FIELD TRIP ACTIVITY GUIDE

FOR LATE ELEMENTARY: GRADES 4TH-5TH

THEME: UNDERSTANDING ANIMAL BEHAVIOR

The theme for this activity guide focuses on understanding animal behavior, as a way for young learners to build empathy and compassion for wildlife. Henry Vilas Zoo recognizes empathy towards wildlife as an important building block for learning to take conservation action.

STANDARDS

Wisconsin Standards for Science (WSS) / Next Generation Science Standards (NGSS):

- LS1.A: Structure and Function
- LS1.B: Growth and Development of Organisms
- LS1.D: Information Processing

LEARNING OUTCOMES

Through participation in this field trip, students will be able to:

- Experience affective empathy towards animals
- Apply cognitive empathy towards animals
- Practice wildlife observation skills that increase chances of postive animal interaction

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FIELD TRIP POINTERS

Go slow! Do not expect to cover the entire zoo during your field trip. Students will have a more memorable experience by lingering longer at fewer exhibits.

Look for the Docents! The zoo often has Docents stationed at various exhibits who can help expand your discussions and tell stories that help students develop empathy for animals. Check the Zoo's website for more guidelines and recommendations for a successful field trip:

https://www.henryvilaszoo.gov/education/school-field-trip/

HOW TO USE THIS ACTIVITY GUIDE

This field trip guide presents five age-appropriate activities that may be completed in any order. Teachers and chaperones are encouraged to use the guide as a reference throughout the field trip, while allowing student-directed learning to occur. Students in grades 4-5 are developing investigation and analysis skills, which can be fostered through opportunities at the Zoo for careful observation and description. At this age, children begin to demonstrate a sense of personal responsibility toward others and their environment, and the Zoo is a perfect space for practicing responsible actions.

The icons on each page symbolize different best practices for developing empathy in children.



FRAMING EMPATHY



INCREASE KNOWLEDGE



ACTIVATING IMAGINATION



MODELING EMPATHY BEHAVIORS



PRACTICING BEHAVIORS



EXPERIENCE ANIMALS CLOSE UP



AREA: WISCONSIN HERITAGE ANIMAL: SANDHILL CRANE





GUIDING QUESTION:

Does the sandhill crane at the Zoo need the same things as a wild sandhill crane?

BACKGROUND:

One way to help children build empathy for wildlife is by discussing how to know what different animals need. At the Zoo, the zookeepers constantly talk about what the animals in their care need. The sandhill crane is a special example. In the wild, sandhill cranes live in small family groups, breeding with a single mate (often the same mate each year). Courtship rituals involve dancing, tossing sticks, and calling together in unison. Buckbeak, the crane living at the Zoo, however, does not relate to other sandhill cranes. At a young age, he imprinted on humans, meaning that he recognizes people – not other cranes - as being his family.

INSTRUCTIONS:

Pair students up and assign one to be the zookeeper and one to be the crane. In each round of this activity, they will act out their assigned roles. The zookeeper should act out providing food for the crane. (Hint: To know what sandhill cranes eat, read the poem!) The crane should act out its response to a human nearby. In round one, the cranes are imprinted on the humans. In round two, the cranes are not imprinted. How does the experience for human and bird differ in each case?

Meet Buckbeak!

Buckbeak is our male sandhill crane born in 2015. His favorite food is meal worms and his favorite activity is calling to the zoo trucks as they drive by.



LITERARY LINK

The Sand-Hill Crane Poem
by Mary Austin
Whenever the days are cool and clear,
The sand-hill crane goes walking
Across the field by the flashing weir*,
Slowly, solemnly stalking.
The little frogs in the tules** hear,
And jump for their lives if he comes near;
The fishes scuttle away in fear
When the sand-hill crane goes walking.

*A "weir" is "a low dam built across a river to raise the level of water upstream or regulate its flow." **A "tule" is a tall rush-like water plant.



AREA: WISCONSIN HERITAGE ANIMAL: AMERICAN BADGER



GUIDING QUESTION:

Are the badgers lively or listless today?

BACKGROUND:

Empathy for animals increases when children understand why animals behave a certain way. Badgers can be very active, digging with their strong front legs and claws. They catch most of their prey by digging, and can tunnel after prey with amazing speed. At other times, badgers are not at all active. In winter, they remain inactive for periods of about 30 hours at a time. This mini-hibernation is called torpor. During torpor, a badger's body temperature drops very low (48°F) and its heartbeat slows to about half the normal rate (dropping from 55 to 25 beats per minute).

INSTRUCTIONS:

Role-playing helps learners experience what it is like to be an animal and increases their empathy for it. Invite your students to role-play an active badger, digging for prey. What did they catch? How fast is their heart rate? (Measure it by counting beats for 30 seconds and multiplying by 2).

Then simulate winter and have the students show badger behavior during torpor. How long must they remain still to reduce their heart rate to nearly half what it was after the active phase?

HISTORY HIGHLIGHT

The nickname for Wisconsin as the "Badger State" comes from the early 1800's when mining lead was popular in the area. Instead of building houses, lead miners dug temporary caves into the hillsides to use for shelter. These caves were described as badger dens (also called setts), and the miners who lived in them as badgers.





AREA: HERPETARIUM ANIMAL: GREEN ANACONDA





GUIDING QUESTION:

Is this geen anaconda a mom or a dad?

BACKGROUND:

Finding similarities between an animal's experiences and our own helps foster empathy for wildlife. Remind the adults on your trip to model curiosity (or at least not fear) around snakes, as they are a common animal for phobias.

Your students probably know that most snakes lay eggs. Point out that boa species, such as the green anaconda, are ovoviviparous (pronounced oh-voh-vahy-**vip**-er-uhs), meaning they give birth to live young – just like human moms!

INSTRUCTIONS:

Intentionally using the pronoun "she" to talk about a female snake raises children's empathy towards the animal. Using "she", explain that the female's size determines how many offspring she will have and how big her babies will be. Larger anaconda moms give birth to more and larger baby anacondas. A very large green anaconda could have 50 baby snakes, each two - three feet long at birth. That's a lot of brothers and sisters! But, unlike human moms, mama anacondas do not raise their babies. As soon as they are born, baby anacondas can swim off on their own and don't spend time with their siblings or parents.

A female green anaconda can grow up to 17 feet in length. Have 3 or 4 students stand with their arms spread wide, fingertip to fingertip in a line, to represent the length of one full grown anaconda. How many anaconda mamas can your whole

group of students represent?

Look up to see a replica of a green anaconda that has recently swallowed a peccary (wild pig)! Do you think this model is a male or a female anaconda?

EXHIBIT ELEMENT





AREA: BARNS AREA ANIMAL: <u>BACTRIAN CAMFL</u>



GUIDING QUESTION:

Is it really too hot to trot?

BACKGROUND:

Most four-legged mammals move their opposite-side front and back legs together. A trotting horse, for example, moves this way.

A camel, on the other hand (or leg), moves both of its right legs together, then both of its left legs together, with a slow, swaying movement called pacing. Pacing is suitable for the hot, flat desert terrain where they live.

INSTRUCTIONS:

Mimicking an animal's behavior promotes empathy. Have students mimic the unique way a camel walks, bending over and using their arms as front legs.

A camel also walks with a digitigrade stance, meaning it walks on its toes. Humans normally have a plantigrade stance, with the soles of their feet on the ground. Can the students demonstrate digitigrade pacing (up on their tip-toes)? Camels are the only animal known to pace, but never trot. They can, however, gallop – where all four legs come off the ground. Involve the students in a game of digitigrade or plantigrade moving up and down on their tip-toes. Then gallop to the next exhibit!



CAREER CALL OUT

Zoos need animal keepers to take care of the fauna, but they also need plant keepers to take care of the flora! This job is called horticulturalist. Volunteer Master Gardeners helped the zoo's horticulturalists plant a special lily garden. Can you find all the animal names in the lily garden?



AREA: AVIARY

ANIMAL: BLUE GOLD MACAWS



GUIDING QUESTION:

How should we talk around a blue-and-gold macaw? What might it say to us?

BACKGROUND:

Physically modeling appropriate behaviors for students is important for teaching them how to behave with empathy in the free-flight aviary. Model how if you are calm and quiet in the aviary, you are more likely to observe the birds doing interesting things. Noisy, rambunctious visitors can cause the birds to hide. Ask students why they think the birds might want to hide? How would they feel if rambunctious visitors entered their home?

INSTRUCTIONS:

The aviary is a good place to experience connections with animals because the animals that live here may choose to interact with people. Enter the aviary quietly and look for the brightly colored blue-and-gold macaws. They might be bathing in the waterfall or climbing a tree, using their beaks as a "third foot" to grasp a branch.

Unlike the people trying to observe them, macaws are very noisy birds! The blue-and-gold macaw communicates through loud squawks and screams. But we should not scream back at them. They are actually known for their ability to mimic sounds and even words. Based on what the students see and hear in the aviary, what words do they think the macaws might have learned to say? After exiting the aviary, invite every student to "squawk" one word they think a blue-and-gold macaw at the zoo might mimic from its surroundings.



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