



Alive

IN THIS ISSUE:

Spiky to Scaly Animal Encounters

Telling the Conservation Story

All Aboard the Zoo Train!

Meeting Guests' Needs

An insider magazine for Zoo Pass members • Spring 2020

The mission of the Zoological Society of Milwaukee is to conserve wildlife and endangered species, educate people about the importance of wildlife and the environment, and support the Milwaukee County Zoo.

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Education is one of the three pillars of our mission at the Zoological Society of Milwaukee - conserve wildlife and endangered species, educate people about the importance of wildlife and the environment, and support the Milwaukee County Zoo. That education comes in many forms. One of them you hold in your hands. Our Alive magazine and Wild Things newsletter educate Zoo Pass members on the wonder of animals, the amazing care animals receive at the Zoo, and what the Zoo and Zoological Society are doing to protect animals in the wild. Another way we educate

is through interpretation around the Zoo. Interpretation is anything that enhances the visitor experience in the animal exhibits. Our Creative Department creates all of the graphics around the Zoo that help visitors learn more about the animals. Our Kohl's Wild Theater performances and Zoo Pride volunteer organization also enrich the guest experience. Turn to page 6 to learn more about the Zoo and Zoological Society's interpretation programs.

We also engage in more traditional education through our Education Department. For example, the Society is now in its 31st year of the Animal Ambassador program. Many students in the 26 participating schools have never visited the Zoo before. They learn how to be advocates for wildlife while learning about animal adaptations, habitats, the food chain and more. Turn to page 14 to read about this remarkable program. We also offer Zoo Classes and Camps to the general public. Registration is now open for Zoo Summer Camps, sponsored by Penzeys. Visit zoosociety.org/summer to learn more. Whether it's a routine visit or special trip, I hope you learn a lot on your next visit to the Zoo!

Jodi Gibson

Zoological Society President & CEO

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ON THE COVER: Stitch the North American porcupine is part of the Stackner Animal Encounter in the farm area.

Photo by Kevin McIntosh





▲ Zookeeper Joe Newell shows a bat during a Stackner Animal Encounter presentation. Photo by Olga Kornienko



(Above) The box turtles are the oldest animals in the Animal Encounter. (Below) The program includes some domestic animals such as ferrets. Photos by Paul Ruffolo



▼ Some animals, such as the barred owl, are trained for use in Zoo events or education programs. Photo by Stacy Kaat



UP-CLOSE

ENCOUNTERS

One of the great things about zoos is getting close to animals you can't see anywhere else. That's especially true at the Stackner Animal Encounter in the Northwestern Mutual Family Farm. During the summer season, children and adults can come face to face with animals there and even touch some of them. Lisa Guglielmi, farm area supervisor, gives us the inside scoop on the Animal Encounter.

Q How long has the Zoo had the Stackner Animal Encounter program?

A Its roots go back to the Children's Zoo, which opened in the 1970s with a petting area. Staff would bring out animals for the public to touch but there was no real education component. We started doing encounter talks in 2004, and the Stackner Animal Encounter building opened in 2005.

Q How many animals are in the building?

A We have reptiles, amphibians, insects, birds and mammals – 55 total.

Q What are some of the most interesting animals?

A We have animals in the farm that you will not see in the rest of the Zoo, such as a barred owl, woodchuck (groundhog) and chickens, but some of the most interesting are the insects. We have blue death-feigning beetles and a vinegaroon, an arachnid that resembles a scorpion. Kids love seeing things like that because they are unusual and not found in Wisconsin.

Q How do you train the animals to be part of the encounter?

A Some animals require training for programs. For example, the barred owl is trained to sit on a gloved hand and to go into and out of a box that we use to transport her. We are working on training the porcupine and woodchuck for nail trims. We are also training the porcupine so people can touch him. Others, like a cockroach or snake, don't require training. We work with some of the domestic animals like rabbits and guinea pigs to be comfortable around large crowds. Sometimes we have 75 people or more at our encounter talks. That can be pretty overwhelming for a guinea pig!

Q Do the animals in that program participate in other programs?

A About 80% of the animals in the collection participate in education programs for the Zoological Society, such as school programs or classes and camps.

Q What animal has been in that area the longest?

A Our two box turtles, Sam and Ella. They have been at the Zoo since at least 1982 and are the farm's oldest animals.

Belle arrived in Milwaukee from South Carolina in November. Photo courtesy of Riverbanks Zoo & Garden

Senior Ladies



Thirty-eight appears to be the magic number in the Milwaukee County Zoo's elephant habitat. That's approximately how old longtime residents Ruth and Brittany are, and it's also the age of the exhibit's new resident, Belle. Belle joined the herd in November from the Riverbanks Zoo & Garden in South Carolina, and she's currently going through the introduction process with Ruth and Brittany. And while there's no guarantee that future residents will be the same age, zoo-goers can expect to see mostly older elephants in the exhibit, says Tim Wild, Zoo curator of large mammals.

One of the reasons the Zoo built the new exhibit was to allow more elephants to join the herd. Modern standards from the Association of Zoos & Aquariums (AZA) require elephant exhibits to hold at least three elephants to meet the animals' social needs. The Zoo's habitat, which opened in May 2019, can hold up to five.

The Zoological Society of Milwaukee, through contributions to its capital campaign, contributed half of the \$16.6 million cost, with the other half coming from Milwaukee County.

In planning the exhibit, the Zoo decided against creating an elephant breeding facility, Wild says. "Zoos are moving toward keeping elephants within their family groups just like in the wild. So if we started having babies, we would be keeping them here. Even with all the space we have now, we would be limited at some point down the road. And forming a new breeding herd just wasn't feasible because breeding animals are not available. It's a very big undertaking, so we leave it to the experts that have been doing it for a while."

As a result, the Zoo will house elephants that are not recommended to breed, whether for genetic reasons or because

of their age. Older elephants need homes, too, Wild says. Many zoos, including Belle's previous home, are eliminating their elephant exhibits because of the large requirements for space and resources to meet AZA standards. "The zoos that decided to renovate or build new facilities as we did have absorbed the older elephants that came out of those other zoos."

The Milwaukee elephant keepers already have experience caring for older elephants because of their work with Ruth and Brittany, says Erin Dowgwillo, elephant care coordinator. "In older elephants, a lot of times we see arthritis and foot problems," she says. "We focus a lot on aerobics and mobility and stretching." The elephants are kept on strict diets to keep them at the proper weight, preventing extra stress on their joints. Keepers pay special attention to the elephants' feet, filing the nails and trimming any overgrowth. The natural substrate in the new exhibit, including sand floors inside the Elephant

Care Center, has already made a difference in keeping their feet healthier, Dowgwillo says.

By Stacy Vogel Davis



Foot problems are common in older elephants, so keepers check their feet daily, filing the nails and trimming overgrowth when necessary.

Photo by Joel Miller

THE NEW ELEPHANT HABITAT is the first piece of Adventure Africa, which will transform 25% of the developed footprint of the Zoo.

The Zoological Society of Milwaukee is raising money to support the next piece, a larger hippo exhibit with underwater viewing. The hippo habitat is expected to open in mid-June. To learn more and donate, visit [HIPPOS.WIN2WILD.COM](https://www.hippos.win2wild.com).

OCEAN-FRIENDLY FISH FRY

It's fish fry season in Wisconsin, but before you order that breaded and deep-fried goodness, you might want to learn more about the fish itself. That's because the seafood industry has a huge impact on the world's waterways. Poor practices can result in overfishing, pollution, bycatch (the accidental catch of unwanted species) and more. But sustainable or ocean-friendly seafood options are out there.

The Milwaukee County Zoo, a conservation partner with the Monterey Bay Aquarium Seafood Watch program, and the Zoological Society of Milwaukee are working to promote sustainable seafood messaging and source it behind the scenes. The program empowers consumers and businesses to make choices for a healthy ocean. Using science-based, peer-reviewed methods, Seafood Watch assesses how fisheries and farmed seafood impact the environment and provides recommendations indicating which items are **Best Choices** or **Good Alternatives** and which ones to **Avoid**.

Zoo Pride volunteers who staff the Aquatic & Reptile Center (ARC) are trained on Seafood Watch and sustainable seafood so they can inform visitors, says Jennifer Herbert, chair of the Zoo Pride Aquatic & Reptile Center Committee. Auriana Donaldson, Zoological Society conservation programs coordinator, says she hopes

worked with Seafood Watch for about six years to assess the sustainability of its menu items.

Even businesses that aren't part of Seafood Watch are getting used to explaining where their seafood comes from, Herbert says. "Now when you walk in the store with the Seafood Watch app, they're familiar with it." Donaldson says Seafood Watch and consumers have forced the entire seafood industry to improve their practices. "The demand has really driven change," she says. "We're excited to expand the program here."

to raise more awareness by adding Seafood Watch signage in the bird building and near the Humboldt penguin, polar bear and otter exhibits. Volunteers have pocket-sized Seafood Watch consumer guides to hand out to guests, although Herbert notes that the Seafood Watch app offers even more information.

Donaldson also hopes to convince more local businesses to join Seafood Watch. Service Systems Associates, the Zoo's concessions vendor, has been a Seafood Watch partner for more than 15 years. It will remove all seafood on Seafood Watch's red list from its menus by 2025, says Andrew Fischer, SSA vice president of sustainability and conservation. Ocean Connections, which operates the seal and sea lion show at the Zoo, is also a Seafood Watch conservation partner. Screaming Tuna, with locations in Milwaukee and Mequon, has



Zoo Pride volunteers Jennifer Herbert (right) and her mom, Jaci Steffes, staff a cart with sustainable seafood information at the Aquatic & Reptile Center. Photo by Richard Brodzeller



Monterey Bay Aquarium
Seafood Watch



DINING & SHOPPING TIPS FROM SEAFOOD WATCH

1. Be brave and branch out. In the U.S., shrimp, tuna and salmon are popular choices, but there are plenty of other sustainable choices, such as Arctic char, barramundi, clams, lingcod, mussels, sablefish (black cod), scallops, sole, oysters, pompano, rockfish, sanddabs, seaweed and U.S.-farmed trout.
2. Become familiar with Seafood Watch recommendations. [SeafoodWatch.org](https://www.seafoodwatch.org) hosts more than 2,000 seafood recommendations covering 85% of the U.S. seafood market. Download the app or bookmark [SeafoodWatch.org](https://www.seafoodwatch.org) on your device.
3. Ask tactical questions strategically. If you are at a restaurant or fish counter, ask the server or fishmonger what they can tell you about the fish. Then you can follow up with questions about where the fish comes from and if it's wild or farmed.

FOR MORE TIPS AND INFORMATION, VISIT [SEAFOODWATCH.ORG/CONSUMERS](https://www.seafoodwatch.org/consumers).



The Zoo and Zoological Society use interpretive graphics to create empathy with endangered animals.

**Just because
an animal
is large,
doesn't mean
he doesn't want
kindness.**

A.A. Milne



The Elephant Care Center includes stations where children can pretend to be a zookeeper, created through a partnership with Betty Brinn Children's Museum.

SPREADING THE MESSAGE

This spring, workers will put the final touches on the Milwaukee County Zoo's new hippo habitat - testing the equipment, helping the animals adjust and installing dozens of signs and graphics. But just because the graphics are the last piece doesn't mean they're an afterthought. In fact, the Zoological Society of Milwaukee and Zoo have been working together for years to make sure all of Adventure Africa's interpretives - which include graphics, zookeeper talks, theatrical performances and anything else that enhances the visitor's experience of the exhibit - tell a clear, consistent message. "We should have one overarching story, and the exhibits are the pieces that tell the bigger story," says Jodi Gibson, Zoological Society president and CEO. Increasingly, that story is about conservation and how people can help protect animals in the wild.

"How we present information, and how the visitor processes that information, combine to make a meaningful interpretive experience," says Julia Petersen, senior director of programs at the Zoological Society. One of the ways the Society supports the Zoo is by designing and creating the graphics you see around the Zoo. The Society's Creative Department relies on best practices from the National Association for Interpretation and the Association of Zoos & Aquariums, along with its own defining principles, such as highlighting the Zoo's exceptional care of its animals and reinforcing conservation and education messages, says Chris Keene, creative director. "We want people to feel empathy for the animals and their struggles in the wild, and ideally take action to help them," Keene says.

As the Zoo creates new exhibits for the elephants and hippos, the Zoo and Zoological Society are working more closely than ever to

create strong messaging. For the elephant habitat, which opened in May 2019, the theme was "A Day in the Life of Elephants," teaching visitors about the care of elephants at the Zoo and the life of elephants in the wild. The hippo habitat, scheduled to open in June, will focus on hippos as "The Life Force of African Rivers." "As a team, we wanted to really educate people on how important hippos are to the water and the animals and people who live off the water," says Ray Hren, a zookeeper on the hippo interpretive team.

HUNGRY, HUNGRY HIPPOS

IN THE WILD,
hippos come out of the water at night to eat and graze on grasses.
Wild hippos eat about 88 pounds of grass each night before heading back to the water to digest their meal.

Happy's daily diet:

- 40-75 pounds of timothy hay
- 10 pounds of high-fiber pellets
- 2 carrots
- 1 apple
- 1 head/bunch of greens

Patti's daily diet:

- 20 pounds of shredded timothy hay (shredded because her teeth are worn down and she can't chew)
- 5 pounds of high-fiber pellets
- 2 carrots
- 1 apple
- 1 head/bunch of greens

Did you know...?
Happy and Patti are fed twice each day. Their diet is divided between two meals with occasional treats such as melons and bananas.

Some graphics are meant to help visitors learn more about the individual animals at the Zoo.

GRAPHICS

The elephant exhibit includes more than 60 interpretive signs, and the hippo exhibit will have more than 20. The Society's creative and education teams met with Zoo representatives, including Zoo Director Chuck Wikenhauser, to determine the theme of each exhibit. Then they researched information with the help of zookeepers, curators and the Zoo librarian. Representatives from the Education Department made sure the content was age-appropriate, aiming for a

fifth-grade audience but including learning opportunities for younger and older visitors, says Heather Thomack, an educator on the hippo interpretive team.

For Thomack, it was important to make some of the graphics interactive. For example, a station in the Elephant Care Center allows children to become zookeepers by pretending to brush an elephant's skin, file its foot and draw blood from its ear. An interactive station in the hippo habitat will explain the concept of "muck-spreading" and why it is important for African rivers. "Children learn by kinesthetic movement," Thomack says. "When they get to act out what a keeper or animal is doing, it helps them retain that knowledge." Betty Brinn Children's Museum helped create both stations.



▲ One goal of the Zoo's interpretive graphics is to emphasize the outstanding care the Zoo's animals receive. Photo by Bob Wickland



▲ A Zoo Pride volunteer teaches children about the coverings of various African animals at a Remains to Be Seen cart in the Adventure Africa area. Photo by Paul Ruffolo

Hren says he's excited for the graphics to share many facts about hippos that make them unique, such as the red, sunscreen-like substance they secrete to protect their skin. He wants visitors to learn about the Zoo's hippo herd, Happy and Patti, how you can tell them apart and what they like to eat.

Once the team developed the content, it moved on to design, production and installation, Keene says. "Every step of the way, we were working as a team to ensure accuracy and adherence to our principles and budget."

ZOO PRIDE

Zoo Pride volunteers provide interpretation by offering insight into the animals at the Zoo and in the wild. In addition to answering questions at designated exhibits, they staff Remains to be Seen carts, where people can touch animal biofacts such as fur and horns. In summer, they lead or assist with Animals in Action talks.

Volunteers received all of the content from the elephant graphics before the exhibit opened, ensuring they were imparting the same messages, says Lynn Wilding, volunteer service manager. "They not only knew what the signs said, but then they could take it further." For example, volunteers can describe what elephants eat in the wild and compare that to the diet of the Zoo's elephants, including their favorite treats. This spring, volunteers will receive the content from the hippo graphics and attend a continuing education class where they will learn about the exhibit directly from keepers and supervisors. "That's key to the success of Adventure Africa, that we're all collaborating," Wilding says.



Kohl's Wild Theater introduced "An Elephant Never Forgets," a show about elephant conservation, poaching and how elephants survive in the wild, to coincide with the opening of the elephant habitat in summer 2019. Photo by Paul Ruffolo

KOHL'S WILD THEATER

Kohl's Wild Theater has emphasized conservation since its inception in 2010, helping visitors make the connection between the animals at the Zoo and their counterparts in the wild. Actors perform free, 15-minute shows in the farm area throughout the summer and interact with guests at certain exhibits. In the past, the group has operated independently of other interpretive elements. That is changing with the opening of the hippo habitat, says Zach Woods, manager of

artistic direction. "For the first time ever, we are directly tying the messaging in our show to what visitors are seeing in the exhibit." The Creative Department shared the sign content with Woods months ago, and his team used that content to create the hippo show that will debut this summer.

The group is also tweaking its at-exhibit performances. "In the past they were very scripted, which sometimes wasn't inclusive to all ages and learning styles," Woods says. This year, the actors will approach the encounters less as traditional theater and more as spontaneous interaction between Zoo guests and costumed characters. The actors will even help visitors learn the answers to hippo questions posed on an exhibit graphic.

Sharing consistent messages in different ways will help visitors retain the information and ideally encourage them to take conservation action, Woods says. "Guests can have an amazing experience

visiting a Zoo Pride cart and touching the biofacts there, and then you can have a completely different experience engaging in a kinesthetic, speech-based interaction with a costumed character. We're actively working together, and I think it's going to have a noticeable impact on the guests."

By Stacy Vogel Davis

ALL ABOARD!

The North Shore Bank Safari Train is one of the most popular - and oldest - features at the Milwaukee County Zoo. Families have been riding it since the late 1950s, before the Zoo officially opened. Today the Zoo operates two steam and two diesel engines with a team of three full-time and two seasonal engineers. The trains run on a 1.25-mile circuit around the Zoo. "The train is about more than giving people rides," says Calvin Schickel, a seasonal engineer. "It's about showing off the history of the park."

It takes the engineers about an hour and a half to get the trains ready each morning as they clean out the operating systems, heat up the coal for the steam engines, fuel up the diesel engines and connect the cars to the engines. Enjoy these behind-the-scenes photos of the team preparing the trains for a summer's day at the Zoo. Photos by Paul Ruffolo



1

1 Train Conductors Shaun Rand (left) and Hunter Feiner pull out passenger cars to attach to an engine.



2

2 Engineer Calvin Schickel cleans ash out of the smokebox of a steam locomotive.

3 Engineer Kevin Klatt adds sand to the sand injector, which is used when the rails are wet.

4 Schickel injects grease into the carrier bearings from underneath the train.

5 The steam engine uses 8 to 10 pounds of coal for each trip around the Zoo.

6 The engineers gas up a diesel engine.

7 The Zoo operates two diesel and two steam locomotives. It is the only place in Milwaukee where you can ride a steam train.

8 The engineering team installed new horns in the diesel engines in 2019.

9 Klatt injects grease into the axel bearings.



3



4



5



6



7



8

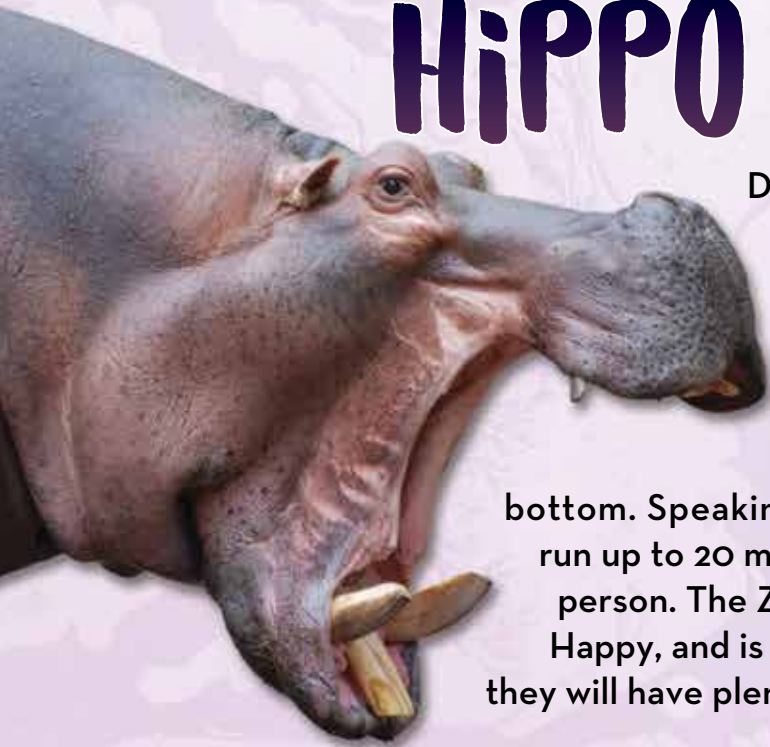


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Fun Facts About the Train

- The original engines all came from the Wisconsin Dells.
- The engineering team does as much in-house work on the trains as possible, such as redesigning the brake systems, installing new horns and whistles, and rebuilding the boilers. Over the past year, the team built a brand-new train car in-house for the first time.
- Diesel engines have horns, while steam engines have whistles. Whistles make noise through steam forced over the opening of a chamber, similar to blowing air over the top of a bottle. Horns make noise through vibrations against the inside walls of a chamber as forced air passes through it.
- The trains are a quarter size of a standard train, but they are working locomotives and are maintained and operated just like their full-size counterparts.
- The engineers must also know how to operate the ballast car that holds stones used to maintain the track, two handcars that carry track tools and the flatcar used to carry heavy loads.

HIPPO HULLABALOO



Did you know hippopotamus means “river horse”?

These massive animals are amphibious, which means they split their time between land and water. Hippos can hold their breath underwater for up to five minutes! Although they appear to swim, hippos move through water by bouncing and running along the bottom. Speaking of running, did you know that hippos can run up to 20 mph on dry land? This is faster than the average person. The Zoo provides a home for two hippos, Patti and Happy, and is currently building a new hippo habitat where they will have plenty of room to swim and roam.

Make YOUR OWN PAPER HIPPO

Hippos have huge incisors and canines on their upper and lower jaws. Since they are mostly vegetarian, these teeth are used not for tearing up food but for threatening and fighting challengers.

MATERIALS NEEDED:

- Colorful construction paper
- White construction paper
- Packing peanuts (To be environmentally friendly, use recycled packing peanuts or buy biodegradable peanuts made of cornstarch.)
- Markers or colored pencils
- Pipe cleaners
- Glue, a glue stick or tape
- Scissors

DIRECTIONS:

1. Cut out a large oval of colorful paper for the head.
2. Cut two large circles of paper for the mouth. If desired cut two slightly smaller circles of red or pink for the inside of the mouth or color a pink tongue on the mouth.
3. Cut two smaller ovals of white paper for the eyes.
4. Cut two smaller ovals of colorful paper for the nostrils.
5. Glue or tape the upper and lower mouth pieces to your hippo's head.
6. Attach the eyes and nostrils to your hippo's face.
7. Draw pupils on the white ovals with markers or colored pencils.
8. Bend colorful pipe cleaners into ears and tape or glue them on the top of your hippo's head.
9. Attach packing peanuts in the mouth to create your hippo's teeth. If you use cornstarch peanuts, you can attach them by dipping one end in water and attaching it to the mouth. Otherwise use glue.



MARSHMALLOW HIPPO HEADS

Hippos have one of the strongest bites in the animal kingdom! This means it's good to keep a safe distance from any hippo you happen to encounter. Luckily, you can get up close and personal with these marshmallow hippo heads. Here is how to make your own:

INGREDIENTS:

- Large marshmallows
- Small marshmallows
- Food coloring
- White icing
- Red hots candy
- Square gum
- Candy eyes or M&M's
- Toothpicks (optional)

WARNING:

Food coloring stains, so wear a smock or old clothes and make sure to cover your work surface with newspaper or rags.

DIRECTIONS:

1. Put a small amount of food coloring on a paper towel and dab it onto one large marshmallow and two small marshmallows to "paint" them. Or you can put the food coloring in a small bowl and use a basting brush.
2. Pat the marshmallows dry or let them dry in the fridge. You can use toothpicks to prop the large marshmallow up as it dries.
3. Attach the small marshmallows (ears) to the large marshmallow with icing.
4. Attach the red hots (nostrils) to the front of the large marshmallow with icing.
5. Attach the square gum (teeth) to the bottom of the large marshmallow with icing.
6. Attach the candy eyes or M&M's to the top of the large marshmallow with icing.
7. Let the icing dry, and then enjoy your marshmallow hippo head!



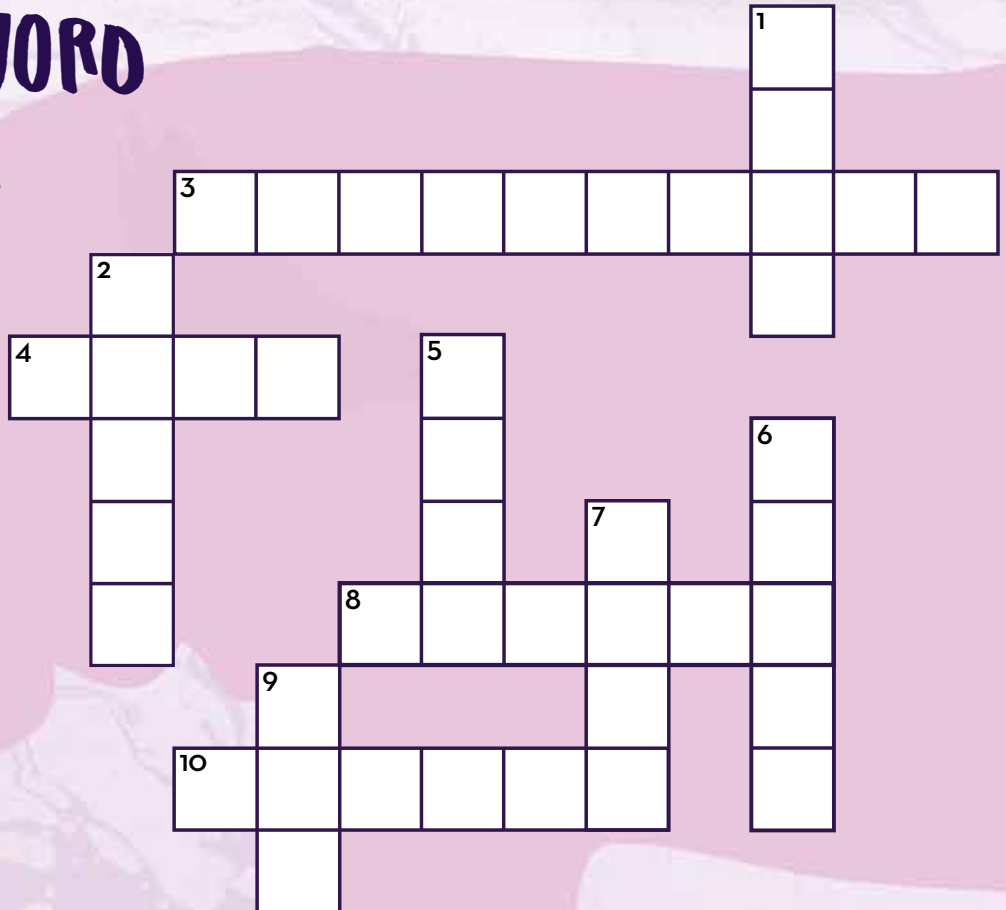
HIPPO CROSSWORD

ACROSS

3. What does hippopotamus mean?
4. What gender is a bull hippo?
8. What continent do hippos live on?
10. What gender is a cow hippo?

DOWN

1. What is a group of hippos called?
2. Where do hippos spend most of their day?
5. What do you call a baby hippo?
6. What do hippos eat?
7. How many minutes can hippos hold their breath?
9. What color is hippo sweat?



Answers: 1. Herd 2. Water 3. Riverhorse 4. Male 5. Calf 6. Grass 7. Five 8. Africa 9. Red 10. Female

SENSORY INCLUSION: MAKING THE ZOO WELCOME TO ALL

What could be more fun than a day at the Zoo? There are so many things to experience, from the roar of the lion to the smell of the dairy barn to the excitement of riding the train. But those same things can make a Zoo visit stressful for a person with sensory needs. The Milwaukee County Zoo and Zoological Society of Milwaukee are working to ease the experience in partnership with a nonprofit called KultureCity.

People with sensory needs, such as autism, post-traumatic stress disorder or dementia, can find certain noises, smells, lights or crowds overwhelming or even painful. You usually can't spot a person with sensory issues, so it might appear to a stranger as if a child is just misbehaving, says Mary, a Zoo Pride volunteer. Her son was diagnosed with sensory integration disorder at age 3. He had trouble interpreting sensory data, so he could have an extreme reaction if he was bumped in a crowd or heard a loud noise such as people singing "Happy Birthday" at a restaurant. "It would have been wonderful to have a quiet place to take him and reset him," she says.

Quiet zones are one part of the Zoo's sensory inclusion effort with KultureCity, a nonprofit dedicated to creating acceptance and inclusion for all. The KultureCity app lists places at the Zoo that are typically unoccupied where families can go if they need quiet. The app also lists "headphone zones," such as near the train and inside noisy buildings, where people with noise sensitivities might



(Above) Sensory bags are available for free check-out at the Guest Services desk, Peck Welcome Center desk and seasonally at the train station. Bags will also be located in the education building for Zoo Class participants and in the Zoo administration offices for first responders.

(Below) The sensory bags contain noise-canceling headphones, fidget tools, a cue card to help people who are non-verbal express themselves and a lanyard for people to identify themselves as having sensory needs if they so choose.

choose to wear noise-canceling headphones. Maps showing quiet and headphone zones will also be available.

The Zoo will have sensory bags available at several locations with headphones, fidget tools and cards that help people who are non-verbal express their feelings and needs. On the KultureCity app, users can find a "social story" or slideshow that takes them through a day at the Zoo and what they might encounter. "Knowing what to expect can help reduce anxiety about exploring the Zoo," says Katie Neville, the Zoo's program and audience evaluation specialist.

But the most important part of the KultureCity program is the staff training, Neville says. KultureCity requires at least half of the staff at a participating organization to go through online training. Well over half of Zoo staff, Zoological Society staff, vendors and Zoo Pride volunteers, nearly 400 in all, voluntarily participated. "I'm pleased at how well the staff of both organizations and the volunteers embraced this," Zoo Director Chuck Wikenhauser says. His nephew has sensory issues

related to autism, and he knows how important it is to provide families with an accepting and supportive atmosphere. "We have to make the Zoo as accessible and inviting as we can to everyone."

In the training, staff and volunteers learned to help someone experiencing sensory overload using the acronym CATCH: ask for *consent* from a caregiver, *approach* the person calmly and quietly,



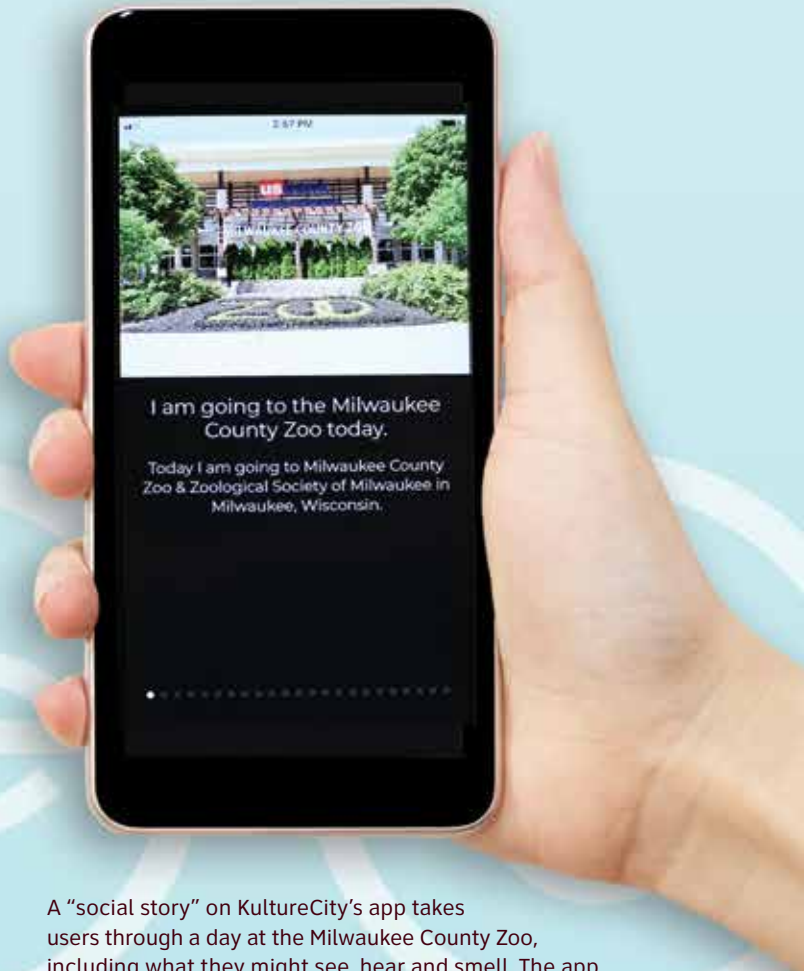
Animals can help create empathy in people with and without disabilities. For example, Alex the orangutan is sensitive to loud noises, just like some humans. Photo by Joel Miller

find out what *tools* will help the person, keep *crowds* away and *help* by providing resources and information. For bystanders, it's important to give the family privacy. "Treating them with dignity and supporting them according to their wishes is an essential part of sensory inclusion," Neville says.

The Zoological Society's Education Department has historically provided support for all participants who requested accommodations. It is now taking additional steps to actively and openly be more inclusive as part of its vision that all members of the community are inspired and empowered to take conservation action, says Samantha Martinson, manager of innovation and engagement. The Education Department has sensory bags and weighted lap pads available for students who need them, and all of the education staff participated in the KultureCity training. "Any classroom experience will only be enhanced by the additional training our educators have received, as well as the new resources we have at the ready for any child or participant in need," she says.

Jane Empey-Theep, a Zoo Pride volunteer and retired educator, notes the Zoo can be a positive place for people with sensory needs, especially with these resources in place. For example, some children and adults with autism enjoy learning about and visiting specific animals. Recently, she was talking to a group of students about Alex the orangutan, who doesn't like loud noises and will sometimes put her fingers in her ears when it gets too loud. "I was explaining to this group why they have a big 'quiet' sign there and why Alex needs that, and the little girl standing next to me said, 'I have that too. I have sound sensitivity.' She had a lot of empathy for that animal."

By Stacy Vogel Davis



A "social story" on KultureCity's app takes users through a day at the Milwaukee County Zoo, including what they might see, hear and smell. The app also offers a map of "quiet zones" and "headphone zones" at the Zoo. It is free through the Apple or Google Play store.


CREATING ANIMAL AMBASSADORS

The second-graders from Hawley Environmental School have spent a fun hour learning about animal habitats and building model habitats out of blocks and other objects. But now comes the moment they've all been waiting for. Instructor Julie Pickard sits behind a rectangular shape covered by a sheet. She says she wants to introduce them to an animal friend, but warns they have to be quiet and still so as not to scare the animal. That's easier said than done as Pickard pulls off the sheet to reveal a straw-colored fruit bat. It's all the kids can do not to squeal with excitement. Their eyes light up as they eagerly crawl forward to get a better look.

These are some of the best moments for Pickard and fellow instructor Mandi Mueller during the Zoological Society's Animal Ambassador program, now in its 31st year. The program serves students in grades two through four at schools in economically challenged neighborhoods in Milwaukee, South Milwaukee and Waukesha. "We give students the opportunity to meet animals and learn about the environment, and these are sometimes students who don't have that exposure in their everyday lives," Mueller says. "It makes conservation real; it makes it applicable."

Each school's participation is underwritten by a foundation, corporation or board, making the program free to schools. Students visit the Milwaukee County Zoo at least once each year and get one school visit from a Zoological Society instructor. They learn about animal classification and habitats in second grade, ecosystems and food chains in third grade, and adaptations and endangered species in fourth grade. At the end of fourth grade, each child receives an animal book and tickets to the Zoo for his or her family during a graduation ceremony at the Zoo.

The "ambassador" part of the name is important, Pickard says. "An animal ambassador represents animals by speaking for them, since animals do not speak in a way we can understand them," she says.



Mandi Mueller teaches the second-graders from Hawley Environmental School about habitats. Photo by Paul Ruffolo

BY THE NUMBERS

31 Years of training Animal Ambassadors

48,000 Students have participated since the program's inception

26 Schools participate in the program currently



▲ Students plan a model habitat with the help of instructor Julie Pickard. Photo by Paul Ruffolo



▲ Classes in the Animal Ambassador program visit the Zoo each year. ▲ At the end of the program, they receive Zoo tickets for themselves and their families. Photo by Paul Ruffolo

“By learning all of this cool information about animals, my hope is that the students get even more excited about animals and the environment and share the knowledge they gained with their family, friends and community members.”

That includes animals that don’t always get much attention, like snakes. Third-graders meet Severus, a ball python, while learning about the food chain. “Usually when I tell them I’m bringing out a live snake, the reaction is squirming away or fear,” Mueller says. “I talk them through the process and tell them that I’m bigger, so the snake is more likely to be scared of me. I give them the opportunity to pet the snake, and usually about 80% of the class – those kids who were squirming a few minutes ago – are standing up and excited to pet the snake. Just with that 15-minute exposure to the snake, they’re already building that appreciation for the animal.”

That was obvious recently when students were asked to rate their experience before and after meeting the snake, Pickard says. One student rated her experience as very positive before meeting the snake, but then changed the rating to very negative after the visit was done. When Pickard asked her why she now felt negatively, she responded, “I didn’t want the snake to leave.”

Kim Leitzke, a third-grade teacher at Barton Elementary School in Milwaukee, has seen the program make a difference for her own students. Her classes have participated in Animal Ambassador for more than 10 years. She loves bringing her students to the Zoo, some for the first time ever. She’s able to build her science units around the topics covered by Animal Ambassador. “We get to do the experiential learning, which is so phenomenal for science. Now they can go and see the animal that they did the presentation on, or they can see the penguins in their habitat.” She believes the experience makes her students care more about animals. “If I read about a tiger in a book or even watch a video, that only goes so far. But if I go to the Zoo and get to see a tiger up close, I’m going to care more about that animal.”

A multi-year grant from Johnson Controls Foundation has recently allowed Pickard to update the program. She has reduced the amount of direct instruction, increased

small-group projects and critical thinking challenges, and added more discussion of conservation issues. For example, fourth-graders now take home sheets with suggested conservation actions such as turning off electronics when not in use and organizing a neighborhood clean-up. “The new activities have definitely enhanced the program because they’re encouraging more child exploration,” Mueller says. “It’s not just a teacher talking to students. The students are participating in their own education.”

By Stacy Vogel Davis

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DIVE into spring at the Milwaukee County Zoo with Zootastic, sponsored by SaintA, the Zoological Society's annual family fundraiser. On May 8, spend a special evening at the Zoo learning about animals that love the water in honor of the upcoming opening of the underwater hippo exhibit. Tickets include dinner, dessert, a dance party, crafts and special zookeeper talks around the Zoo.

VISIT ZOOSOCIETY.ORG/ZOOTASTIC to learn more or check out the flyer packaged with this issue.