



# Helping Children Value and Appreciate Nature

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by Janis R. Bullock

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Children are naturally curious about their world and enjoy exploring their surroundings. Because of their inquiring minds, children are eager to know why things are the way they are and will ask many questions about their immediate environment. On a recent nature walk children could be heard asking, “I wonder what is under the rocks?” “What is that bird eating?” “Does that flower smell?” and “Why are the ants fighting?” Childhood is the time to encourage and nurture early interests in nature.

By incorporating nature education into the curriculum, teachers can help children find answers to their many questions. They can help to develop

inquiring minds, curiosity, and wonder. The hope is that children who experience nature education will develop positive attitudes about themselves, natural life, and the earth. Because we face so many environmental crises, the study of nature is even more critical today.

Because nature study concerns itself with living organisms (*Bridging Early Childhood and Nature Education*, 1991), its purpose is to introduce

children to living things and to support their curiosity, exploration, and understanding. The intent is to encourage in children an interest in the diversity, beauty, and joy of natural life and an understanding of the importance of the interrelationship of living things. Such topics as weather, streams, mountains, rocks, and stars can be included as supporting information within the context of the settings being studied.

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## What Is the Value of Nature Education?

Early childhood educators and naturalists (*Bridging Early Childhood and Nature Education*, 1991) have identified five areas that support the value of nature education in the development of young children:

1. Nature education provides an important foundation of experiences and assists children in making sense of their world. In order to develop an appreciation of nature children need to engage in many repeated and varied opportunities over periods of time all year long. They need time to experience, explore, and process information in order to get beyond surface-level understanding.

2. Exploring nature provides children with many opportunities that transcend language and race. All children can come to appreciate the beauty, wonder, and common experiences provided by nature. Regardless of the area in which children live, they can learn about events relevant to their surroundings.

3. Experiences with nature can provide the real-life context for children's books as well as for other activities. Children's books and classroom activities often focus on household pets, farm animals, and animals in the wild. Experiences with nature can help to reinforce concepts of great interest to children and can broaden the context of their learning.

4. Experiences with nature can help to stimulate children's own natural curiosity about their world.

5. Experiences with nature can help children to develop a respect for living things. Children who come to appreciate living things and understand the importance of the relationships among them will be less likely to hurt or destroy them.

## What Are Some Goals of Nature Education?

When planning nature experiences teachers need to ask themselves some fundamental questions. What are my goals? What do I hope the children will gain from the experience? How will the experience cover several areas of the curriculum? Selecting some broad goals is necessary because it re-

quires that teachers think about what it is that they want children to learn (Hendrick, 1990).

Some goals for nature education are:

- to develop respect for and appreciation of all forms of nature
- to understand the relationships between habitats and humans
- to learn facts that can be used for thinking and reasoning skills
- to become observers of the environment
- to use the senses to learn about the environment
- to learn about new interests and areas in the child's immediate environment
- to ask questions, to explore, to discover, and to have fun
- to appreciate the beauty found in nature
- to learn to overcome any fears that may have been acquired
- to learn to be cautious about nature when necessary.

## What Can Teachers Do?

It is well known that young children learn best by interacting directly with their environment through relevant, concrete hands-on experiences, and by having rich opportunities to play (Bredenkamp, 1987; Bybee & Sund, 1982). As teachers observe young children engaging in these processes, they realize that much of what attracts children's attention is their immediate natural world. From smelling a flower, touching a worm, tasting a wild berry, hearing the birds sing, and seeing a butterfly, to feeling the wind and rain, children use all of their senses to learn about nature. The concept of personal ecology defined by Holt (1989) as "the individual child interrelating, interweaving, and interacting with the phenomena that make up his own environment" (p. 118) provides an appropriate guide to the study of nature. This idea places children at the center of their learning and daily reality.

In order for nature education to be meaningful, children need to believe that their teachers value nature. Children need to sense the excitement and curiosity about and the awe of nature that their teachers feel. Because teachers' attitudes are so important, those

who feel less confident can begin by exploring their own uneasiness about nature. Becoming more knowledgeable about a topic will build confidence. Teachers can consult curriculum books on the importance of nature education to the developing child (see "Curriculum Resources"), discuss ideas with staff, and make contact with resource people in agencies or universities, if available. Teachers can spend time listening and talking to children regarding their interests. What do children bring with them, think about, explore, and question? Teachers can let the parents know that they are looking for ideas and resources. I have found that many parents have a strong interest in nature-related issues and are very willing to share their knowledge and resources with children.

Although less experienced teachers will need to work at developing resources and curriculum activities, they do not need to be experts in all areas of nature education or think that they should have all of the answers to children's questions. The process of learning begins when a teacher might say, "I'm not sure of the answer, but let's see what we can do to find out." This approach can build confidence in teachers when they discover the mutual joy of learning with children. Teachers need to take time to experience the natural world, to build confidence, and to trust in themselves.

Using the immediate environment as a base, teachers can begin by developing activities that are related to children's lives. Animal and plant life can be brought into the classroom, where children can take part in their care. One child brought in some tadpoles that he had caught in a nearby pond, and the children became very involved in observing their transition into frogs. The children cared for and fed the tadpoles and discussed the changes in their appearance. Stories and pictures about tadpoles and frogs were placed near the aquarium. To make a connection to the natural world, we planned a field trip to release the frogs back into the pond. Other children became very interested in the water, and they brought some back to school in buckets, where they observed plant growth and bugs. Still



other children delighted in turning over rocks and logs to discover what might be underneath.

Another time, I brought in some silkworms and leaves from my mulberry tree. We learned about cocoons and metamorphosis and read the story, *The Very Hungry Caterpillar* (1979) by Eric Carle. We talked about the differences between moths and caterpillars. The children released the moths once they emerged from their cocoons. A parent of one child took an interest in this topic and brought in some of her cocoons, silk fabric samples, and clothes. After dropping a cocoon into hot water, she showed the children how to unravel the silk

thread. She talked about how fabric is made from silk cocoons and encouraged the children to touch the fabric.

Other children became interested in growing some vegetables at school because their families were involved in gardening. Some of the children brought seeds from home, and in a small plot of land, we planted them. The children took the responsibility of caring for and tending to the garden. As we harvested the "crops," we invited parents to share in the preparation and eating of the food. Other children took some of their vegetables home to share with their families. After these experiences we continued to look at plant forms in other ways. We grew

some herbs inside and talked about how they are used in cooking and eventually used them in some of our cooking projects. We used some weeds and flowers brought in by a parent for art collages and for pressing into clay. In addition, I brought in several potted plants and flowers that some of the children took an interest in watering and incorporating into their "house play."

As the children began to develop more of an interest in nature education, we decided to explore the area surrounding our school, which was located in a large city. We took many walking trips, and the children and I were surprised to "discover" flowers, lots of weeds in the dirt and in cracks of the sidewalks, butterflies, bugs in standing water, bees, ants, worms, and spiders. As a result, a child brought his terrarium to school to share with the children; it contained his special bugs and some plants. I invited an entomologist (a person who studies insects) to talk to the children about his work. He brought in a collection of bugs and talked about some of their characteristics, similarities, and differences. He donated his collection to the school, and many children continued to enjoy looking at the bugs through magnifying glasses. My goal was to show the children that nature can be found and appreciated in large urban areas. By using all of their senses, the children were encouraged to observe, explore, question, and respect nature in their immediate environment.

When I moved to a rural school setting, I took time to learn about the area and the interests of the children. For example, I found that the children at the school were particularly fascinated by large animals such as deer, bear, elk, and moose because they roam in the nearby forests. I invited a mother who is a wild life biologist to talk about the animals, and about how they eat and sleep, because this is what interested the children. She brought in samples of horns and antlers, and we discussed their similarities and differences. We took a field trip to a child's home to view deer and elk prints in the snow, and we took plaster castings of the prints.

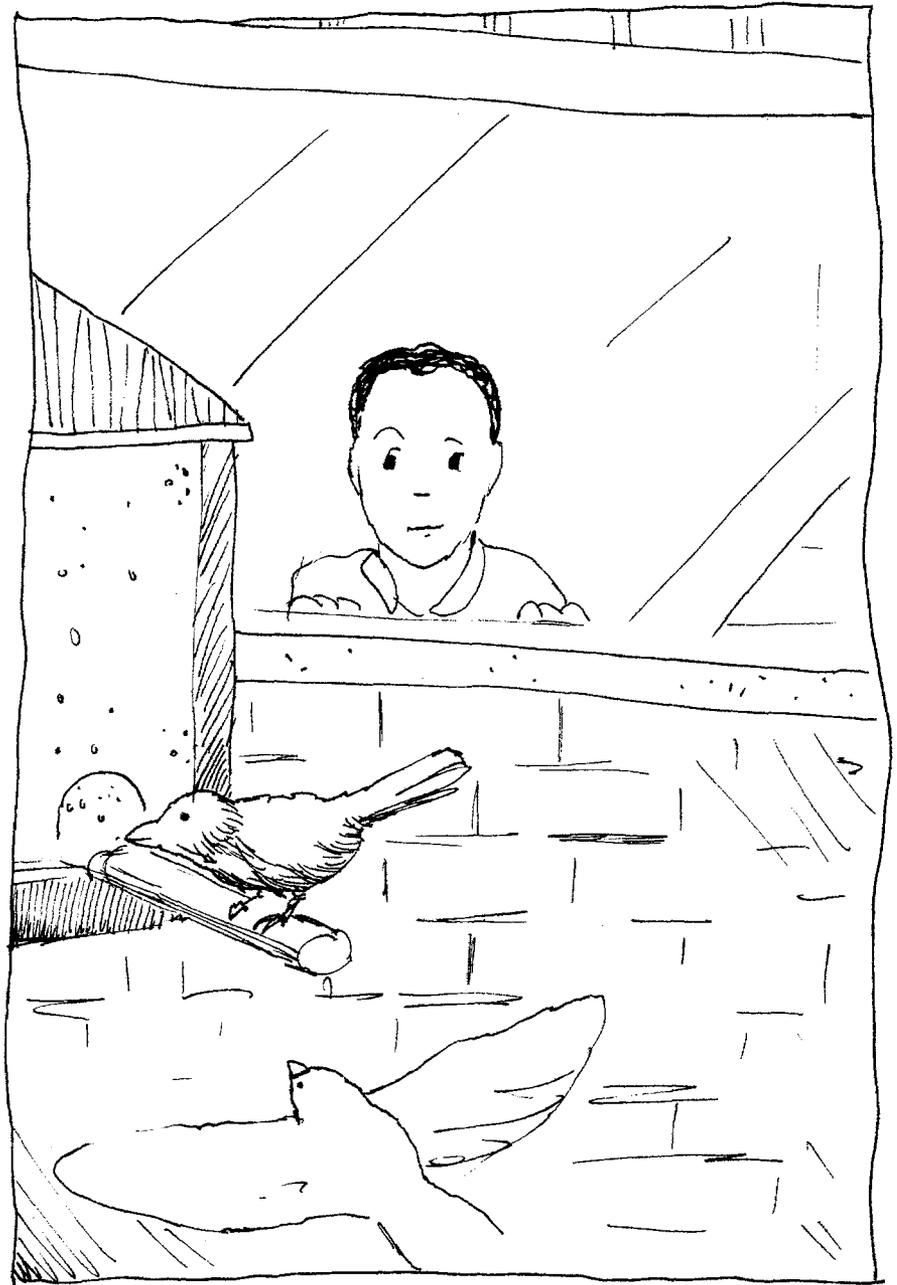
We visited the nearby museum to view its exhibit on the large animals in the area. The activities in both the urban and the rural settings focused on the connections among the natural world, the children's experiences, and their immediate environment.

### What Are Some Considerations for Selecting Nature Activities?

When considering nature activities, it is important to think about how they may fit into the overall planning of the curriculum. Rather than presenting a nature experience as an isolated activity, consider how it can be linked to other activities in the classroom. For example, after the snow had melted, the children and I took many nature walks over a period of time to explore what could be observed. As we revisited several places, the children became curious about new buds coming out of the trees, flowers sprouting from the ground, ants digging into the ground and making hills, and many other natural events.

On our many walks, some children became especially interested in the birds. We began to look for and spot birds that are difficult to see because they blend in with their environment. Some children enjoyed learning about the concept of camouflage and how nature's invention is applied to birds and other animals for protection (Shuttlesworth, 1952). We talked about the concept of migration, what it means, and why some birds migrate. We visited a bird shop, where we were given a bird feeder to place outside the classroom window. The children enjoyed filling the feeder with seed and watching the birds as they fed. Colorful books on birds were set up in the library for the children to view.

These walks naturally led to many related activities. For example, we went to the library and checked out books, and I read many of them to the children. We had many lively discussions on such questions as, "Why do you think birds migrate and return to build nests?" and "What do you suppose the ants are doing underground?" Some children became interested in making their own books, in which they drew pictures of their observa-



tions and asked the teacher to write down the stories they dictated.

We asked a mother who is a naturalist to come to our school. The children learned that a naturalist is concerned about living animals and plants and their environments and teaches other people how to care about and respect nature. The interaction with this mother led to further discussions about what other parents do during the day (Nachbar, 1992). Teachers can structure the planning of activities and use the children's interest as a guide in determining further directions. Pro-

jects will often emerge and take off on their own as children's interests become more apparent.

Several important considerations are summarized for selecting nature activities for young children, some of which are drawn from *Bridging Early Childhood and Nature Education* (1991) and Holt (1989).

Plan nature activities that emphasize interacting with and thinking about the environment. Involve the children in the continual processes that are a part of nature. Encourage careful observations, recording, dis-

cussions, predictions, and problem solving based on the children's experiences. Help the children note differences over time in relationship to growth and change.

Relate nature activities to all of children's senses and developmental domains (physical, social, emotional, cognitive, and creative). Integrate activities so that they become a part of all aspects of the curriculum.

Focus on the attitudes of the children in the classroom. A lack of knowledge and experience may lead to unfounded and unrealistic fears regarding certain animal life. Help the children to understand that all creatures play a role in ecology and that we can benefit from observation and inquiry. Attempt to prevent the children from developing value-laden discrimination against some creatures that may be based on their noise (a buzzing fly), their perceived threat (a bee), or their texture (a worm or slug).

Consider the context of the nature activities so that they center on important aspects of the child's community. Cactus, rodents, and insects may be important to learn about in one area, whereas in another area it may be more appropriate to focus on alligators, snakes, and swamps. Children who learn to respect their immediate environment may transfer these attitudes to other areas.

Be aware of personal biases and issues of sexism. All children should have equal access to participation in all activities.

Stress issues of safety, and establish any necessary rules concerning nature in advance of the activities. Rules may involve a discussion on respecting all forms of life, and on emphasizing which forms of life are non-threatening and threatening to humans. Prepare the children for what to expect in the care and treatment of natural life. Children should be taught not to put anything in their mouths when exploring nature. On our nature walks, the children are requested not to pick wild flowers or to disturb the natural habitat because disturbing one life form can cause problems for other life forms.

Maintain contact with the parents, and let them know what you are em-

phasizing in the classroom. Involve the parents who also have an interest in nature by allowing them to share with the children. Inform the parents of programs and resources that are available in the community or places to go with the children where nature can be observed.

### Summary

Integrating nature education into the curriculum teaches children many important concepts, such as aesthetics, respect, caring for the earth, and the interrelationships among humans and the habitat. As the world becomes more populated and polluted, and as some animal and plant life becomes endangered and extinct, the role that we all play in protecting or destroying the earth can be reinforced. Through nature study, children can learn how they affect the environment as well as how the environment affects them. By having rich and varied opportunities to experience and explore nature, children can begin to value and appreciate their immediate world and will hopefully generalize this knowledge to other situations and places.

### Curriculum Resources

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