



WELCOME

The Advancing Conservation through Empathy for Wildlife (ACE for Wildlife) Network Virtual Empathy Summit will start promptly at 9:00am Pacific Standard Time.

If you have any questions, please drop them in the chat and a virtual facilitator will get back to you shortly.



Land Acknowledgement

Across the region of the Network, we recognize that we are on the lands of tribal people. We acknowledge their stewardship of these places continues to this day and that it is our responsibility to join them to restore the relationship with the living world around us.



Who are we?

The Advancing Conservation through Empathy for Wildlife (ACE for Wildlife) Network is a learning network that creates and shares effective practices to foster empathy for animals and people, leading to conservation actions.



27 AZA accredited zoos & aquariums (Partner Organizations) & ~250 Network Members



Over 100 Affiliates at 70+ organizations

Empathy: a stimulated emotional state that relies on the ability to perceive, understand, and care about the experiences or perspectives of another person or animal.



Welcome to Day 1

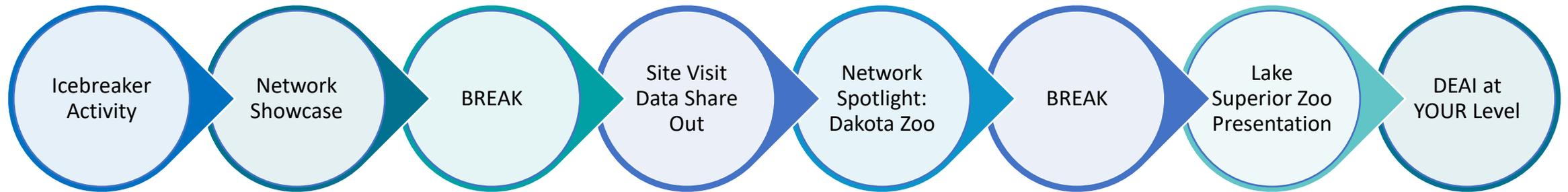
The 2024 Virtual Empathy Summit marks the **5-year anniversary** of the first Advancing Conservation through Empathy for Wildlife (ACE for Wildlife) Network gathering in 2019.

We look forward to an exciting virtual Summit and can't wait to start planning for our in-person 2025 Summit!





Welcome to Day 1





Icebreaker Activity

Facilitated by Amber Reger of the Communications
Committee



Icebreaker

- We will be utilizing Padlet, breakout rooms, and Zoom Whiteboards
- We will be in breakout rooms for ~15 minutes before coming back together
- Once you are in the breakout room, you and your group will brainstorm group meeting norms for the Summit and explore the Zoom Whiteboards feature for the icebreaker

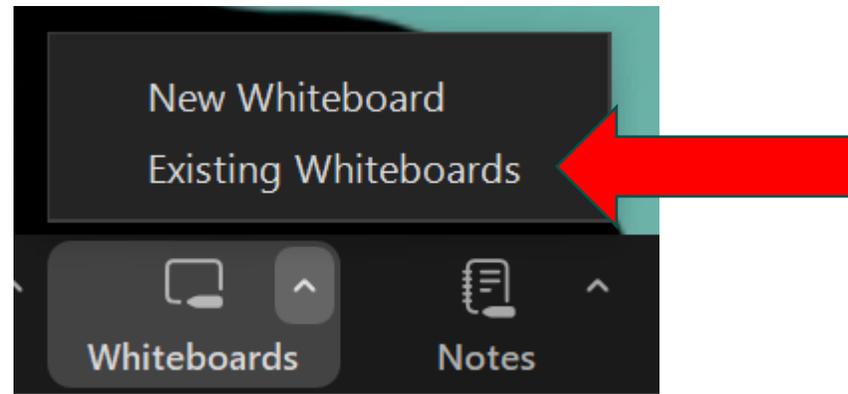
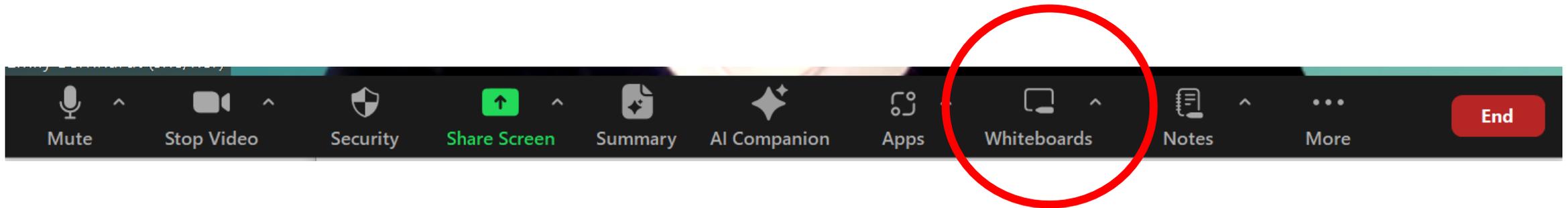


Meeting norms

- In the Day 1 links document dropped in the chat, you can find the link to a Padlet
- As a breakout room, spend some time brainstorming what you think are appropriate meeting norms for our 2-day virtual Summit and place them in the Padlet
- If you see a norm in the document placed there by another breakout group that you agree with, feel free to star or annotate it



Where can I find Zoom Whiteboards?

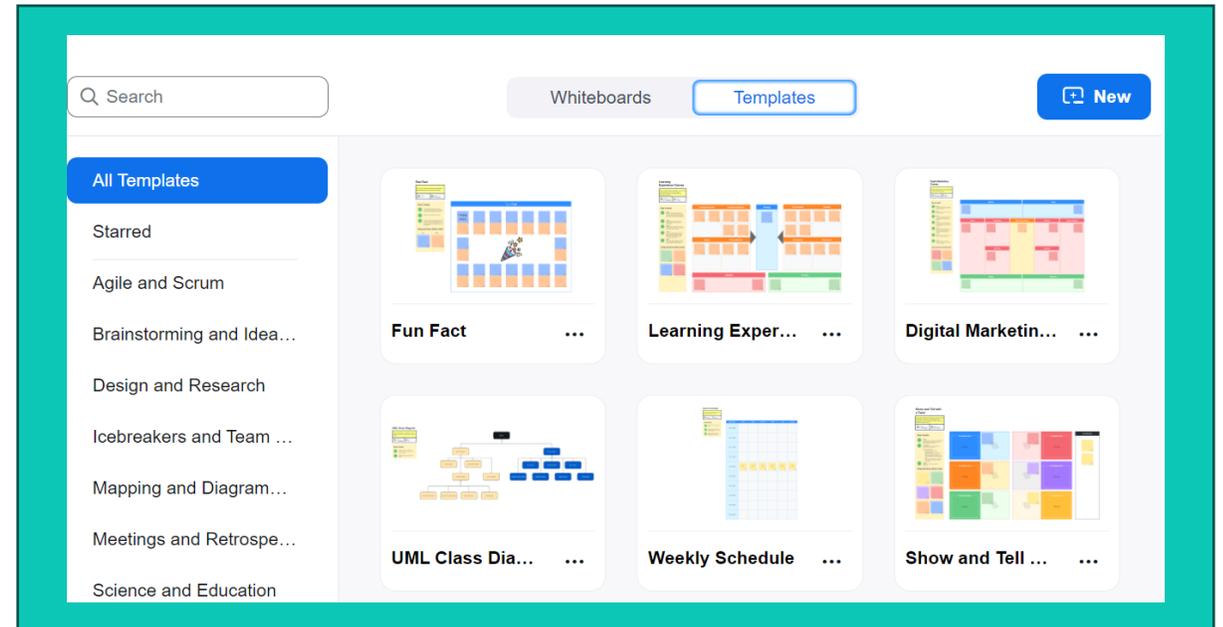


If an additional window pops up after you select "Existing Whiteboards," make sure you select the "collaborate" option in the window.



Selecting a Whiteboard Template

- We recommend the following icebreaker templates:
 - Virtual Scavenger Hunt
 - If You Could
 - Would You Rather
 - Deserted Island Scenario
 - First Job
- If none of those sound enticing, feel free to choose another – or just chat and get to know one another.



We will be in our breakouts for ~20 minutes.



2024 Network Showcase



The 'Z' Word: Leanne Schuh
– Grizzly & Wolf Discovery
Center



Erica



Jessica

***Engagement and
Empathy:*** Erica Carnes,
Jessica Schellhorn –
Blank Park Zoo



***Creating a Sense of Place
in a Virtual Space:*** Nicole
Hennigan – Northwest
Trek Wildlife Park



***Roll for Empathy! The
Power of Tabletop
Roleplaying Games in
Wildlife Education:***
Kelsey Fairhurst – PAWS

The “Z” Word



Leanne Schuh
Naturalist/Fundraising Assistant

Labels and Public Perception



Grizzly & Wolf Discovery Center
Published by John Heine • May 21, 2020

We are excited to announce the birth of four wolf pups! Born to 10-year-old Sura, the two male and two female pups are three weeks old today and doing great. Sura is a very attentive mother and is taking care of their every need. Currently mom and pups are off-exhibit and temporarily separated from the 14-year-old father Lakota. We expect the family group to venture out in their habitat in the weeks to come. Stay tuned for more developments.



All- Department Interpretive and Empathy Training

**How do I
do this?**

**OK, I enjoy this,
what next?**

**Wait, is it OK to
be here? How do
I feel about this
place?**

**Where's the
bathroom?**

All- Department Interpretive and Empathy Training

Guest FAQ's

Is the lone wolf that's by himself alone for a reason?

Why are the wolves in the park eating all the elk?

When does Sam come out?

How many bears do you have?

Do you guys have shows?

Why are the wolves sleeping?

Are grizzly bears the same as brown bears?

We were told to come here instead of Bear World, why?

Can we pet the animals?

Do you have cubs?

All- Department Interpretive and Empathy Training

Guest FAQ's

How do you move the bears?

Is the lone wolf that's by himself alone for a reason?

Why are the wolves in the park eating all the elk?

Is that bear lonely?

Were these animals rescued?

How big is their habitat/behind the scenes space?

Why are the wolves sleeping?

Are those bears
fighting?

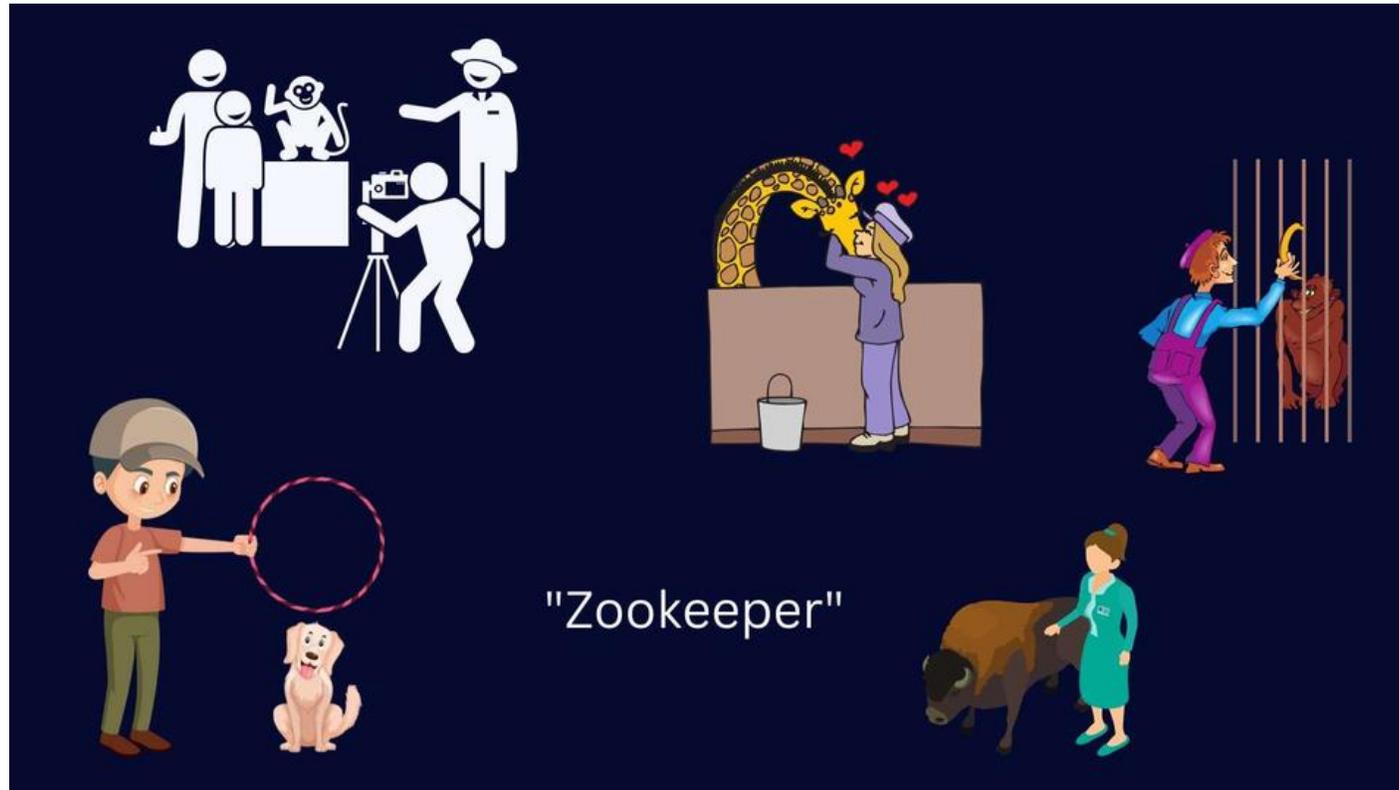
Are the birds bored?

Why don't these bears hibernate?

Are they happy?

Why do you have
wolves?

All- Department Interpretive and Empathy Training



All- Department Interpretive and Empathy Training

Why are we a zoo?

Our mission- get people to care and want to learn. We believe this makes the biggest impact on wild animals.

Evolve as a zoo- enrichment, space, social structure, learn as a facility

"Rescue" "Sanctuary" "Zoo" "Wildlife park"

"Educational Facility" "Nonprofit" "AZA-Accredited"

"Zoo"= Connection to a larger, collaborative, professional field that holds us to a standard of excellence.

All- Department Interpretive and Empathy Training

Pillars of Interpretation

Accurate



Accessible



Engaging

Empathy- A Quick Look



From ACE for Wildlife Network: "People need more than just knowledge to act on behalf of the environment. They need an emotional connection."

- Unique challenges for GWDC:
- Is there such a thing as 'too much empathy'? ex. Sam
 - Much closer proximity than other zoos to wild animals
 - Individual vs. species



Engagement & Empathy

Erica Carnes - Volunteer & Conservation Engagement Manager
Jessica Schellhorn - Education Manager



Engagement Team

Conservation

Education

Volunteers

Purpose - to provide fun, lifelong opportunities for engagement with the natural world that inspires conservation action.



Education



From fact sheets to messaging guide

Old Fact Sheets

Lots of of information that isn't actually helpful for programs.

Blue and Gold Macaw (*Ara ararauna*)

“No Touch” animal

Name	“Amborro”
Class	Bird
Habitat	Rainforest, high in trees especially along swamps and rivers.
Region	Throughout Mexico, as well as Central America and northern parts of South America
Size	32-36 inches long, 2-2 ¾ pounds, and 41-45 inch wingspan
Description	Back and upper tail feathers are brilliant blue while the underside of the tail is olive yellow. The forehead feathers are green. The underwing and breast are yellow-orange. The bare facial area is creamy white with several lines made of black feathers.
Diet	<u>Wild</u> : fruit, vegetable matter, seeds, nuts, leaves and bark <u>Zoo</u> : Parrot pellets, vegetables, fruit, seed mix and monkey biscuit.
Age	50 in captivity (oldest recorded 115)
Reproduction	Like other macaws, they are monogamous birds. Female lays a clutch of 1-2 eggs and incubates them for 24-26 days. The young are born featherless; but, at ten weeks, they are covered with feathers and the wings and tail have attained their full length.
Predator	Large snakes and birds of prey
Conservation	Least Concern; Major concerns are illegal taking of individuals for pet trade.
Other Facts	Uses feet to hold food while eating. Use beak to open seeds and nuts. Extremely intelligent and adaptable and can be taught tricks as well as mimic words. (Amborro has about 50 words in his vocabulary). Screaming is a natural behavior for macaws. They do it to make contact with one another, to define territory, and even as part of their play. They can also imitate sounds and words that they hear, often practicing to themselves until they get it right. When they are high up in trees, the bright yellow and blue feathers have the capability of looking like tropical flowers, leaves or fruits.



New Messaging Guide

BIRDS

What is a bird?

Defining Characteristics:

- Vertebrates - has bones
- Endothermic (warm-blooded) - can produce their own body heat
- Feathers
- Egg layers

Feathers



- Wing - specialized for flight by uniform windproof surfaces. These are asymmetrical to prevent midair twisting.
- Tail - arranged in a fan shape to support precision steering in flight. In some birds, tail feathers have evolved into showy ornaments that are useless in flight.
- Contour - covers bird's body and streamlines its shape. Tips are waterproof.

3 Familiar Groups of Invertebrates:

1. Insects
2. Arachnids
3. Crustaceans

Insects:

- Largest group of invertebrates
- 6 legs, 2 antenna and 3 body parts
- Some have wings, but not all - however if an invertebrate has wings, it is definitely an insect.
- There are more species of beetle in the world than any other type of animal, invertebrate or otherwise

Arachnids:

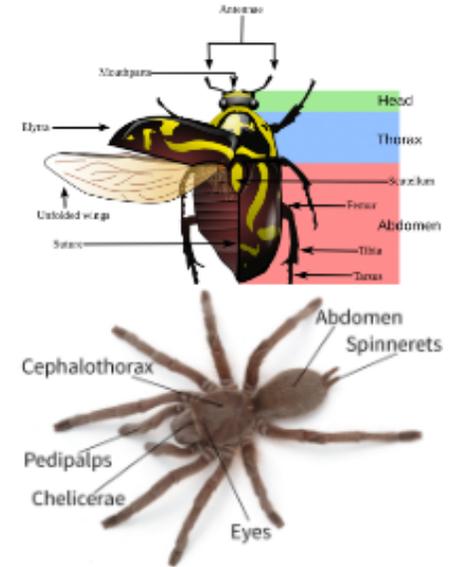
- 8 legs, no antenna and 2 body parts
- Often feared but are actually very beneficial to humans - most are harmless to humans

Crustaceans:

- 10-14 legs, 4 antenna and 2 body parts
- Many live in water but some live on land
- Common examples: crabs, lobsters, shrimp, pillbug

Why invertebrates are important:

- **Invertebrates are a vital food source for many animals.** They live towards the bottom of the food chain - a critically important spot to ensure all the other animals further up the chain can survive.
- **Invertebrates ensure biological control, keeping an ecosystem in balance.** "Biological control" means the control of pests in a natural way - without chemicals. Invertebrates simply eat the pests.
- **Invertebrates are essential to the creation of products and services that benefit humans.** Their "ecosystem services" ensure the production of food, medicines and ensure necessary decomposition of materials in our environment.



Important messaging about birds

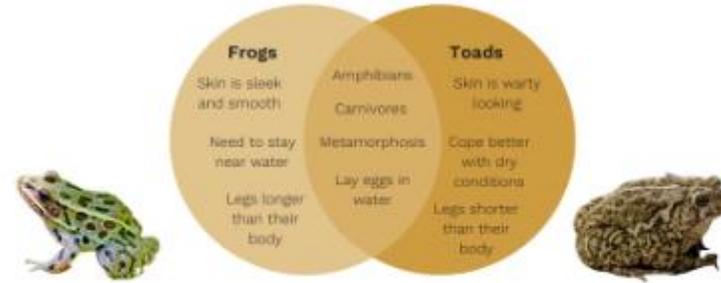
- **Careers**
 - A person who studies birds is called an ornithologist.
- **Climate Change**
 - Research on birds has shown that climate change affects birds both directly and indirectly. The distributions of birds are closely associated with both winter and summer temperatures, and increased temperatures due to climate change may directly affect birds by forcing them to use more energy for thermoregulation. This can disrupt their maintenance (the energy needed by organisms to maintain their basal levels of activity and condition), reproduction, timing of breeding and migration, and reduce survival or fitness. Birds may respond to these costs by shifting their ranges over time to areas with more suitable thermal conditions, but habitat and other resources may be insufficient or unsuitable for their needs.
- **Connecting to Nature**
 - Monitoring birds is essential to help protect them. Join a project such as eBird, Project FeederWatch, a Christmas Bird Count or Backyard Bird Count to record your

bird observations and provide valuable information to show where birds are thriving and where they need our help.

- **Disease**
 - Avian influenza - Highly pathogenic avian influenza (HPAI) strains are extremely infectious, often fatal to birds and can spread quickly. Low pathogenicity avian influenza (LPAI) naturally occurs in migratory waterfowl and shorebirds without causing illness. It can infect other birds, creating little or no sign of illness.
- **Habitat Loss**
 - Birds have few places to safely rest during migration and to raise their young to human land development. Plant native plants in your yard to provide shelter and nesting areas for birds.

Frog vs. Toad

Toads are a subclassification of frogs, meaning that all toads are frogs, but not all frogs are toads



Amphibians in Iowa

- 24 species documented in Iowa
- [Threatened and endangered species in Iowa:](#)
 - Endangered
 - Blue-spotted salamander
 - Crawfish frog
 - Threatened
 - Mudpuppy
 - Central newt

Key Words

Ectothermic, metamorphosis, tadpole, permeable skin, ecological indicator

Conservation Actions for All Ages

- *Leave wild animals where you find them.*
- *Keep waterways litter free by disposing of trash properly.*
- *Encourage toads to live in your garden by providing dark, damp places to hide during the day.*
- *Teach others about amphibians and their special habitats!*

Additional Resources

<https://www.amphibianark.org/>
<https://www.amphibians.org/>
<https://parcplace.org/>

Blue and Yellow Macaw (<i>Ara ararauna</i>)		Least Concern - Declining
Blue and yellow macaws at Blank Park Zoo Amorro (male - he/him) - estimated hatch date in 1994. Came to BPZ in 1997.		
Weight	Median life expectancy	Diet
1 cantaloupe (2-4 lbs)	<u>Wild:</u> 30-35 years <u>Human care:</u> 50+ years	<u>Wild:</u> seeds, nuts and fruit <u>At BPZ:</u> parrot pellets, veggies, fruits, seeds and nuts, pinecones, honey, cheerios, pasta, jello, hard boiled egg
Where do they live?	Northern South America from Venezuela to Brazil, Bolivia, Colombia and Paraguay. Also found in Mexico and Panama. Found mainly in rainforests in swampy riparian (next to wetland) areas.	
Predators	Birds of prey, humans	
Important messaging	<p><i>Not A Pet</i></p> <ul style="list-style-type: none"> ● High global demand for non-traditional pets fuels the illegal capture and trade of millions of animals, many of which suffer and die in the process. Their large size, behavioral complexity, and longevity requires a large home and extensive commitment therefore blue and yellow macaws, and many other parrot species are not good pets. See Statement about non-traditional animals as pets. <p><i>Wildlife trafficking</i></p> <ul style="list-style-type: none"> ● Their removal from native habitats often results in deaths of parents in order to obtain fledglings and destruction of important nesting trees. The illegal pet trade results in much destruction. <p><i>Habitat loss</i></p> <ul style="list-style-type: none"> ● Habitat degradation in South America from pollution, development and logging affect populations of blue and yellow macaws. <p><i>Role in the ecosystem</i></p> <ul style="list-style-type: none"> ● Blue and yellow macaws are important seed predators in tropical forests, they may influence forest dynamics through seed predation and dispersal. <p><i>AZA Animal Programs</i></p> <ul style="list-style-type: none"> ● While not a North American songbird species, blue and yellow macaws live in the migratory ranges of many North American songbirds and benefit from the same bird friendly practices that songbirds benefit from including consuming bird friendly coffee and chocolate. 	

<p>Planting connections</p>	<p><i>We all love food</i> - Amborro gets a wide variety of fruits, veggies, nuts and seeds in this diet everyday. Most of his veggies, he just throws on the floor but he loves to eat bananas, peanuts and his parrot pellets. In the wild, macaws will hang upside-down from a tree branch and eat hanging fruit. Frequently, Amborro’s food is placed in hanging enrichment to mimic this same behavior displayed in the wild.</p> <p><i>We all like fun new things</i> - Amborro gets enrichment every day! He has favorite things he likes to play with and usually enjoys new sights and sounds around his enclosure. Amborro really enjoys tearing up phone books and listening to music. He often starts to “dance” when you whistle at him.</p> <p><i>We all like to be comfortable</i> - Amborro never learned how to fly. For exercise, he has a very large enclosure with lots of perching levels. He spends a lot of his day, climbing up and down on the different perches exploring the enrichment he is given.</p>
<p>Key words</p>	<p>Bird, oviparous, arboreal, diurnal, herbivore, endothermic, seed dispersal</p>
<p>Resources</p>	<p>IUCN Red List, Animal Diversity Web, AASAG, eBird, World Parrot Trust</p>

Volunteers



Adult and Teen Volunteer Training

- Storytelling
- Guest Interaction Guide Training
- Discovery Guide Books
- Zoo Animal Guide



Education Discovery Guide



North American River Otter

Updated 05/15/2023

North American River Otter Discovery Guide

This cart should contain the following:

Binder
River Otter Pelt

Storytelling

Telling stories is one of our society's most powerful means of communicating ideas and feelings. Their effectiveness lies in the ability to connect the listener to the points or purpose. People recall stories in greater detail and for far longer time than they do a list of simple facts and figures. This is one of the key components to developing empathy. Empathetic connections are what will move our guests from *seeing them* to *saving them*. Feel free to use the story below or create your own!

North America River Otter Story Example

When I was at the Zoo this winter I noticed Oliver, a three year North American river otter, playing in the snow. I was wearing my winter coat, hat and gloves. I wondered if Oliver was cold but then I learned that river otters are well suited to Iowa winters. They have fine, dense, waterproof fur that keeps them warm in colder temperatures. The oil glands in their skin help to waterproof their fur to keep them dry in the water. This allows them to remain active and hunt for food year round.

Other adaptations that river otters have are webbed feet and a strong tail to help them swim more efficiently. Did you know that they can hold their breath underwater for eight minutes? I don't think I can hold my breath that long underwater. Can you?



Updated 05/15/2023

Blank Park Zoo North American River Otters

Sassy

- Year Born: 2005
- Female
- Favorite Food: shrimp
- Favorite Activity: swimming, rubbing in the dirt, training
- Identifier: her coat is lighter than the male
- Sassy really loves swimming and also enjoys training a lot.
- Her parents are from other AZA facilities.



Oliver

- Born: May 2018
- Male
- Came to BPZ from Maryland
- Was orphaned very young and due to his age was deemed non-releasable. He is very energetic and fun!



Fisher

- DOB: February 15, 2021
- Male
- Name has an English origin meaning "one who obtained a living by fishing"
- Came to BPZ from Henry Vilas Zoo in Madison, WI
- Diet consists of herring, capelin, mice, ground beef, carrots and dog food
- Identifying features: lighter chest fur and has a slimmer face. Walks more like a ferret one foot at a time instead of hopping with both front and back feet like Oliver.



Updated 05/15/2023

North American River Otter - **Least Concern**

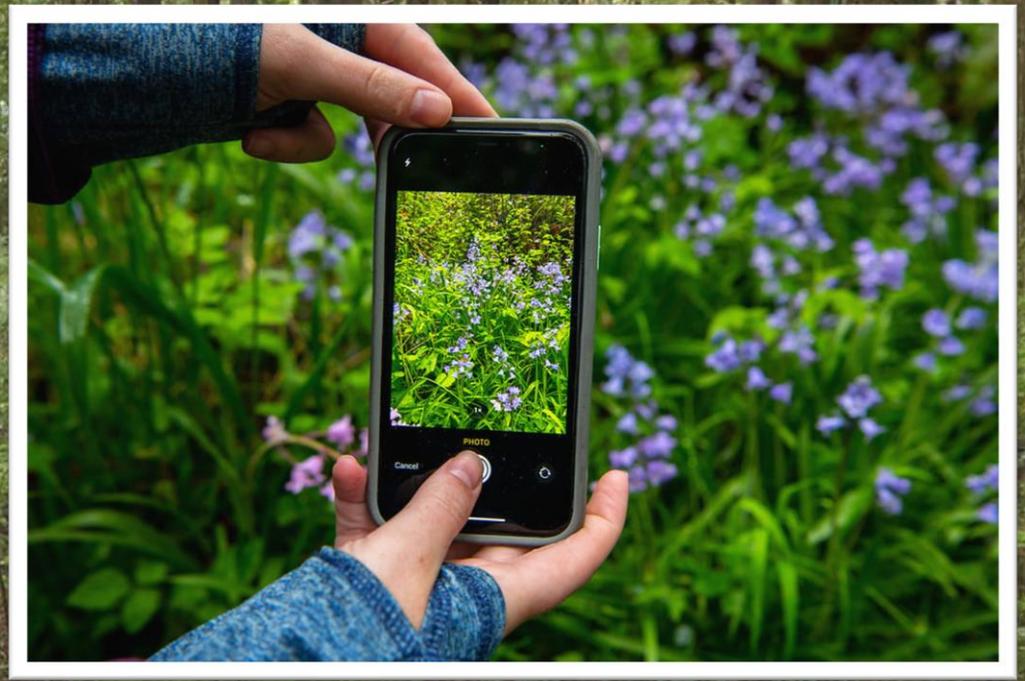
Scientific Name:	Lontra canadensis
Feeding Type:	Carnivore
Lifespan:	8 to 9 years in the wild, 21 years in captivity.
Size:	34-60 inches long
Weight:	Between 7 - 31 pounds
Range:	Northern North America, East Coast, and Gulf Coast
Habitat:	Lakes, rivers, inland wetlands, coastal shorelines, marshes
Diet in the Wild:	Crayfish, crabs, and other aquatic invertebrates; fishes; and frogs. May also occasionally prey on birds, rabbits and rodents.
Diet at the Zoo:	Herring and capelin. It rotates depending on the keeper and what is available

Physical Characteristics: In general, otters exhibit various shades of brown (light cinnamon to dark brown), with a darker dorsal (back) surface and much lighter ventral (underside) surface. Otters have four relatively short legs used to swim, walk, groom, and manipulate prey. Paws have bare sole pads on the undersides. River otters have webbed feet and strong, claws on all four feet. The tails of river otters are long, and about one-third of total body length. The valve-like structure of the ears enables them to close when in the water. The fur of all otters is fine, dense, and velvety. They do not shed. All otters have very good hearing. Some scientists believe that an otter's sense of hearing is more important than smell for sensing danger. Oil glands in their skin helps to waterproof their fur to keep them dry in the water. Oil glands also called Sebaceous gland are microscopic exocrine glands in the skin that secrete an oily or waxy matter, called sebum, to lubricate and waterproof the skin and hair of the otters.

Behavior: Otters spend up to 60% of their time hunting and foraging. Other normal otter activities include playing, sliding, grooming, swimming, and digging. Otters usually hunt at night, especially during the summer. An otter's high metabolic rate - important for generating body heat - requires a substantial amount food. River otters hunt by using their vibrissae to detect movements of prey in the water.

Updated 05/15/2023

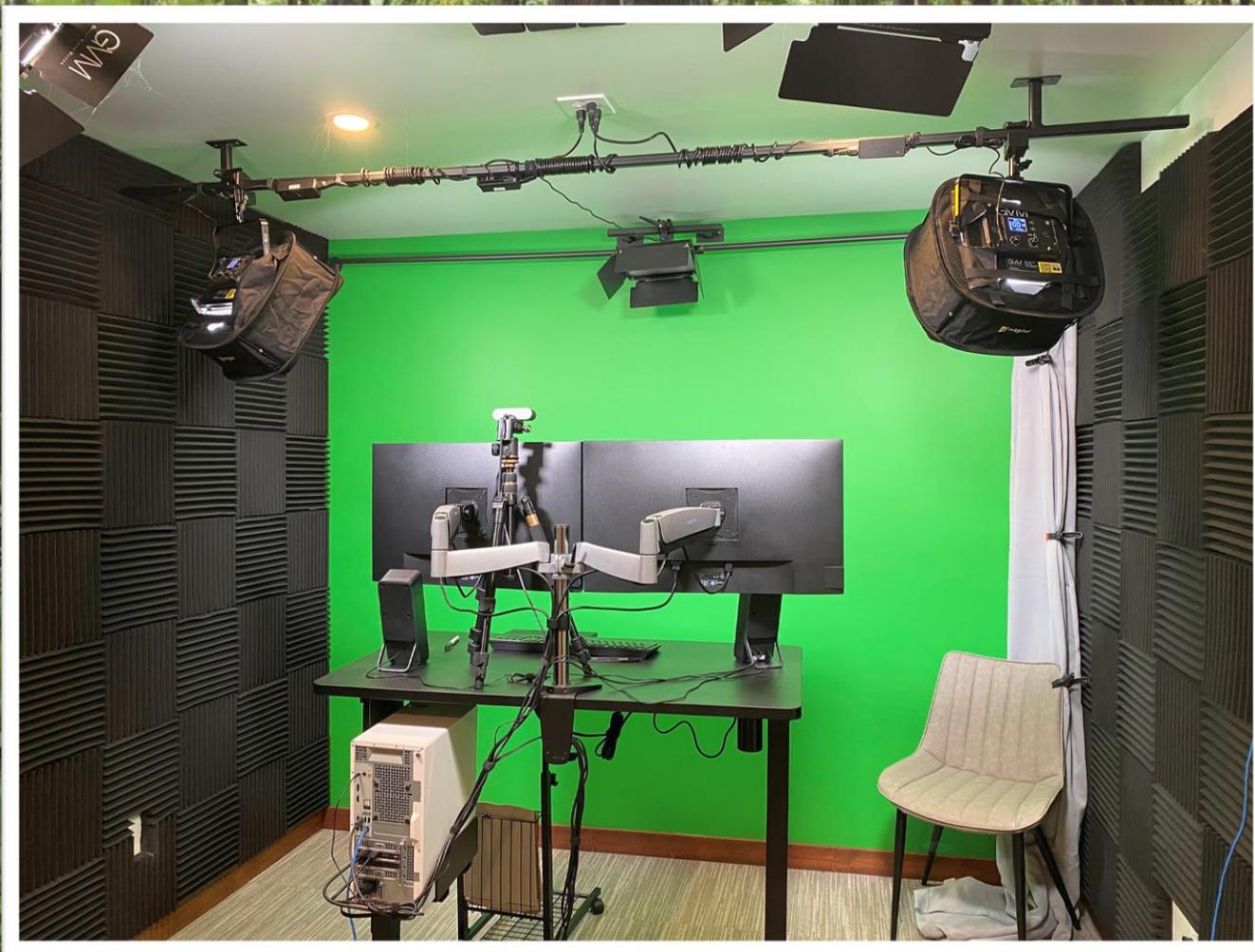
Creating a Sense of Place in a Virtual Space



A Little History...

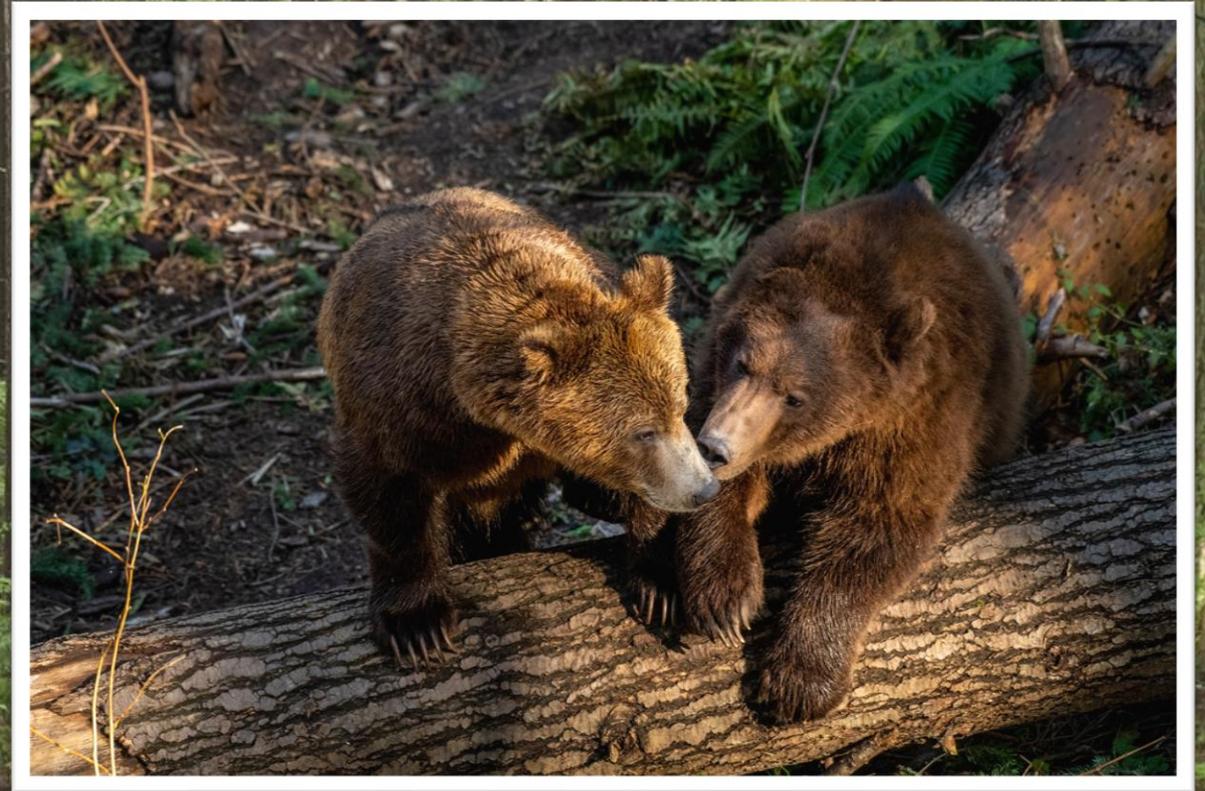


The OWA Studio

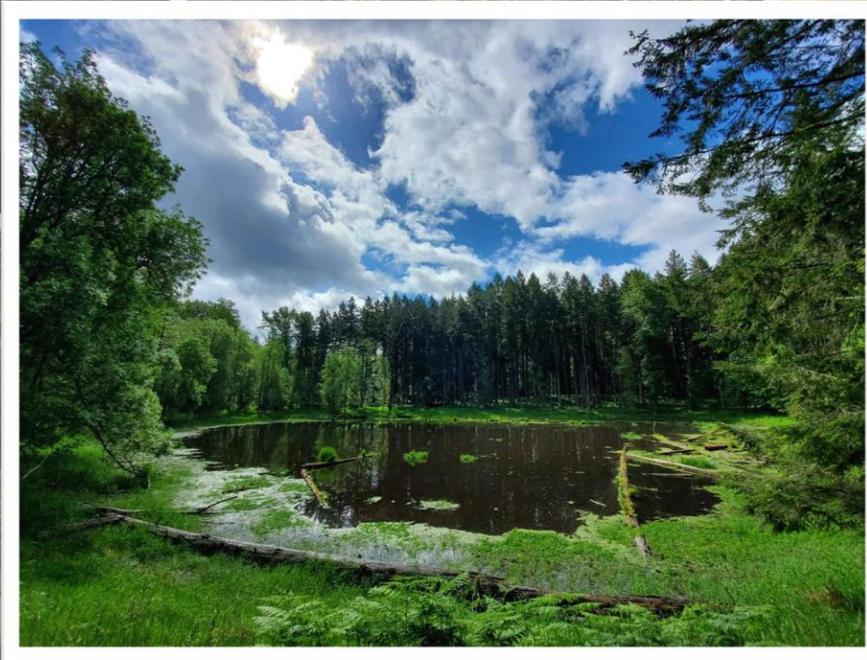
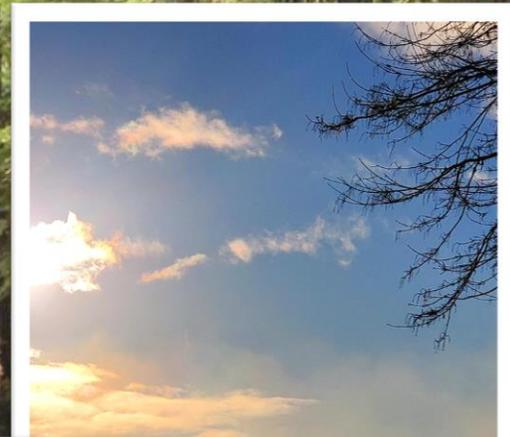


Our Partners

- Streamable Learning
- We Thrive Together
- Field Trip Add-Ons
- STEM Classes

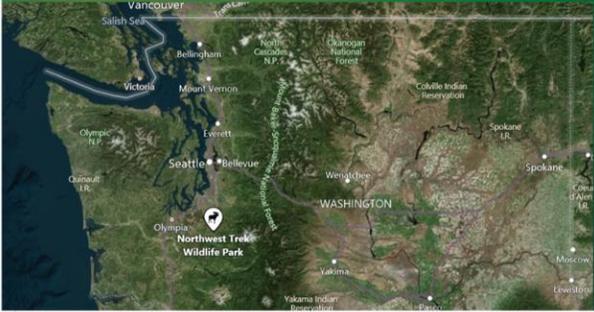


A Sense of Place



Program Structure

Where is Northwest Trek?



What Does it Mean to Survive?

Finding Resources:



Defense/Avoiding Danger:



Are Our Survival Needs the Same as Plants and Animals?

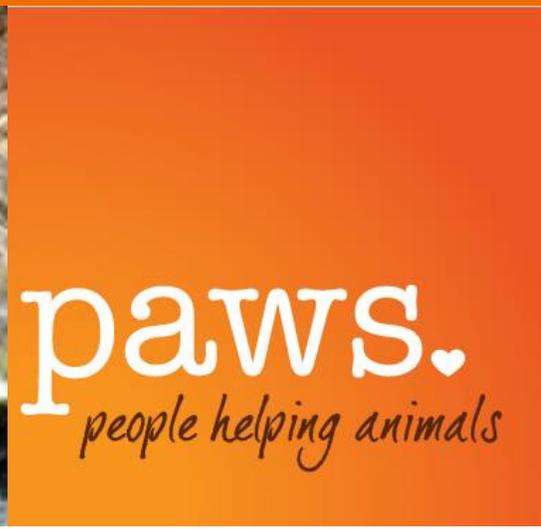
Our Plans for the Future

- Accessible programming for groups with:
 - Cost barriers
 - Geographic barriers
 - In-person event barriers



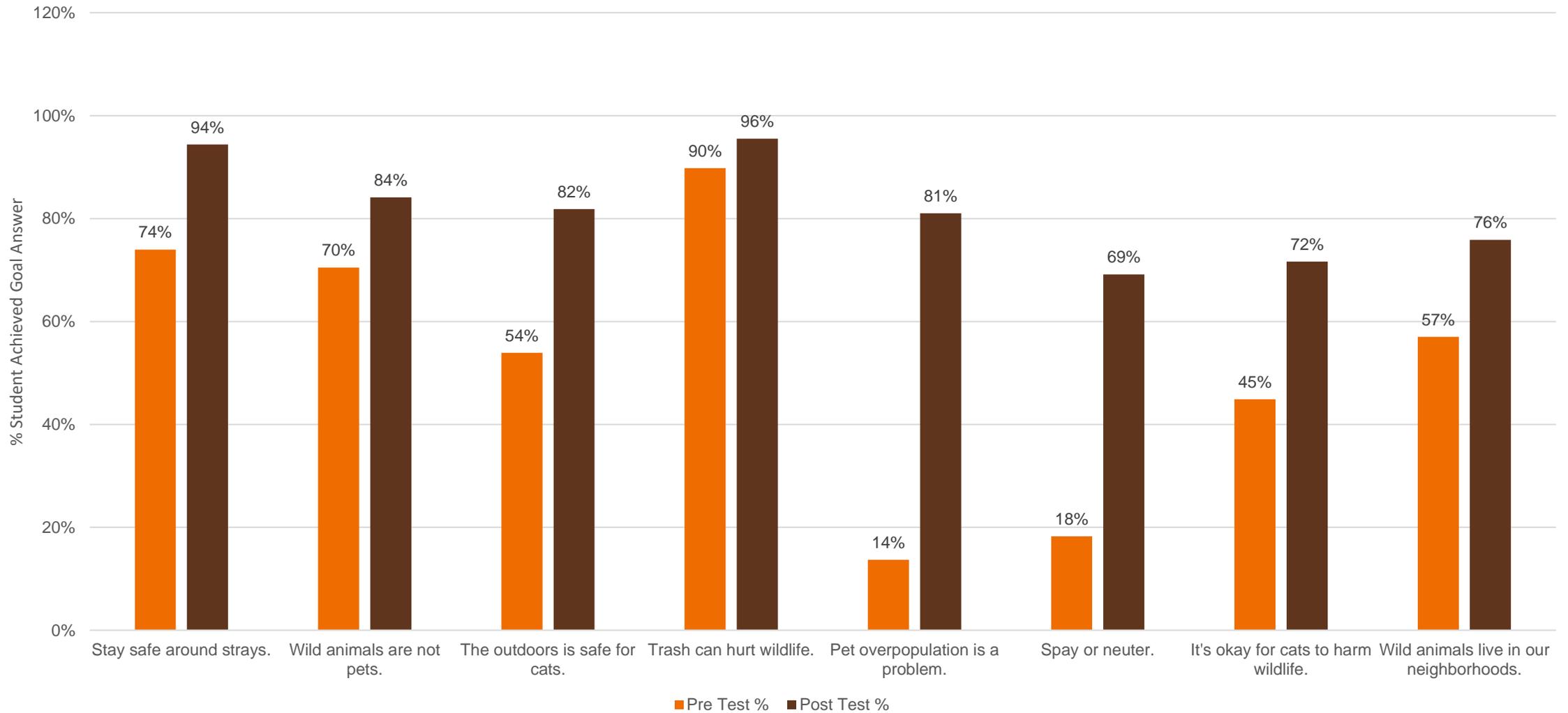


Role for Empathy! The Power of Tabletop Roleplaying Games in Wildlife Education



Progressive Animal Welfare Society

PAWS Kids Who Care Results 2022-2023 School Year





DUNGEONS & DRAGONS WORKSHOP



Come join us for a fun 4-session workshop where we just may encounter magic and dragons, while problem solving real world wildlife conservation issues!



What

- ✓ Ages 13-17
- ✓ All materials included
- ✓ Storytelling
- ✓ Teamwork
- ✓ PAWS Tours
- ✓ Dog Meet & Greets
- ✓ Service learning hours

When

4-week sessions,
12-4 p.m. Saturdays
January-March 2024

Where

PAWS (Progressive
Animal Welfare Society)

Registration Info



<https://bit.ly/m/pawseducation>

- **Goal:** Promote empathy for wildlife while encouraging participant-led problem solving.
- Can gamifying our content lead to better results?
- TTRPGs can be used to immerse students and help them engage with the curriculum while practicing social and problem-solving skills.

BREAK

Take this time to use the restroom, get a refreshment or snack, and clear your mind



Site Visit Data Share-Out

Insights and findings from the 2022-2023 ACE for
Wildlife Network visits to Partner Organizations

Presented by: Theo Bamberger



2024 Network Spotlight

*Dakota Zoo presents: Instilling Empathy through a Unique
EncounTOUR: North American River Otter*



Brent Weston



Allison Malkowski



Instilling Empathy
through a Unique
EncounTOUR:

North American River Otter





CURRENT OTTER BEHAVIORS

- target
- Pool/swim
- side
- POK
- UP
- Paw
- Bell
- ope

(EXHIBIT STATIONS)

- * go to Pool
- * go to Rock (window or Pool)



Introduction:

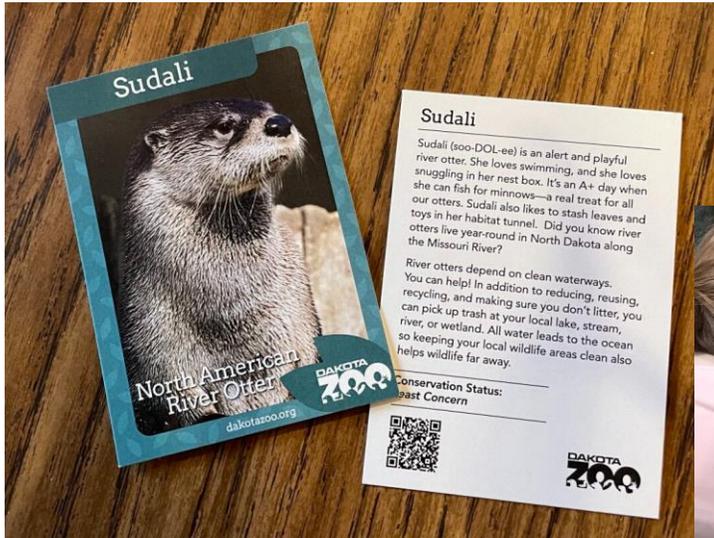
Historic Zoo Species.

~35 years...

New Exhibit.

New Program.

Wild EncounTOURs



Goals

Unique and engaging experiences for both the guests and otters. (Defining Moment)

Local Conservation Tie – River/Lake life in ND and concrete actions to help otters and waterways.

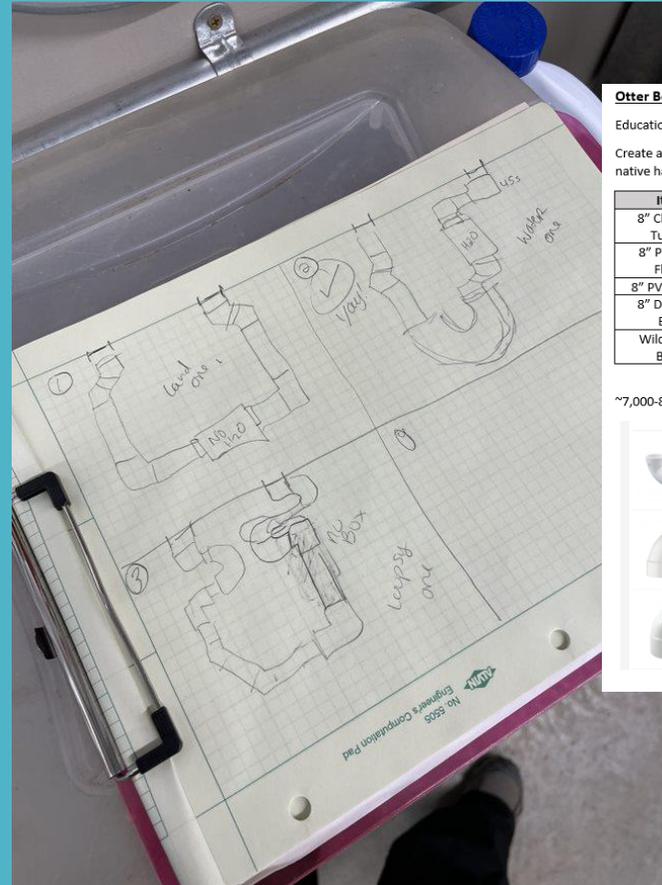
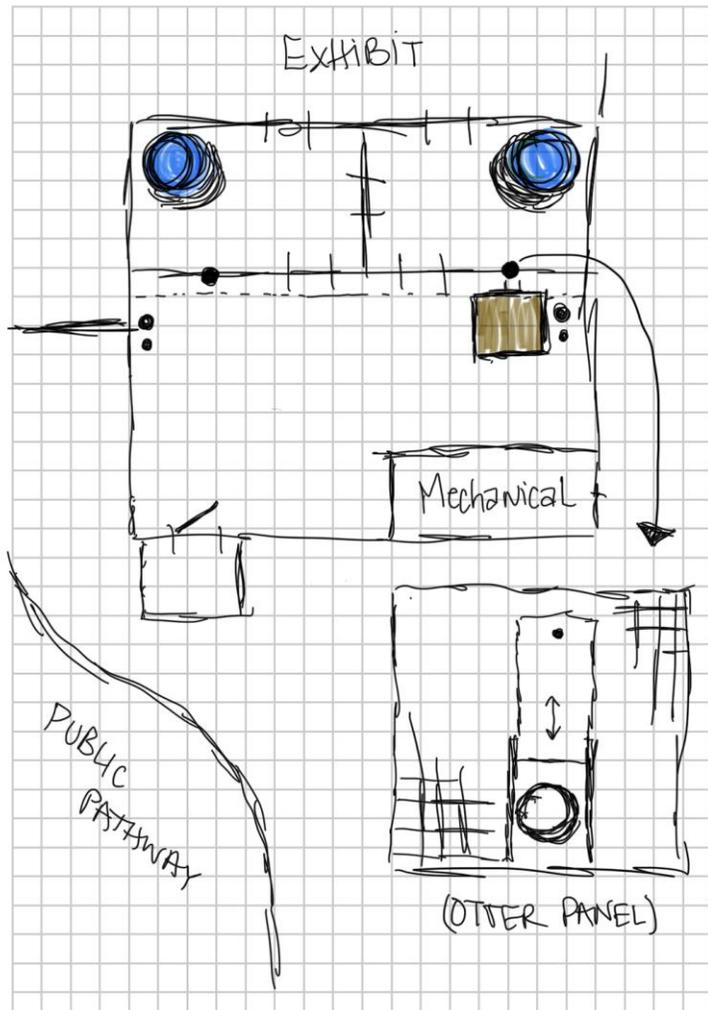
[Report a River Otter Sighting](#)



Design

Dakota Zoo Wild EncounTOUR: North American River Otter

Note Title: Otter experience [Edit](#)
 December 4, 2022 at 2:50 PM — Shared



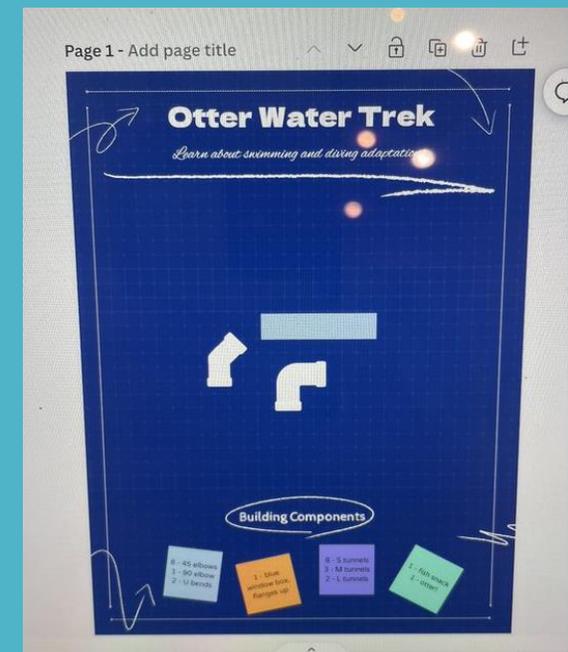
Otter Behind the Scenes Experience

Education and Conservation hands on activity. "Create Your Own Adventure"

Create and build your own otter adventure course to learn about how otters live, eat, and swim in the wild. Find out how you can help protect otters and their native habitat!

Items	Location/Website	Cost	Comments
8" Clear PVC Tunnels	https://www.usplastic.com/	20' = \$1,986.80 + Shipping	
8" PVC Duct Flange	https://www.usplastic.com/	8 = \$939.74 + Shipping	
8" PVC U Bend	https://www.pvcfittingsonline.com/	4 = \$750.48 + Shipping	
8" DWV PVC Bend	https://www.pvcfittingsonline.com/	6 = \$949.14 + Shipping	1669.62 + 555.84 Shipping + Tax = 2413.35
Wildlife Toy Boxes	https://www.wildlifetoybox.com/cart	3 = \$1483.92 + \$320.00 Shipping	3 Boxes: 1 water, 1 nesting, 1 feeding/ misc = 1723.92

~7,000-8,000 Total Cost





Develop

Dakota Zoo Wild EncounTOUR: North American River Otter





Working through the courses...
(assembly and trial and error)



The Final Courses
(and one that needed a change)

Otter Water Trek

Learn about swimming and diving adaptations.

Building Components

- 8 - 45 elbows
1 - 90 elbow
2 - U bends
- 1 - blue window box, flange up
- 8 - 5 tunnels
3 - M tunnels
2 - L tunnels
- 1 - hose
1 - fish snack
1 - otter!

1 - Otter Water Trek

Otter Nesting Trek

Learn about nesting and denning adaptations.

Building Components

- 4 - 45 elbows
2 - 90 elbow
- 1 - blue window box, flange down
- 4 - 5 tunnels
2 - M tunnels
2 - L tunnels
- # - nesting materials
1 - fish snack
1 - otter!

2 - Otter Nesting Trek

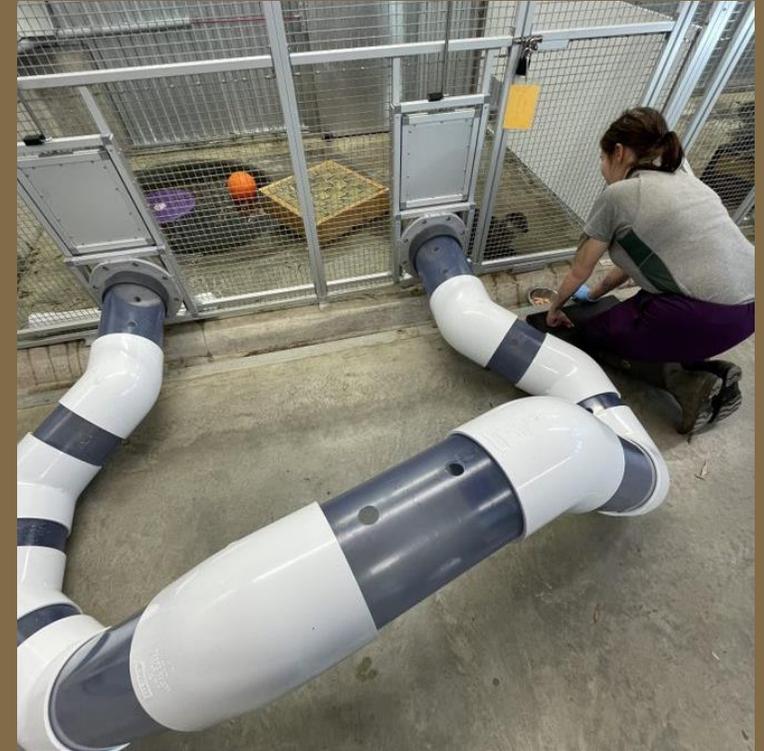
Otter Travel Trek

Learn about range and locomotion adaptations.

Building Components

- 5 - 45 elbows
4 - 90 elbow
2 - U bends
- 1 - XL tunnel
2 - climbing tubes
- 4 - 5 tunnels
3 - M tunnels
2 - L tunnels
- 1 - fish snack
1 - otter!

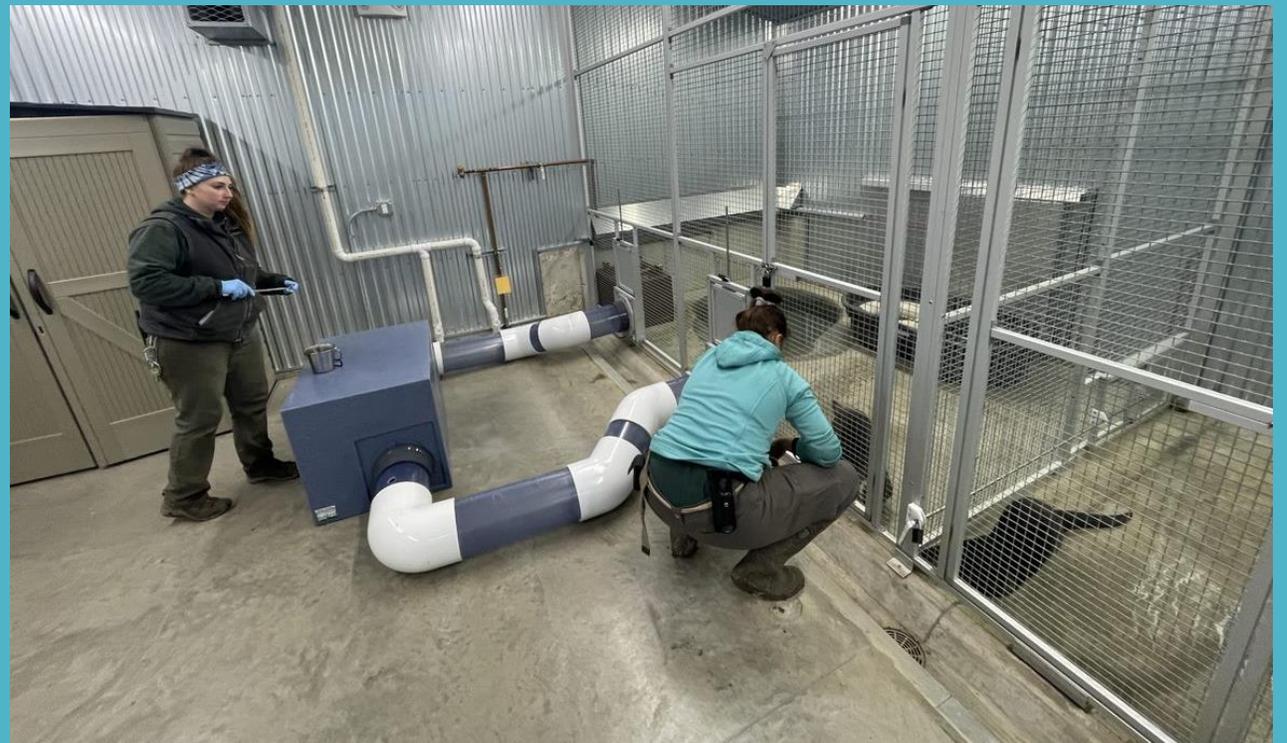
3 - Otter Travel Trek



The Training

Repetition builds confidence!









The guinea pigs...

Logistics

DAKOTA ZOO WILD ENCOUNTOURS

Tour	Description	# of Guests/Age	Time
African Penguins	Waddle we do without penguins? Have a meet and greet with one of the most endangered species of penguin in the world. Explore the unique personalities and adaptations of our penguin colony and discover what you can do to help! <i>(possible touch or fish feed - unannounced)</i>	Min 2, Max 6 (6yrs+)	~30min
River Otter	Build your own adventure! Otters are known to be playful and curious. Learn about their aquatic adaptations and habitat while getting a unique glimpse into the life of a river otter. <i>(possible fish feed - unannounced)</i>	Min 2, Max 6 (4yrs+)	~40min
North America	Elk, bears, and wolves oh my! Learn about the importance of healthy ecosystems and the role of herbivores, omnivores, and carnivores. What can you do to protect the species in your own backyard? <i>(possible bear feed - unannounced)</i>	Min 2, Max 8 (6yrs+)	~45min

Times/Days

Seasonal Times:

Summer Season (May-September) 4x/week each @ 1:30pm (Fri/Sat/Sun/Mon, one of each tour type each day at that time)

Winter Season (October-April) 2x/week each @ 1:30pm (Sat/Sun, one of each tour type available at that time)

Sign up a minimum of one week in advance.

Book your Wild EncounTOUR today!

Share an experience like no other with family and friends when you go behind the scenes at the Dakota Zoo. Get to know the animals up close and personal and see what goes into the care and conservation of these species.

Know Before You Go:

- All tours are walking tours. No transportation is provided.
- Some tours take place in temperature-controlled environments while others are entirely outside.

Wild EncounTOURS

Share an experience like no other with family and friends when you go behind the scenes at the Dakota Zoo. Get to know the animals up close and personal and see what goes into the care and conservation of these species.

Know Before You Book

- Tours are not guaranteed to be private unless your group fills the maximum capacity.
- All tours are walking tours. No transportation is provided.
- Some tours take place in temperature-controlled environments while others are entirely outside.
- Closed-toe shoes are required for all tours.
- Due to the unpredictability of animals, tour experiences may vary.
- All guests should be aware of zoo policies and must abide by staff instructions at all times.
- Each tour has a specific age requirement listed in the tour description.
- For safety reasons, children under 18 must be accompanied and monitored at all times by an adult.
- While all of our public spaces are fully accessible, some of the behind-the-scenes areas of the zoo program may not be. If there are any physical, cognitive, or behavioral needs within your group, please contact the Education Coordinator or Guest Service Manager at 701-223-7543 so our staff can provide reasonable accommodations.
- In compliance with best practices for zoo animal welfare, service animals are not permitted in behind-the-scenes areas.
- Tours are non-refundable. If it becomes necessary to reschedule your tour, please contact the Education Coordinator or Guest Service Manager at 701-223-7543 or educate@dakotazoo.org. Tours must be rescheduled within 30 days of cancellation. No refunds or rescheduling opportunities will be given for no-call/no-shows.
- The Dakota Zoo reserves the right to cancel any tour due to unforeseeable animal health, weather, or staffing issues. In case of such an event, we will contact you as soon as possible.**

Tours

North American River Otter

Build your own adventure! Otters are known to be playful and curious. Learn about their aquatic adaptations and habitat while getting a unique glimpse into the life of a river otter.

- Number of Guests:** Minimum of two; Maximum of six
- Duration:** Approximately 40 minutes
- Age Requirements:** Ages 6 and up
- Cost:** \$80 per member; \$90 per non-member

Wild EncounTOUR: North American River Otter Tour

General Information:

- Purpose: Provide *defining moments* and conservation education regarding North American River Otters.
- Arrive 10 minutes before the tour begins. Consider bringing the otter pelt from the education office or other applicable biofacts.
- Safety:
 - Liability waivers will be filled out at admission as the tour arrives.
 - Confirm with guest service staff that this has been completed for all participants before the tour begins.
 - All tour guests must have closed toed shoes.
 - Remind them of safety as often as necessary during the tour.
- No Behind the Scenes photos at this time. We want them to experience it through their own eyes, not through a lens/phone and keep the details of the tour private for others. This also helps the guests be more cognizant of safety. We will look at adding a staged photo opportunity in the future.**
- Introduce yourself, lay out any expectations you deem appropriate, smile, be positive, cater to your audience!

Messaging:

General Facts:

- 13 species of otters in the world.
- The North American river otter occurs in much of Canada and the United States. They are found year-round in North America.

Travel Trek:

- On land a river otter can run at speeds of up to 15 miles (24 kilometers) an hour—they can slide even faster.
- Their playful snow and mud sliding, tail chasing, water play, and snow burrowing activities also serve other purposes—they help strengthen social bonds and let young otters practice hunting techniques.
- Otters have strong limbs and a flexible spine that allows them to maneuver through tight spaces.
- Otters will push off their hind legs and land on their front legs when traversing the land. This is what is called "loping".
- Otters have also been known to slide on their bellies when moving across land.

Conservation:

- North American river otters are likely the most numerous of the otter species. Because they are at the top of their food chain, they have few predators. However, water pollution, uncontrolled trapping, and severe habitat loss have reduced the number of river otters.
- North American river otters were hunted and trapped extensively for their fur in the 19th and 20th centuries and are still hunted in some places. They were extirpated from portions of their range, but conservation and reintroduction efforts are helping populations to recover. However, habitat loss remains a significant threat.





Implement

Dakota Zoo Wild EncounTOUR: North American River Otter



Dakota Zoo · Published by Allison Malkowski · January 10 at 11:45 AM · 🌐

New Year, New Opportunity! 🎉

Join us at the zoo for a North American River Otter "Wild EncounTOUR" and get behind the scenes with Gary and Sudali our river otters! Otters are known to be playful and curious. Learn about their aquatic adaptations and habitat while getting a unique glimpse into the life of a river otter.

Share an experience like no other with family and friends when you go behind the scenes at the Dakota Zoo with our Wild EncounTOUR program. Get to know the animals up close and personal and see what goes into the care and conservation of these species. These new tours will be offered year round. Click the link below for details and how to schedule your tour. Keep checking back for additional behind the scenes experiences as we continue to build our "Wild EncounTOURS" program!

<https://www.dakotazoo.org/education/wild-encountours/>



See insights and ads Boost post

👍❤️ 180 24 comments 32 shares



Expand

Dakota Zoo Wild EncounTOUR: North American River Otter



Local Conservation Options (*including the public and game and fish*):

- River clean up
- Otter spotting and reporting

Post tour surveys for programming feedback as well as feelings toward action. Post email?

Options for changes to courses to keep tour new and exciting!

Thank You!

-Questions -



BREAK

Take this time to use the restroom, get a refreshment or snack, and clear your mind



Capacity Building Grant Presentation

Haley Hedstrom & Sarah Wilcox present their Capacity Building Grant project: Immersive Nature Experiences at the Lake Superior Zoo



IMMERSIVE NATURE EXPERIENCES

Haley Hedstrom, CEO
Sarah Wilcox, Education/Preschool Director





LAKE SUPERIOR ZOO



Duluth, Minnesota on the shores of Lake Superior



Founded in 1923 with one animal



16 acres of greenspace



100,000+ guests

Our mission is to provide close-up animal experiences that inspire connections with wildlife and action toward conservation in our region and around the world.

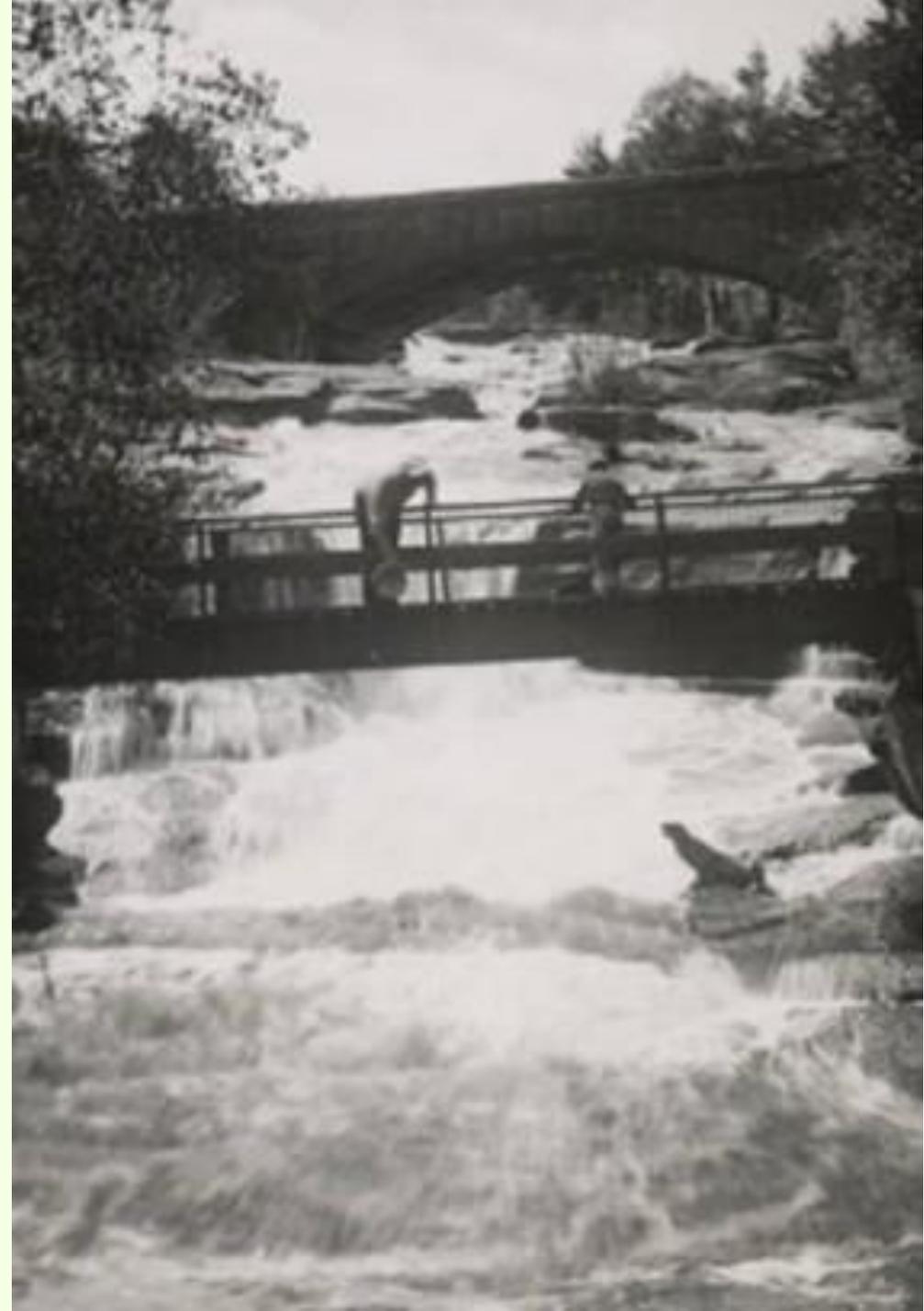
PLANS & OBJECTIVES

Background Topography Existing trail & flood

Collaborate with contractors, staff, and stakeholders to redevelop the Zoo's nature trail

Partner with contractors and staff to build a seasonal pavilion educational programs and guests.

Develop empathy-driven signage highlighting local flora and fauna, nature play benefits, and regional conservation issues.





P R O J E C T P R O C E S S

Stakeholder Engagement

Staff & Board

City of Duluth Partnership

Survey

Request for Proposals

Development

Onsite pre-bid meetings

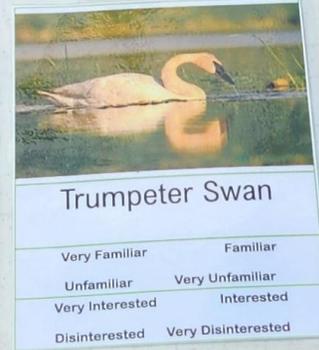
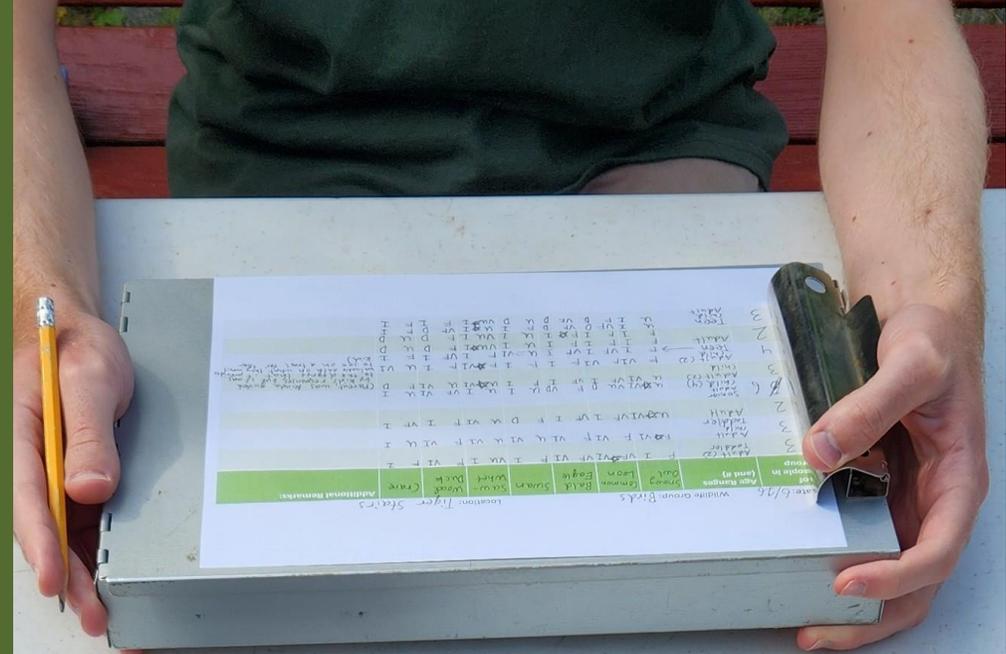
Submissions



PROJECT PROCESS : SIGNAGE

Research
Visitor surveys

	A	B	C	D	E	F
1		Topic				
2	Species	Winter Temps	(Co-)Dependence	Invasive/Non-native	Competition	Canopy/Understory
3	American Marten	X	X		X	X
4	Fisher	X	X		X	X
5	Northern Long-Eared Bat	X				X
6	Trumpeter Swan		X			
7	Northern Saw-Whet Owl*				X	X
8	Snowy Owl	X	X		X	
9	Lake Sturgeon			X		
10	Lake Whitefish	X		X		
11	Tullibee	X		X		
12	Firefly					X
13	Spruce Budworm	X			X	X
14	Dragonfly		X		X	
15	Labrador Tea	X	X	X		X
16	Running Clubmoss					X
17	Broadleaf Plantain	X		X		X
18	Tamarack	X	X		X	X
19	Paper Birch	X		X	X	X
20	Sugar Maple	X		X	X	X
21	Blanding's Turtle					X
22	Red-Bellied Snake	X	X		X	X
23	Wood Turtle		X		X	X
24	Spotted Salamander	X		X		X
25	Four-Toed Salamander ^A					X
26	X: Highly Impactful; X: Somewhat Impactful					
27						
28	Topic Explanations (All topics are meant to highlight conditions that are important aspects to consider when gauging t					
29						
30	Winter Temps: Many species rely on (or gauge seasonal times by) the typical conditions created by Minnesota's char					
31	MN's winters; in particular, we are faced with later freeze dates, sooner melt times, increased density of snowpack, an					
32	conservation efforts in MN.					



Design template



THINK ABOUT WHAT'S UNDERFOOT

LAKE SUPERIOR ZOO

Bakaan ingoji gaa-ondaadak

Broadleaf Plantain

*I'm Broadleaf or Common Plantain, also known as "White Man's Footstep." When white settlers moved across North America, they cleared areas for roads, fields and lawns, which are all good habitats for me—I followed "in their footsteps." Many plants that spread this way are invasive and harmful, but not me. I am **naturalized** because I don't crowd out other plants and I provide helpful benefits. Birds eat my seeds, and humans can add my leaves to salads or use them to dull the pain of insect bites.*

What lives on the forest floor?

The plants, logs, leaves, rocks, and other materials on the forest floor are as important as the trees above. Smaller wildlife have an easier time finding food and shelter when their habitats have a greater mix of features. There's so much more happening on a "messy" forest floor than on a "neat" green lawn.

Meskomisaded

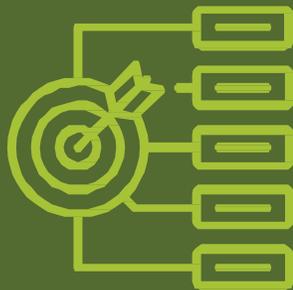
Northern Redbelly Snake

*Hello! You probably don't see me very often. Like most snakes in Minnesota, I'm shy and avoid humans whenever possible (plus I'm tiny, growing only 8 to 10 inches long). I live in areas near water and with plenty of leaf, wood, and rock cover, where I hunt slugs. In the winter, my friends and I live underground in **hibernacula** (winter shelters) to keep warm. You can build these around your house to give us and other snakes a home during the cold months!*

Waawaatesi

Firefly

*If you stay up on a summer night and look out at a dark forest or field, you may see the flashes of fireflies like me. Those flashes are signals that help us mate. Turning off lights at night and planting tall plants in your yard lets adult fireflies see each other's flashes and lay more eggs. Keeping leaf piles in your yard gives our **larvae** (baby fireflies) good places to rest and hunt. Aiding us during every stage of our life helps us keep making the night magical!*



Align with Objectives

LEAVE SNAGS STANDING

What forest animals
raise their young in
dead trees?



Apa

In the
during
natur
raise
Unfor
forest

SIGNAGE OBJECTIVE #1

Teach visitors
about local flora,
fauna, and
conservation
issues.



LEAVE SNAGS STANDING

What forest animals
raise their young in
dead trees?



Porcupine

Burrowing Owl

A healthy forest doesn't
only have big trees. Trees
of many different ages and
sizes work together to
create good habitat for
many creatures.



Blue Jay

Screech Owl

Snags (standing dead
trees) are important
because lots of species call
them home. They might
not look pretty, but by
leaving snags alone, you
help protect a hotspot of
activity in the forest.



Wababizhesi

American Marten

Hello from above! You'll often find martens like me climbing
in the treetops in search of prey. The large holes in snags
and other old trees are perfect for me to hunt, rest, and
have babies in. It would be rare to see me in Minnesota in
the 1930s, but as more forests have been protected, more
martens have returned. There are about 10,000 of us in
Minnesota today.



Wababizhesi

American Marten

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in the treetops in search of prey. The large holes in snags
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Minnesota today.

SLOW DOWN FOR SLOW ANIMALS

Why did the turtle
cross the road?



You
gra
ope
as
uns
rea
old.

SIGNAGE OBJECTIVE #2

Frame human
impacts in a
positive way --
what people can
do to help.



You can make roads less dangerous by slowing down when driving near water in the spring and summer, and by encouraging others to do the same.

PROMOTE PEST PREVENTION

What plants and animals are being impacted by pests?



Ma
Hello! I'
hatched
which a
area for
fir and
budworm
trees m

SIGNAGE OBJECTIVE #3

Introduce
species
using empathy
best practices.



Mashkiigwaatig

Tamarack

Have you ever seen a conifer tree with golden needles? That's me—I'm a Tamarack, the only needleleaf tree in Minnesota that loses needles in the fall. Many others find shelter or food thanks to me, like the Eastern Larch Beetle, who burrows under my bark to lay eggs. Warmer winters have allowed the beetles to lay more eggs than usual and infest me for longer. If you see me with reddish or tunnel-filled bark, please report it to the DNR to help map the beetle's spread.



As you walk and learn along this trail, please be mindful and curious about the human story here. We acknowledge that the Lake Superior Zoo resides on traditional, ancestral, and contemporary lands of Indigenous nations, most recently the Ojibwe people, and before them, the Dakota, Northern Cheyenne, and other Native peoples from time immemorial. Under the threat of violence, the Ojibwe communities in northern Minnesota signed the Treaty of 1854, which directed their forced resettlement from areas of great historical, spiritual, and personal significance to the system of Ojibwe reservations throughout the Great Lakes region. Today, having survived attempted genocide, Ojibwe and other Indigenous people continue to protect and practice their sovereignty and culture on these lands. Simultaneously, a lack of understanding or concern for Indigenous rights and cultures, along with purposefully hostile actions, pose serious threats to tribal communities. Decolonization and colonization are current, active processes that we all have a responsibility to be aware of and accountable for. The Lake Superior Zoo offers this land acknowledgment not as an isolated action but as a first step towards continuing to learn how to develop authentic relationships with local Indigenous communities and support their activities and values.

SIGNAGE OBJECTIVE #4

Incorporate
Indigenous
perspectives.



Squeaky-Voice Plant

Running Clubmoss

My name's confusing—I'm not a moss, but one tiny plant in the group **lycophytes** (we look like mini evergreens). Anishinaabe stories tell how we used to be greedy and smug trees that were turned into little plants as a reminder to be generous and humble. Some people pick us for wreaths and bouquets, but please don't do this. How we grow is complicated and takes a long time, so even taking a few of us can mean we won't grow in an area anymore.



SIGNAGE OBJECTIVE #5

Help visitors understand the value of allowing children to play in nature and how to do so safely and respectfully.



VISITOR SURVEY RESULTS

Process

QR code

Incentive - free red panda sticker

Highlights & Data

Trail and interpretive signs are having a positive impact on visitors





IMPACT ON EMPATHY

The children ask to stop along the trail to read the signs often.

They enjoy learning about the animals and looking for animal prints.

After watching a child hit a tree with a stick another child said, “That might hurt the tree and make it sad.”



After identifying mushrooms and other fungus in the fall, students were excited to show each other fungus they found and reminded each other to not step on or hurt the fungus.





Children have named favorite play spaces along the trail: *The Boulders, Apple Falls, The House, and Fern Forest.*

Repeated visits to these special places allow the children to form a deep connection with the land, which helps these children build empathy.

Our learning about nature has become so much more rich and authentic and the opportunities to foster empathy now happen daily.





FUTURE PLANS

Pavilion construction

Variances & permitting

Weather impacts

City partnership

New caribou exhibit

Vision development

Future opportunities



THANK YOU!

ACCREDITED BY THE
**ASSOCIATION
OF ZOOS &
AQUARIUMS**

**LAKE
SUPERIOR
ZOO**



ADVANCING
CONSERVATION
THROUGH
EMPATHY FOR
WILDLIFE



DEAI at YOUR level

Facilitated by Camoya Evans, Fernanda Mora, and Shanna Hillard of the Diversity, Equity, Accessibility, and Inclusion (DEAI) Committee



DEAI at YOUR level

- **BREAKOUT ROOM 1: Facilitator, Shanna Hillard**
 - If you and/or your organization is just starting a DEAI journey and want to learn more about how to start successful initiatives.
- **BREAKOUT ROOM 2: Facilitator, Fernanda Mora**
 - If you and/or your organization have started a DEAI journey and are looking to grow. You've read some books, attended webinars, or started DEAI trainings, but want to broaden the scope of what is possible at your organization. We can also open the conversation to learnings from any successes or missteps that have happened along the way.
- **BREAKOUT ROOM 3: Facilitator, Camoya Evans**
 - If you and/or your organization has been intentionally engaging in DEAI work for a while. You've implemented many successful initiatives, trainings, and are looking to find ways to truly embed DEAI principles throughout your organization. While successes are important to highlight, we can also discuss places for further growth and areas of needed improvement.

We will come back at ~12:20pm to do brief share-outs from each room.



Day 1 Closing

- **Thank you** all for attending Day 1!
- Tomorrow is going to be interactive, and discussion focused
 - Unconference Session (10:45-11:45am)
 - Planning for the Future (11:45am-12:20pm)

