A field trip at the Columbus Zoo and Aquarium is a great way to extend the walls of your classroom and apply the concepts you are teaching your students. With a little pre-planning, you can make this an experience your students will appreciate for a lifetime. Before diving into the materials on the next few pages, here are some tips to make your field trip experience even more successful:

- **Prepare students for the trip**: This packet contains an activity you can do with your students before your field trip.
- **Prepare chaperones for the trip**: The activities are designed to be led by chaperones with varying experience levels. We recommend you have the chaperones familiarize themselves with the materials before the field trip.
- **Bring it all back together**: After your field trip, reinforce the concepts the students learned by doing the final activity in the packet.

The purpose of this self-guided field trip activity packet is to guide students as they explore wildlife and wild places through nature play. We encourage teachers to utilize all five activities chronologically to provide students a complete learning experience centered around a meaningful field trip.

**5E Lesson Plan**
The self-guided field trip activities are structured around the 5E Lesson Plan model, commonly used in science education:

- **Engage** - sparking interest in a topic
- **Explore** - student-led investigation of concepts
- **Explain** - adult-led clarification of concepts
- **Extend** - student-led application of concepts
- **Evaluate** - opportunity to demonstrate understanding of concepts
Outcome and Objectives

This self-guided field trip is designed to meet the following behavioral outcome:
Fostering a lifelong connection to nature.

By participating in this program, students will be able to:

• Feel curious about the natural world
• Feel comfortable playing in nature
• Learn skills for exploring the natural world through observation
• Use all their senses to explore the natural world
• Ask questions based on what they observe

Ohio State Science Standards

Each of the activities in this self-guided field trip activity packet addresses certain components of the Ohio State Science Standards. When used in conjunction with other science-based learning experiences, the activities will help classroom teachers achieve the following Ohio State Science Standards with their students:

LS.K2.1c Identify a living thing.
LS.K2.1b Identify a living thing and a nonliving thing.
LS.K2.1a Sort living and nonliving things.
LS.K2.3c Identify a source of food.
LS.K2.3b Identify the basic needs of plants and animals.
LS.K2.3a Describe food sources for a variety of animals.
LS.K2.4c Identify an environmental resource.
LS.K2.4b Match environmental resources needed for a specific thing.
LS.K2.5c Match an animal to its environment.
LS.K2.5b Identify how an animal has changed an environment.
LS.K2.5a Describe the effect(s) of the environmental change(s) by an animal.

And don’t forget to look for Zoo volunteers throughout your field trip! They have a wealth of knowledge and are always happy to answer questions and share their love of the Zoo and our animals.
Better Academic Performance
Learning in natural environments can:

**Boost Performance**
in reading, writing, math, science and social studies.

**Enhance**
Creativity, critical thinking and problem solving.

**Enhanced Attention**
Spending time in nature can help children focus their attention:

**Increased Focus and Attention**

**Decreased ADHD Symptoms**

Seeing nature from school buildings can foster academic success.

Increased Engagement and Enthusiasm
Exploration and discovery through outdoor experience can promote motivation to learn.

**Increased Enthusiasm for Learning**

**Greater Engagement with Learning**

Improved Behavior
Nature-based learning is associated with reduced aggression and fewer discipline problems.

**More Impulse Control**

**Less Disruptive Behavior**

*adapted from Children and Nature Network*
### SUGGESTED SEQUENCE OF ACTIVITIES TO SUPPORT A SELF-GUIDED FIELD TRIP FOCUSED ON NATURE PLAY.

<table>
<thead>
<tr>
<th>5 STEPS TO A MEANINGFUL FIELD TRIP</th>
<th>DESCRIPTION OF ACTIVITY</th>
<th>ESTIMATED TIME</th>
<th>MATERIALS NEEDED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENGAGE</strong></td>
<td>Classroom or Schoolyard Nature Search: Organize a scavenger hunt for natural objects.</td>
<td>10-20 minutes</td>
<td>“Can You Find?” Scavenger Hunt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Crayons</td>
</tr>
<tr>
<td><strong>EXPLORE</strong></td>
<td>MY HOUSE Nature Search: Direct students to search for the hidden objects inside My House while they explore the space.</td>
<td>10-20 minutes</td>
<td>Nature Search Cards</td>
</tr>
<tr>
<td><strong>EXPLAIN</strong></td>
<td>Using Our Senses for Observation: Explain that looking, listening and touching are all ways to observe nature.</td>
<td>5 minutes</td>
<td></td>
</tr>
<tr>
<td><strong>EXTEND</strong></td>
<td>Unstructured Outdoor Play in Nature: Play a loose version of I Spy to practice observation skills in nature.</td>
<td>15-30 minutes</td>
<td></td>
</tr>
<tr>
<td><strong>EVALUATE</strong></td>
<td>Loose Parts Play: Bring moveable materials from nature into the classroom for students to create a mini-habitat for an animal.</td>
<td>20-60 minutes</td>
<td>Loose parts from nature Plastic animals</td>
</tr>
</tbody>
</table>
SCAVENGER HUNT

WHAT?
Scavenger hunt for items found in nature

WHERE?
In your classroom or on school grounds

WHEN?
Prior to the Zoo field trip

WHY?
To engage students in the process of observation and to provide them with an example of what they will do during the Zoo field trip

HOW?
Use the Can you Find? scavenger hunt included on the next page, or make one specific to your school yard or classroom, using words or pictures or both. You may choose to bring natural materials into the classroom for this activity.

GOOD TO KNOW!
All living things need food, water, shelter, and space. Animals get food by eating plants and/or other animals. They drink water from ponds, lakes, rivers, puddles and dew drops. Animals find shelter in places where they can be safe from predators and bad weather, like in trees or logs, under rocks or even underground. The space they need might be small or large, depending on the type of animal. Plants are living, too; they get their “food” from the sun’s energy. They use roots to soak up rain water in the soil. Plants find shelter under larger plants, behind rocks and by extending their roots deep underground. The space they need depends on how big they’ll grow.

EXTENSION ACTIVITY
Circle the items on the scavenger hunt that are living.
- What do these living things have in common?
- Do all living things move?
- Do all living things eat?
- How are the non-living items important to the living ones?
Can you find?

See how many items you can find. Remember to look, but don’t pick up or disturb the habitats. Which of the non-living items provide shelter to the living ones?

<table>
<thead>
<tr>
<th>Flower</th>
<th>Tree taller than your teacher</th>
<th>Leaf</th>
<th>Feather</th>
</tr>
</thead>
<tbody>
<tr>
<td>Something prickly</td>
<td>Something fluffy</td>
<td>Something smooth</td>
<td>Something a squirrel might eat</td>
</tr>
<tr>
<td>Insect</td>
<td>Rock</td>
<td>Stick</td>
<td>Bird</td>
</tr>
<tr>
<td>Place where a spider could live</td>
<td>Hole in the ground</td>
<td>Place where a puddle could form</td>
<td>Paw print</td>
</tr>
<tr>
<td>Something straight</td>
<td>Something curly</td>
<td>Something that makes noise</td>
<td>Something you think is beautiful</td>
</tr>
</tbody>
</table>
**WHAT?**  
Scavenger hunt for elements of nature items featured inside My House

**WHERE?**  
Inside the My House area at Columbus Zoo and Aquarium

**WHEN?**  
During the Zoo field trip

**WHY?**  
To explore the area and observe details of natural features

**HOW?**  
Lead students through My House, looking for items listed on the Nature Search card included on the next page.

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**GOOD TO KNOW!**

My House at The Columbus Zoo and Aquarium is located in Habitat Hollow, which includes My House, My Backyard and My Barn, in the North American region of the Zoo. At Habitat Hollow children can explore everything that goes into making a habitat, and which habitats can be found in Ohio. Created from recycled materials and designed as a magical storybook place about wildlife and wild places, colorful, interactive habitats engage visitors, ages two to ten. Children may jump, climb, crawl and tumble as they explore the beauty of the marsh, forest and prairie habitats housed within My House. Outside of My House, Habitat Hollow offers a real prairie, wetland and forest habitat full of Ohio’s native species. The path outside of My House ends at My Barn, where guests can have hands-on interactions with the many animals that call My Barn home. Food. Water. Shelter. Space. Together, these four things make a habitat. Without all four in place, no animal will be able to live.
<table>
<thead>
<tr>
<th>Log</th>
<th>Butterfly</th>
<th>Red-Winged Blackbird</th>
<th>Leaf with Jagged Edge</th>
<th>Rock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mushroom</td>
<td>Fish in a Pond</td>
<td>Squirrel</td>
<td>Insect</td>
<td>Spider Web</td>
</tr>
<tr>
<td>Leaf with Smooth Edge</td>
<td>Canada Goose</td>
<td>Frog</td>
<td>Leaf Litter</td>
<td>Chipmunk</td>
</tr>
<tr>
<td>Cattails</td>
<td>Bird in a Tree</td>
<td>Pond</td>
<td>Dragonfly</td>
<td>Tall Tree</td>
</tr>
<tr>
<td>Turtle</td>
<td>Flowers</td>
<td>Bird Nest</td>
<td>Tall Grasses</td>
<td>Ants</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

**Nature Search Card**
Explain

**USING OUR SENSES**

**Grades K-2**

**At Zoo**

**WHAT?**
Explanation of how to use senses of sight, hearing and touch to observe details in nature

**WHERE?**
In the My Backyard space, located behind My House at the Columbus Zoo and Aquarium

**WHEN?**
During the Zoo field trip

**WHY?**
To provide the basis for the next activity, where students are expected to use observation skills to participate in an I SPY game

**HOW?**
1. Direct students to find something around them that is green.
2. Next, direct students to close their eyes and raise their hands when they hear the sound of water. Together, identify the source of the water sound.
3. Finally, direct students to find something that feels smooth and sit next to it.

With each step, applaud the students’ ability to use their senses when exploring nature.

**GOOD TO KNOW!**
The amount of food, water, shelter and space available for living things is constantly changing. The amounts of each resource may change naturally throughout different seasons. For example, in winter, leaves are missing from trees and snow covers a lot of the ground, making it harder for animals to find food. The sun’s energy is less strong and available for fewer hours each day, making it harder for plants to make food. Sometimes changes occur because of unnatural causes, such as human activity. When new roads, businesses or homes are built on land that used to provide food, water, or shelter to living things, then the plants and animals in that space need to find those resources elsewhere to survive.

**EXTENSION ACTIVITY**
- Which of the green things provide food for animals? Which provide shelter?
- What animals do you think drink from the water you heard?
- Did anyone find a smooth item that could be food for an animal? That could capture water? That could be shelter?
WHERE?
Anywhere at the Columbus Zoo and Aquarium where your group can comfortably gather and observe natural elements
- **North America**—specifically moose, beaver, eagle habitats
- **Congo Expedition**—specifically mandrill and okapi habitats
- **Australia and Islands**—inside the aviary
- **Asia Quest**—inside tiger hut

WHEN?
During the Zoo field trip

WHY?
To allow students an opportunity to use their senses for observing details in nature

HOW?
Facilitate the I SPY game, but keep it relatively unstructured. Natural elements that can readily be spied in most of the recommended habitat areas include:
- Nest-building material
- Leaves
- Rocks
- Things that are wet
- *I wonder why...?*
- *What will we discover if...?*
- *What happens when...?*

Encourage students to ask questions based on their own observations. Instead of providing specific answers to kids’ questions, respond with additional questions and prompts to keep exploring.

GOOD TO KNOW!
At the Columbus Zoo and Aquarium, animal care specialists make sure the animals have all the food, water, shelter and space they need. At home we can help provide food, water, shelter and space for wildlife by growing native plants, setting out bird feeders and bird baths, leaving snags (dead trees) standing, accumulating brush piles and keeping our wild spaces free of trash.

EXTENSION ACTIVITY
Look into the animal habitats to spy specific examples of food, water and shelter for each species. Help students read the signs to find out what kinds of food an animal eats.
Creative play using loose parts to construct a mini-habitat for a plastic animal figurine

At school

After the Zoo field trip

To assess students’ ability to ask questions based on observations of natural materials

Instruct students in small groups to create a home for an animal using a variety of natural materials. As they construct, ask them to point out details of their design. Listen for questions they ask each other about the materials they choose and how they are assembled.

Loose parts simply means moveable materials that children can use in their play. Examples of loose parts from nature include:

- stones
- moss
- gravel
- shells
- pine cones
- seedpods
- twigs
- feathers
- leaves
- acorns

**EXTENSION ACTIVITY**

After constructing the habitat, students should identify sources of food, water and shelter for their animal.