This did make him relatively friendly towards us, but he has his limits. Oswald is a fantastic interior decorator when it comes to getting things for his nest.

Big Bertha (BB) Cobblepot is a sweetheart. When we need to check her eggs, she politely rolls to one side for us to look at them. Don't let this fool you though, because when it comes to feeding time, she will be front and center, and if you are not feeding her fast enough, she will find you and push all other birds out of the way to get to you. That being said, she is not a fish stealer as much as Ava and Malia are.

The Honorable Chudder McFluff is both an adorable penguin and a menace. He tends to walk around the colony like he owns it, although he speeds up near Oswald's and Gunter's nest boxes. He will readily greet the keepers and has a fascination with sweatshirt hood strings. Although he has not had any chicks, we think he will do well with an egg, as he has been very devoted to incubating rocks. Chudder got his name because the keepers in Discovery Reef were making fun of the names we were giving our penguins and suggested The Honorable Chudder McFluff, so we went with it.

Charmin McSnugglebum is the epitome of 2020, which is the year she was hatched. She started off great, and was one of the best chicks that we ever had for Penguin Preschool, and then backslid tremendously and became one of the

worst penguin chicks we ever had. She is not solely responsible for this as her foster parents, Ava and Gunter, doted on her significantly and kept feeding her well past when they should have stopped. This has led to Charmin being spoiled rotten and a little unaware of things going on around her. Although she went through a very angry and biting phase, she has mellowed out and seems more aloof than anything else at this point.

Asela Belfontaine was also a spoiled rotten bird, especially when it came to nesting. She used to be paired with Chirriante who passed away last year, and he catered to her every whim. If she didn't want him in the nest, then he would sit outside; if she wanted to be outside, then he would take care of the chick. Unfortunately, since Chirriante's passing, she has not paired up with another penguin. She is trying really hard to pair with Phineas, but he does not always share the same interest. She can often be heard calling for him, which he tends to ignore.



Professor Phineas Sprinklebottom was one of 3 Sprinklebottom siblings. They are all the offspring of Hans and Katja. The two females have moved to other zoos, but Phineas stayed here with us. Phineas either thinks that he is a person or that the keepers are penguins and is infatuated with us. He will most often be seen following us around and trying to figure out how to get to keeper areas of the building.

Malia is the sister of Ava and very similar in personality to her. She is very sweet, but will tackle other birds to get food if necessary. She is definitely one of the largest penguins in the colony.

Bruce Banner was named because he would "Hulk" out on things when he was a chick. He is very aloof and a little bit of a buffoon. He typically doesn't seem to know what is going on in the colony and tends to wander into places he shouldn't. For the most part he is a calm penguin and pretty friendly with the keepers. If something spooks him, he will again "Hulk" out and panic, which usually leads to a lot of bites on our hands and wrists, but this is most likely because he is still a young bird. Bruce can often be seen swimming in the pool.

All in all, among other descriptors, our Penguins are precious, phenomenal, priceless, praiseworthy, perfect, playful, polite - or not - and personable - or not.

Thank you, Kevin and Taylor, for spending your valuable time to share this great information that will certainly give us motivation to spend time with our penguins and our guests.

--Cathy Shade

Sources:

Kevin Kollar, Shores animal care staff, Columbus Zoo and Aquarium

Taylor Hann, Shores assistant curator, Columbus Zoo and Aquarium

Animals' Effects on Ecosystems



Bison have a wide-ranging effect on the northern great plains. When their numbers dwindled from millions to hundreds the ecosystem suffered. Bringing them back from near extinction is an ongoing effort. So, what do they do that is so important?

- They graze the grasses at different heights, providing nesting grounds for birds.
- Rolling around and packing down the soil in depressions creates wallows. These fill with rainwater, providing breeding pools for amphibians and sources of drinking water. Without these wallows, water would only be found in naturally occurring streams and ponds.
- The long-billed curlew uses bison droppings as camouflage by building nests nearby in patterns that mimic the droppings. Birds also use bison fur to line their nests.
- Prairie dogs prefer to nest by burrowing into the ground through the short grasses. These grasses also provide a source of food
- Prairie dog towns provide critical habitat for black-footed ferrets.
- When bison plow through the snow using their massive heads and shoulders they create highways for animals like pronghorn and elk. Their foraging also makes it possible for other animals to reach grasses that would otherwise be unreachable.



Fun Fact: Endozoochory
Seeds are spread when an animal eats them and passes them in scat.

This information provided by the World Wildlife Fund led to searching for ways other animals are critical for healthy ecosystems. WWF provides information on how wildlife helps to combat the climate crisis, stressing the importance of biodiversity.

Tigers play a key role in maintaining the health of their forests that sequester carbon emissions. In India, forests with tigers were discovered to contain three times the carbon density of forests where tigers were eradicated. The presence of tigers helps to ward off human activity that degrades habitats and reduces the number of trees. As top predators, tigers also help keep vegetation in balance by preying on herbivores.

Forest elephants in Africa stomp out small invasive plant species allowing large trees to grow and store carbon. Elephant dung contributes to seed dispersal and adds nutrients to the soil. The estimation is that Africa's rain forest would lose seven percent of its ability to store carbon without the disturbance of elephants.

Decades of clearing trees for agriculture and ranch land, and for wood and paper products have left forests decimated. One surprising tool for restoring the forests is tapir poop. These large terrestrial animals prefer to roam degraded forest. Their diet of herbs, shrubs, and leaves rich in nutrients means they leave a trail of seeds in their waste.

Land animals are not alone in their contributions to ecosystems. Sea otters are not just adorable, they are vital in a food chain that helps capture carbon from the air. They feed on sea urchins, which feed on kelp. By keeping sea urchin populations in check, kelp can thrive and sequester more carbon. In fact, kelp was found to be 12 times more effective at absorbing carbon when guarded by sea otters.

Whales, like all living things, are carbon sinks – very large ones. Each great whale sequesters an average of 33 tons of carbon over their lifespan. When a whale dies a natural death, its carbon turns into sediment that nourishes the sea floor.

In northern California beavers were often considered a nuisance. Then along came the 2011-2016 droughts. Ponds were drying up. Fish were threatened. At the Sugar Creek Ranch Fly Fishing Club two beaver dams have helped save threatened Coho salmon. On the other side of the country Mike and Ruth Callahan founded a company, Beaver Solutions. They

have fixed more than 200 beaver problems without removing them. This isn't about saving a few animals. Beavers return the land back to its natural state which saves the natural wetlands

. Not to be outdone by the mammals, oysters are a keystone species when it comes to the health of their ecosystems. One adult oyster can filter up to fifty gallons of water in a single day. Healthy oyster reefs provide a home for hundreds of other marine organisms which promotes biodiversity and ecosystem balance. As sea levels rise these reefs act as walls to buffer storms and protect against further coastal erosion.

One of the most well known examples of restoring an ecosystem to balance is the reintroduction of wolves to Yellowstone National Park. Within a few years the willows returned as the elk population came under control. Coyote populations declined. Carcasses from wolf kills fed scavengers. The list goes on. These examples show the importance of biodiversity and especially the importance of Keystone Species without which an ecosystem cannot function properly or may even collapse. Keystone is an architectural reference to the stone placed at the top of an arch to keep the structure from collapsing. Similarly, a Keystone Species helps keep the ecosystem together and functioning.

--Karen Linn

Sources:

Kreider, J. (2022) *How wildlife help combat the climate crisis*. Retrieved March 13, 2023 from <https://www.worldwildlife.org/stories/how-wildlife-help-combat-the-climate-crisis>.

World Wildlife Fund (2023) *How bison help shape the northern Great Plains*. Retrieved March 13, 2023 from <https://www.worldwildlife.org/pages/how-bison-help-shape-the-northern-great-plains>

Bolen, A. (2017) *Beavers as Ecopartners*. Retrieved March 13, 2023 from <https://www.nwf.org/Home/Magazines/National-Wildlife/2017/Aug-Sept/Conservation/Beaver-Ecopartners>

Aschwandten, C. (2002). *Leave the Wetlands to Beaver*. Retrieved March 13, 2023 from <https://www.nwf.org/Magazines/National-Wildlife/2002/Leave-the-Wetlands-to-Beaver>

Parsons, C. (2023). *What is a Keystone Species?* Retrieved March 13, 2023 from <https://defenders.org/blog/2023/02/what-keystone-species>



The American Golden-Plover— a Colorful Visitor to Ohio

Introduction: Ohio is a stopover point for a number of migratory birds, providing a safe place for resting and foraging in the spring and fall as the birds move on to their final destinations. Ohio attracts wildlife because of the varied topography - forests, grasslands, and coastal areas as well as two large water sources –Lake Erie and the Ohio River.

Among those species that frequent Ohio during migration is the American Golden Plover. The Nature Conservancy points to the American Golden Plover as one of the “must-see” migrations in Ohio. Plovers can be observed along the southern shore of Lake Erie in flooded farm fields or in wildlife refuges such as *Ottawa National Wildlife Refuge*. - <https://www.fws.gov/refuge/ottawa>

During their stopover in Ohio, plovers forage on insects and berries which provide the necessary calories to sustain them on their long northerly flight over Lake Erie.

Scientific Name: *Pluvialis dominica*

Population and Threats: Based on data from 2016, the current population is approximately 200,000. They are listed by IUCN as *least concern*; however, the population is decreasing. The major threats to the plover population are climate change and severe weather with associated ecosystem degradation. They have lost large percentages of their arctic breeding grounds.

Migration: The American Golden-Plover migrates up to 20,000 miles each year from breeding grounds in the Arctic tundra in Canada and Alaska to the grasslands of South America and back, including a non-stop segment of 3000 or more miles over the Atlantic Ocean. The plover is one of the fastest-flying shorebirds and can reach flight speeds up to 60 miles per hour. Because of their long migratory path from southern South America to the Arctic tundra, plovers have been described as the “marathoners of bird migration”.

Habitat and Diet: Although considered to be a “shore bird” the American golden plover is often found in grasslands, far from water. Plovers feed on larval and adult insects, mollusks, small crustaceans, seeds, and berries. In late summer they consume more berries, which are thought to be an important source of calories, providing energy for long flights.

The foraging style of the plover is known as “stop and start” and is characterized by running/walking a few steps, pausing and then running/walking again, pecking the ground when it encounters food.

Breeding: Breeding grounds are in subarctic tundra - both lowlands and mountains. Tundra vegetation is only a few inches high facilitating both nesting and feeding. Courtship displays are complex both in the air and on the ground and involve both males and females. The male plover prepares the nest by making a shallow depression in the tundra using his feet and breast. The nest is lined



with lichen, grass and leaves and measures about 4 inches in diameter and 1.8 inches deep. The average clutch size is 3 – 5 eggs (1 brood/season) and incubation is 24 – 27 days. The fledglings are covered with down, walk very soon after



hatching, and are able to feed themselves one day after hatching. Fledglings are well camouflaged in the tundra nests. Both males and females defend a large breeding area of up to 125 acres.

Our Plover in N.A. Aviary: According to Nikki Smith, North America Region curator, we have one handsome plover named Stephen in the North America Aviary. In late winter and early spring, Stephen begins to get his breeding plumage, becomes increasingly vocal, and begins to “look for love”. Stephen sustained a wing injury during migration in 2017 and, like most of the birds in the aviary, is considered non-releasable. He is described as living his “best life” in the aviary and enjoys foraging for insects and spending time with the ibis on the building roof. Stephen has access to the diet of all the songbirds as well as the waterfowl diet, insects, trout chow, small fish and insectivore chow. According to Nikki, insects are Stephen’s favorite. Watch for Stephen when you visit the N.A. aviary. He wears a blue band (15L).

Plover Chicks

Plover chicks in a tundra nest illustrate their exceptional camouflage.

With permission from **Over the Treeline**.

—Sally Rudmann

Plover call audio: <https://abcbirds.org/wp-content/uploads/2019/07/XC356253-American-Golden-Plover-Pluvialis-dominica-1.mp3>

References

American Golden Plover. *All About Birds*. The Cornell Lab of Ornithology. Retrieved February 4, 2023, from <https://www.allaboutbirds.org/guide/American-Golden-Plover/overview>

American Golden Plover. IUCN Red List. Retrieved February 5, 2023, from <https://www.iucnredlist.org/species/22693740/93420396>

American Golden-Plover. Retrieved February 5, 2023, from <https://www.audubon.org/field-guide/bird/american-golden-plover>

American Golden-Plover. American Bird Conservancy. Retrieved February 4, 2023, from <https://abcbirds.org/bird/american-golden-plover/>

American Golden-Plover. Audubon Guide to North American Birds. Retrieved February 5, 2023, from <https://www.audubon.org/field-guide/bird/american-golden-plover>

Nikki Smith, North America Curator, Columbus Zoo and Aquarium

Ottawa National wildlife Refuge. U.S. Fish and Wildlife Service. Retrieved February 5, 2023, from <https://www.fws.gov/refuge/ottawa>

Over the Treeline. World Press. Field Studies of Wader and Skua Ecology. Retrieved February 6, 2023, from <https://overtthetreeline.wordpress.com/tag/golden-plover/>



Congratulations Docents!



Sandra Aukeman spent the last 30 years at the Ohio Civil Rights Commission – an agency charged with enforcing Ohio's Laws Against Discrimination. Prior to that she spent 15 years in the financial services industry as a licensed broker, options principal and operations manager. She has one daughter, a nurse, veteran and Purple Heart recipient, one son-in-law, an active member of the Army Reserves, and two adorable grandsons who love the Zoo and live in New York. She is so excited to be part of the docent program!



Don Cagle retired from Battelle after a 31 year career. He has greatly enjoyed his time as a Zoo volunteer and also has volunteered with the Ohio History Connection. He is a member of the Harmony Project that includes singing in a 500 person choir and performing community service.



Linda Coffey was raised on a farm and inherited her love for animals from her dad. She has been fostering dogs and involved in dog rescue for over 25 years. She currently fosters and processes applications for Speak for the Unspoken.



Fred Colby has been married for 40 years this June. He loves golf, cooking and nature. He worked in IT for over 40 years.



Susan Cross was born and raised in Scranton, PA and moved to Columbus about 30 yrs. ago. She worked in Mental Health as a License Professional Counselor for 36 yrs. One of her loves is our Metro Parks communing with nature and taking photographs which have been used in their magazine. Nature and animals are where I feel the deepest connection with God.



Ann DeMuth has lived in Columbus, Ohio for the last eight years, after moving here from Asheville, North Carolina. She retired just in time for Covid, which put off volunteering for a year. Her son, daughter, and two grandchildren live here. She loves hippos, but because we don't have any here at the Zoo, her favorite animal is Glen, the southern hairy-nosed wombat.



Congratulations Docents!



Ann Dulin is a mostly retired Accountant. She lives in Dublin with her three legged rescue cat Trio. She has been a volunteer since 2018.



Jane Johnson will celebrate 37 years of marriage in June 2023. She enjoys getting out in nature with the family dog, a scruffy Border Terrier. Traveling and photography are passions she enjoys when not at the Zoo.



David Kieffer has been married for 45 years and is the proud father of 7 and Grandpa of 9! This Buckeye Grad was a Profession Engineer for the Ohio DNR for 31 years and a Peace Corps Volunteer in Kenya, East Africa. He loves hiking, back packing and travel.



Stephani Kim has a PhD in epidemiology and her research focuses on how chemicals in the environment impact human health. She stays active by playing tennis, hiking, skiing, and cheering on the Columbus Crew, which increases her heart rate more than the other activities combined - such is the life of a soccer fan.



Keri Kotchounian has been married for 24 years. She has a son and a daughter, ages 19 and 16, and an adorable dog, Murphy, who is 8. She has been a middle school teacher for 24.5 years and has taught 7th grade Science for the last 21 years. She also volunteers at CHA Animal Shelter and enjoys traveling.



Joy Nichols lives in Greenville. She has 2 daughters, 3 dogs, 3 cats, 2 rabbits and has been married for 26 years. She works at Tipp City Veterinary Hospital as a veterinary assistant. She has been volunteering at the Zoo for going on 3 years.



Congratulations Docents!



Carol Roy is a recently retired tax accountant. She has been a Zoo volunteer for 6 years, a Meals on Wheels volunteer for 18 years and is a recent CAPA volunteer. She has been married for 42 years, has 2 adult daughters and 3 grandchildren. She enjoys adventures!



Erin Saad lives in Lewis Center with her husband and their two sons. She has degrees in engineering from Ohio State and is a Patent Examiner for the United States Patent and Trademark Office. Her favorite animals at the Columbus Zoo are the manatees, sea lions, and seals.



Lori Sheppard grew up in Delaware and moved back to Ohio with her own family in the early 2000s. Her two adult daughters had many trips to the Zoo! Lori works for an international perennial plant business and loves the outdoors, reading, and too many binge-worthy tv shows. She now lives in Columbus with her husband, rescue dog and rescue cat and is so excited to be included in the docent class of 2023



Sally Stein is a retired RN after 43 years of working. She moved to Delaware, OH 5 years ago and had been an adult volunteer since 2018. Since volunteering at the Zoo she has found out she loves animals as much as she loves people.



Emily Thackery has been married for 26 years and has one son who will be graduating college in April. She has worked in the printing industry for almost 30 years. She enjoys baking and has started making her own vanilla extracts.



Tara Trigg resides in her hometown of Westerville with her four cats (went from two to four unintentionally in 2022!), two fish, and one mystery snail. She works for a municipal government, has a part-time job at a dance studio, holds an MBA from Otterbein, and is a grad student at OSU. She loves to read and travel to Disney World.