Illinois Department of Natural Resources Division of Education

Field Trip Pack Instructions and Correlations Sheet

Thank you for borrowing and using a *Field Trip Pack* from the Illinois Department of Natural Resources! We hope that you and your students will enjoy your time spent observing and interacting with nature.

Please read the following information regarding this *Field Trip Pack*.

- 1. When you pick up the pack from the lending site, please make sure that all of the components shown on the *Content Checklist* are included. If anything is missing, please immediately report it to the staff members at the lending location.
- 2. All of the pack contents are meant to be used. You will find some suggested uses for them listed below. Do not be limited by these suggestions, however.
- 3. Please clean and dry any of the items that get muddy or dirty during use.
- 4. Before returning the pack, please use the *Content Checklist* again to help you determine if you have returned all of the items to the pack.
- 5. If something should be broken or damaged while your students are using the pack, please tell the staff at the lending location about it when you return the pack.

What can we do with...

- an aluminum pan? The pan can be used in conjunction with the dip net, trowel or the sand sieve. Remember to only leave organisms in the pan for a short time and then return them to the place where you captured them. The pan can also be used to reflect sunlight to alert others of your location.
 - If you use the dip net to collect aquatic life forms, you can place them in the pan to help you see them better. Also include some water from where the organisms were living to give them a supply of oxygen and to allow them to swim freely.
 - The trowel can scoop up sand, soil or leaf litter that can be placed in the pan for examination.
 - The sand sieve will help children sort sand, soil or leaf litter by size and contents. Place the pan under the sieve. Add material to the sieve, and then gently shake it. Use the magnifying glasses and forceps to help you find tiny creatures and objects.
- a field guide? Field guides contain information and images that can be used to help you and your students to prepare for the trip. By allowing children to look through the field guides in advance of the trip, they can become familiar with some of the animals, plants and physical features that they might encounter on the trip. While on the field trip, they are a quick reference tool for you to use.

- *a bird call?* The bird call can be used to attract small birds for the children to see and hear. For the most success, the group should remain quiet without moving much. Use the binoculars to watch the birds.
- *a Bird Song Identiflyer?* Play the songs of some of the local birds before you go on the field trip. Listen for them when you are outdoors. Use it to help you identify other bird songs that you hear. Many birds are more likely to be heard than seen.
- **binoculars?** Binoculars aid our ability to see distant objects in more detail. They can be used on animate or inanimate objects.
- *a compass?* Use the compass to teach about directions. It can also help you orient yourself on the field trip.
- a dip net? Small aquatic creatures are fascinating to watch. If you have access to a pond, stream or water garden, you can scoop up a new realm of organisms for children to explore. Use the aluminum pan, magnifying glasses and forceps to assist your search.
- forceps? This simple tool can be used to help sort small organisms and objects.
- an insect viewing cube? Carefully place a small insect or other invertebrate in this chamber then close the lid. Children can safely view the animal close up. Remember to only leave it in the cube for a short time and then return the animal to the place where you captured it.
- a magnifying glass? Explore the world in a new way by magnifying objects. What can you see that you couldn't see before?
- a measuring tape? Use the tape to measure the height of plants, the distance between tracks, the diameter of a tree, the length of a shadow, the distance a bullfrog can jump and so much more.
- an observation container with a grid? Like the insect viewing cube, you can enclose a small invertebrate and view it safely. You can also look through the attached magnifier to see it bigger. The grid helps you to determine comparative size relationships between organisms. Remember to only leave the animal inside the container for a short time and then return it to the place where you captured it.
- a plant press? Leaves and flowers can be pressed so that they retain their shape for further study later. Only take a single leaf or flower from each type of plant. See the note below regarding collecting. Remove the two straps and the top board. Place the white pages between the cardboard sheets so that you have a stack of alternating cardboard and white pages. Place a leaf or flower on top of any or all of the white pages. Straighten the stack, and then put the board back on top. Now put the two straps around the boards and pull tight. When your field trip is over, take the leaves/flowers out of the press. You can press them longer by enclosing them in newspaper sheets and placing heavy books on them.
- a Port-a-Bug container? Like the other observation containers, the Port-a-Bug allows
 the children to view small invertebrates safely. This container will accommodate larger
 or more delicate animals, like butterflies. Remember to only leave the animal inside the
 container for a short time and then return it to the place where you captured it.
- a sand sieve? Discover the myriads of small objects and creatures that you can separate from sand, soil and leaf litter by using a sieve. Catch them in the aluminum pan, view them with the magnifiers and observation containers and manipulate them with the forceps. Remember to only leave organisms inside the container for a short time and then return them to the place where you captured them.
- a trowel? The trowel can be used for digging in sand, soil or leaf litter.

PLEASE NOTE: You must obtain permission from the property owner and follow site and other regulations before collecting anything! Refer to the *Wildlife in the Classroom* document included in this pack for more information.

Correlations to Learning Standards

Taking children on an outdoor field trip can help you accomplish several Illinois Early Learning and Development Standards and Next Generation Science Standards with your students. Some of the most relevant ones are listed below. Do not be limited by this list, however. All subject areas can be incorporated into a field trip. It's a great way to teach in an interdisciplinary manner.

Illinois Early Learning and Development Standards

	Mathematics
6.A.ECa	Count with understanding and recognize "how many" in small sets up to 5.
6.A.ECd	Connect numbers to quantities they represent using physical models and informal representations.
7.A.ECb	Use nonstandard units to measure attributes such as length and capacity.
7.C.ECa	With teacher assistance, explore use of measuring tools that use standard units to measure objects and quantities that are meaningful to children.
8.A.ECa	Sort, order, compare and describe objects according to characteristics or attribute(s).
9.B.ECa	Show understanding of location and ordinal position.
10.A.ECa	With teacher assistance, come up with meaningful questions that can be answered through gathering information.
10.A.ECb	Gather data about themselves and their surroundings to answer meaningful questions.

Science			
11.A.ECa	Express wonder and curiosity about their world by asking questions, solving problems and		
designing things.			
11.A.ECc	Plan and carry out simple investigations.		
11.A.ECd	Collect, describe, compare and record information by describing, talking and thinking about what		
happened during an investigation.			
12.A.ECa	Observe, investigate, describe and categorize living things.		
12.A.ECb	Show an awareness of changes that occur in oneself and the environment.		
12.B.ECa	Describe and compare basic needs of living things.		
12.B.ECb	Show respect for living things.		
12.E.ECa	Observe and describe characteristics of earth, water and air.		
12.E.ECb	Participate in discussions about simple ways to take care of the environment.		
12.F.ECa	Observe and discuss changes in weather and seasons using common vocabulary.		
13.A.ECa	Begin to understand basic safety practices one must follow when exploring and		
	engaging in science and engineering investigations.		

Next Generation Science Standards - Grades Kindergarten through Three

13.B.ECa

13.B.ECb

Next deficiation Science Standards — Grades Kindergarten tillough Tillee		
K-LS1-1	Use observations to describe patterns of what plants and animals need to survive.	
K-ESS2-2	Construct an argument supported by evidence for how plants and animals can change	
	the environment to meet their needs.	
K-ESS3-3	Communicate solutions that will reduce the impact of humans on the land, water, air	
	and/or other living things in their local environment.	

Become familiar with technological tools that can aid in scientific inquiry.

Use nonstandard and standard scientific tools for investigation.

1-LS1-1	Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow and meet their needs.
1-LS3-1	Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.
2-LS2-2	Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.
2-LS4-1	Make observations of plants and animals to compare the diversity of life in different habitats.
3-LS2-1	Construct an argument that some animals form groups that help members survive.
3-LS4-3	Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well and some cannot survive at all.

