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.

S T A N D A R D S

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.





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.







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?

EXHIBIT ELEMENT

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?







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?





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-andgold 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.





