# Nurturing Nature Inside and Outside the Early Childhood Classroom

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#### **Nature Curriculum Ideas:**

In the following pages there is a simple introduction to a nature curriculum that includes weekly outdoor nature lessons and corresponding materials available for use indoors. There is an introductory lesson on observing nature and then lessons on a variety of nature topics. The lessons are meant to be cumulative but self-contained into weekly lessons. As always, we strive to follow the child and in these whole group lessons, often information needs to be paired down and sometimes extended over a two-week period.

Most importantly, keep in mind the aim of these lessons is to inspire awe in nature and all of its elements, to foster the children's interest in and connection to nature and also learn about observing, classifying and identifying elements of the natural world.

Following the outdoor lesson there should be materials available inside that correspond to the lesson topic. Ideally these indoor materials will be of nature that can be found locally. At this time other outdoor activities can be introduced for use at recess or other outdoor times. Once the children have had many outdoor lessons and experiences working with the materials indoors a variety of activities and projects can be introduced. These typically work well for the older students but can be adapted for younger students.

# **Introductory Lesson**

#### **Materials:**

• Space outdoors to gather in a circle (sitting or standing)

### **Presentation:**

- 1. Prepare for outdoor lesson with a short introduction to group while indoors. Inform children: "We are going to be learning about nature each week during our outdoor lesson and then new materials will be available indoors for you to work on as well." Have a procedure in place to get ready to go outside and share this with the children.
- 2. Walk outside; find place to sit or stand in a circle that can be used each week.
- 3. Introduce weekly outdoor lessons by going over procedures, i.e. the day and time of the lesson, the location we go to each week, how the lessons looks.
- 4. Introduce animal senses pausing to observe for a few moments before introducing next (owl eyes, deer ears, dog nose, raccoon touch). Really emphasize that while observing no matter what sense that it's good to be very quiet.
- 5. Allow each child to share an observation.
- 6. After each child has shared that desires to, introduce the walk through the woods (or other natural space, large or small) and how to observe during walk.
- 7. Finish by walking through woods and modeling all observation techniques.
- 8. Return to classroom.

# **Lessons Following Introduction Materials:**

• Space outdoors to gather in a circle

#### **Presentation:**

- 1. Walk outside, return to observation/lesson location.
- 2. Review animal senses, modeling each one. (Model observation of any previous lessons)
- 3. Allow children to share observations if desired.
- 4. Introduce new lesson. Talk of the characteristics of lesson, pull examples from the children's own observations that they just shared.
- 5. Invite children to share anything further they observed.
- 6. Highlight a few items that are easy to observe nearby and relate to the lesson.
- 7. Finish by walking through woods and modeling all observation techniques to find items that connect to the lesson.
- 8. Return to classroom.

**Variations and Extensions:** All lessons following the basic observation lesson are variations and extensions. They each build on the last lesson but allow for enough information to be given in each lesson so that they are relevant and interesting for all children.

- Observation (animal senses)
- Living vs. non-living
- Plants vs. animals
- Parts of a tree
- Deciduous vs. coniferous trees
- Parts of a leaf
- Why leaves change in the fall
- Parts of a flower
- Parts of a root
- Parts of a twig
- ID trees by leaf, twig, outline
- ID leaves by shape
- ID flowers

- Season change to Fall/Winter/Spring/Summer
- Measure precipitation (separate lesson for each season)
- Land/Air/Water
- Local geography with map making
- ID animals by animal tracks
- Parts of different animals connect back to pets in the classroom
- Parts of worms
- Parts of insects (butterflies, ants, ladybugs)
- Life cycle of various animals and insects (raise caterpillars to release outside, find ladybug pupa, etc.)

# **Recess/Outdoor Materials Lesson**

#### **Materials:**

- Small to medium basket or tub that can be carried outside
- 5-10 Flip books, Field Guides etc.
- Small box of colored pencils
- Small booklets for children to use as nature journals

#### **Presentation:**

- 1. Gather items for recess basket, beginning with just 2 3 items.
- 2. Gather children for large group lesson either before going to recess or just outside before they begin to play. Share with them that these are materials for them to use while at recess, that they can continue learning and exploring about nature while playing at recess.
- 3. Show how the flip books work (find item that is pictured, or something similar).
- 4. Show how each material works.
- 5. Allow children to use independently, in small groups or larger groups. They should have as much freedom as possible to explore, as they like.
- 6. Adults can also model this observation during recess with a small group of children.
- 7. Have basket or tub in easily accessible location outdoors so children can return materials and use freely throughout recess.
- 8. Gather materials before going inside. Also, have designated location for materials indoors and encourage children to take responsibility to care for items.

#### Variations and Extensions:

- Flip books to find trees, flowers, leaves, colors shapes, animals in outdoor space
- Bird, tree, plant, insect etc. ID books or ID sheet
- Nature journals for independent drawing of what observe
- Black fabric/paper to catch and observe snowflakes
- Magnifying glasses
- A jar to catch insects to observe and then release when finished
- If you have a camera for children to use, or this can be done with adult being guided by the child.
  - Take weekly photo of a tree or other natural space to watch the changes with the seasons
  - Take several photos in each season to make your own seasons sorting work

## **Other Nature Activities and Projects:**

- Take weekly photo of a tree or other natural space to watch the changes with the seasons
- Take several photos in each season to make your own seasons sorting work
- Make story starter cards, matching cards, parts of flower/leaf, tree from pictures taken during outdoor lessons.
- Make an ant farm in a large mason jar
- Raise caterpillars to butterflies
- Make a ladybug house
- Start seedlings indoors to plant in garden in the spring
- Get a variety of tree cookies and learn how to tell age of tree by counting rings, also measuring rings to determine if it was a dry or wet year
- Have a variety of field guides to introduce children to botany and zoology have fun
  with the field guides by having child find something that begins with their initial,
  choose something to research
- Forest find Have children find or adult bring in a very interesting object from the outdoors to observe indoors - can write or draw object, connect it with "I wonder...."
- Leaf litter investigation Collect leaf litter in the fall and sort and classify living and non-living elements, possible begin classifying insects found
- Flower dissection Think about growing flowers that are good for flower dissection with clearly separated parts
- Owl pellet dissection Use tweezers and tongs, have charts of animals commonly found in owl pellets
- Model building of local areas
- Measuring precipitation
- Set up worm bin
- Set up composting bin for outdoors
- Design Garden Plot able to include many elements of outdoor lessons into the garden, guide these connections
- Project Ideas (cumulative after several lessons)
  - o Skits about information learned over several outdoor lessons
  - Creation of Food Webs/Chains
  - Creation of models or dioramas of local area for geography and weather
  - o Set up recycling/composting/landfill waste sorting for another classroom
  - o Do a waste audit
  - Set up garden plot
  - Have a garden tour where students teach visitors about all of the things in the garden
- Invite nature centers, forest preserve or other representatives to come in to talk about elements of nature.
- Go on fieldtrips to local nature preserves; enjoy the elements of nature in your local community.

#### **Book Resource List**

## **Botany:**

The Dandelion Seed by Joseph Anthony

Flowers (also Leaves, Seeds, Roots, Stems) by Melanie Mitchell

The Giant Turnip by Aleksei Tolstoy and Niamh Sharkey

A Log's Life by Wendy Pfeffer

In a Nutshell by Joseph Anthony

Seeds by Ken Robbins

Why Do Leaves Change Color? By Betsy Maestro

## Zoology:

Barn Owl by Sally Tagholm

An Egg is Quiet by Dianna Hutts Aston

Owl Moon by Jane Yolen

Wiggling Worms at Work by Wendy Pfeffer

What is a Fish? (also Reptile, Bird, Mammal, Insect and Amphibian) by Lola M. Schaefer

#### **Other Nature:**

Color Me a Rhyme by Jane Yolen

Everybody Needs a Rock by Byrd Baylor

If You Find a Rock by Peggy Christian

Snowballs by Lois Ehlert

White Snow, Bright Snow by Alvin Tresselt

#### For Adults:

15 Minutes Outside: 365 Ways to Get Out of the House and Connect with Your Kids by

Rebecca P. Cohen

Beauty Muse: Painting in Communion with Nature by Lisa Lipsett

Coyote's Guide to Connecting with Nature by Jon Young, Ellen Haas, Evan McGown

Earth to Earth by Martin Hill

Last Child in the Woods by Richard Louv

Nature's Playground by Fiona Danks, Jo Schofield

Nature Kindergartens by Claire Warden

Sharing Nature with Children by Joseph Cornell

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