



# Exploring the Natural World with Infants and Toddlers in an **Urban** Setting

Alyson E. Williams

One crisp fall afternoon, the teachers in the infant classroom were busily preparing the children to go out on the deck for some fresh air. As they zipped them into windbreakers, I went outside to sweep the leaves off the deck. Mid-sweep, I paused and asked myself, Why am I sweeping off the leaves? Some of my favorite childhood memories involve jumping into piles of crunchy fall leaves with my sister. So, instead of sweeping the leaves away, I swept them into a big pile. That afternoon, the babies and teachers had a great time stomping, crunching, smelling, and dropping the leaves all over the deck. Later, the toddlers used leaves in sensory activities and the 2-year-olds used leaves to make art.

**AS AN EDUCATOR, I VALUE** children's experiences with the natural world—but do my actions support my ideals? I try to find the time to encourage children's interactions with nature, especially since, in an urban setting, "so much of a baby's life is spent indoors" (Honig 2004a, 24). In the real world, helping infants explore the earth is not always practical. The logistics of enjoying nature with a group of infants and toddlers in a city can be daunting; however, with a few smart policies and wise decisions about health and safety, sharing nature with young children brings rewards that more than make up for the inconveniences.

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## Overcoming obstacles

Teachers and administrators face many challenges when they support young children's experiences with the natural world. Parents and teachers may protest because, when children explore the earth, they get dirt on their clothes, in their hair, and in their mouths. As for the weather, adults may think it is too cold outside (or, depending on the climate, too hot, too windy, or too wet). In cities, there are added concerns about air quality, taking children off-site, traffic, and strangers. Exploring nature isn't always easy, but it is always a great learning experience.

It's no surprise that "children's long-term attitudes toward science as subject matter begin with the attitudes of teachers whom children encounter in their earliest exposures to science" (Harlan & Rivkin 2000, 21). To give children daily opportunities to experience the natural world, urban teachers have to





respond positively when children are excited about things adults might have aversions to, such as caterpillars, spiders, or city-dwelling rodents like squirrels. Harlan and Rivkin state that “when the teacher’s own sense of wonder is alive and active, curiosity behavior is modeled for the children” (2000, 22). Teachers who are excited about children’s discoveries

in the world around them have children in their classroom who continue to be excited about nature.

As with any other activity, when teachers intentionally plan outdoor activities, they must

first define the purpose of the outings. Taking toddlers on walks to experience different outdoor environments is developmentally appropriate. In the city, a butterfly garden, a fountain, or a front yard all offer different experiences for young children. Teachers can prompt children to watch the butterflies land on flowers, listen to the tinkle of the water, or explain why some bushes have berries and others don’t.

It is sad and disappointing when infants and toddlers remain inside because adults need so much time to get organized. To provide meaningful outdoor experiences, teachers should plan and organize ahead and schedule enough time into the day to allow for smooth transitions between activities. It can take 15 or 20 minutes to get a group of infants and toddlers into jackets, hats, and mittens and then loaded into a stroller or buggy with all their gear. Add to that the time it takes to travel to the destination, say, 20 minutes, and it may take a class a total of 40 minutes to arrive and spend 5 minutes watching butterflies before it is time to return for lunch. With such time constraints, teachers should take care to make the transitions and the travel just as meaningful as the visit by using songs, stories, and objects to engage the children—or look for places nearby.

Creative teachers realize there is almost always a moment to explore the natural world with each child each day. No schedule is so rigid that a teacher can’t spontaneously “lure the

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## What about the Weather?

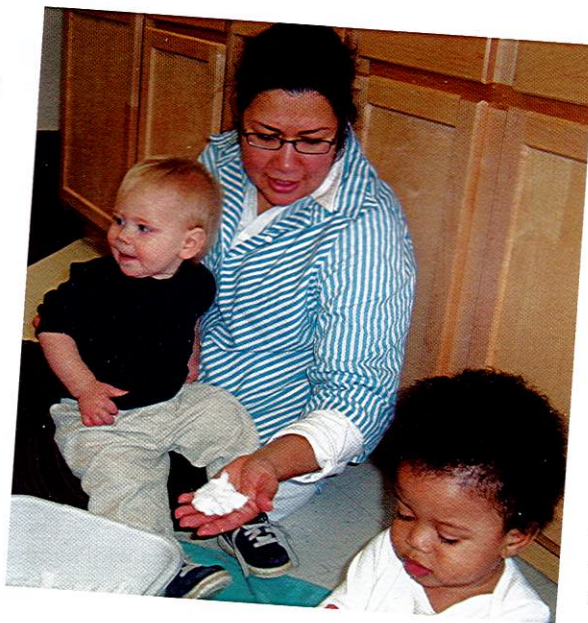
Outings are important in all kinds of weather, including heat, wind, rain, and snow; however, some teachers and families may worry about taking children outside in inclement weather. Early childhood professionals can combat adult worries about weather by having realistic weather policies and recommendations about outerwear that support extended exploration outdoors, even during less-than-ideal weather. In cold climate cultures, “children boot up and suit up to explore the world beyond the school yard, even in weather we would probably consider far too inclement for outside activity” (Wagner 2004, 60). In Anchorage, Alaska, for example, children go outside for recess unless the temperature or wind chill factor reaches minus 10° F (Anchorage School District Online 2000–11).

This isn’t to say that cold weather should be taken lightly, but sensible precautions and safety procedures make outdoor exploration possible in all but the most extreme conditions. Teachers can keep a supply of extra weather-appropriate gear to ensure that children will be comfortable outdoors. Taking along drinking water on hot days and tissues on cool days helps children and teachers both enjoy outside time.

little ones to come to a window and notice light raindrops, driving rain, the delicate shapes of snowflakes, the sounds of thunder” (Honig 2004b, 22). With infants especially, who often have individualized schedules, it is sometimes more practical for teachers to bring the outside in: snow, sand, and leaves are all appropriate materials for the sensory table.

## Encouraging young scientists, mathematicians, and artists

Children learn important math and science concepts from examining their world. For example, when they look out the window near the changing table and see different conditions each day, and the adults with them point out and describe the changes, children learn about patterns, sorting, cycles, and making predictions. Young children are naturally curious about the weather and “seriously absorbed by the big questions scientists ask” (Polito 1995, 236), like







"How big is the sky?" and "Why do worms come out after it rains?" Children love to splash in puddles, play in mud, and dig in dirt. Without adult instruction or interference, "children will interact with natural objects and phenomena in a wide range of deliberative and expressive sequential processes" to better understand what goes on in the world around them (Polito 1995, 223).

By providing early experiences with nature, teachers purposefully support children's development of scientific and aesthetic thinking, so they can "appreciate beauty, express creativity, and perceive patterns and variety in sensory dimensions of their worlds and themselves" (Torquati & Barber 2005, 40). Making a mud pie might seem to some adults like just getting dirty. To a young child, it is an opportunity to feel the hardness of acorns and the grainy texture of sand and notice the different shapes of two kinds of leaves. Children can compare the colors of rocks, feel the difference between ice and snow, and be amazed by the way light shines through an icicle or a raindrop. To stop, observe, and enjoy nature is sometimes a challenge in an urban environment, but nurturing children's interest in the natural world will benefit them in many ways for the rest of their lives.



## Practical Ideas for Sharing Nature with Urban Infants and Toddlers

- Watch through the window as the snow falls; encourage children to touch the window pane to feel how cold it is
- Bring snow or leaves inside to fill a sensory table
- Have children help to water potted plants inside and outside
- Watch gardeners work; observe lawn sprinklers—and get close enough to feel the drops
- Lie on the grass and watch the leaves falling
- Smell flowers
- Go outside when it's raining or snowing; come back in and warm up together
- Feed the ducks
- Watch the clouds and the birds
- Walk through a garden
- Look for the sun, the moon, the stars
- Collect natural items, such as rocks, sticks, sand, leaves, or flowers, to display and explore in the classroom

## Working with families

It is important to respect cultural differences in attitudes about the outdoors. Educators walk a fine line between respecting families' cultural views about outdoor play and advocating what is best for children; however, it is important to obtain the consent and approval of families when exposing young children to the outdoors. To do so, communicate the positive aspects of children's experiences in the natural world, such as the science concepts that outdoor exploration teaches.

Children who play with sand and water, for instance, are learning about volume and measurement as well as prediction (Will all the water from the pitcher fit into the cup?). Parents may need to be reminded that all the mess from digging in the earth is really indicative of learning—when "children take home evidence of practical problem-solving ability or share science information that has meaning in the adult world, parents rarely fail to respond positively" (Harlan & Rivkin 2000, 24).

As an educator, I want families to value their children's early experiences with nature as much as I do. In an urban environment, teachers can share with parents some of the

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places where they have explored nature with the children

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and encourage parents to explore the outdoor environments at home as well.

When teachers run into snags, like a parent or teacher who does not want the children to get their hands dirty, it is our duty to advocate for the children and spread the word that early sensory-kinesthetic experiences with nature, like playing with sand and digging in dirt, help children develop dispositions for lifelong learning. Patiently communicate to families that when they see

children doing and playing, the learning and benefits often go far beyond what meets the eye. Having clear explanations for the activities you plan helps families understand

that their children may be covered with dirt, but they learned a lot! Peggy, a mother with a child in the infant program, was never unhappy when her son was "dirty." "It means you kept him busy and he was happy all day!" she would say.

### Getting dirty—and learning!

One day when the 2-year-olds were out on the playground, bird poop landed on one of the children—an unpleasant moment for all. However, the incident coincided with the children's toilet learning. In that teachable moment, the children learned that

birds poop in the sky, dogs

poop in backyards, babies poop in diapers—and 2-year-olds can poop in the potty!

Teachers can support children's explorations and interactions with the natural world much like they support any other learning: with the belief and hope that each child will be encouraged to become a geologist, biologist, zookeeper, veterinarian, or preschool teacher, regardless of how dirty the job may be.

### References

- Anchorage School District Online. 2000–11. Winter Weather. [www.asdk12.org/parents/winter.asp](http://www.asdk12.org/parents/winter.asp)
- Harlan, J.D., & M.S. Rivkin. 2000. *Science Experiences for the Early Childhood Years: An Integrated Approach*. 7th ed. Upper Saddle River, NJ: Merrill.
- Honig, A. 2004a. "A Letter to Families." *Early Childhood Today* 18 (6): 24. [www2.scholastic.com/content/collateral\\_resources/pdf/ECTonline/letter04\\_04.pdf](http://www2.scholastic.com/content/collateral_resources/pdf/ECTonline/letter04_04.pdf).
- Honig, A. 2004b. "Exploring Nature with Babies." *Early Childhood Today* 18 (6): 22. [www2.scholastic.com/browse/article.jsp?id=3747401](http://www2.scholastic.com/browse/article.jsp?id=3747401).
- Polito, T. 1995. "Frederick Froebel's Illuminations on Kindergarten Children's Relatedness to Nature." *Education* 116 (2): 223–37.
- Torquati, J., & J. Barber. 2005. "Dancing with Trees: Infants and Toddlers in the Garden." *Young Children* 60 (3): 40–47.
- Wagner, J.T. 2004. "Fishing Naked: Nordic Early Childhood Philosophy, Policy, and Practice." *Young Children* 59 (5): 56–62.

### Items to Bring in Backpacks on a Nature Outing

- Latex gloves
- Trash bag
- Hand sanitizer
- Emergency medications (epi-pen, bee sting stick, bandages, and first aid basics)
- Bottles of water
- Snacks
- Extra diapers, baby wipes, and a travel-size changing mat
- Cell phone
- Emergency information for each child (phone numbers for family and pediatrician, medical treatment authorization, allergy information, medical insurance, and such)
- Identification for each child (at a minimum, the center name and phone number taped to the shirt—but never the child's name)
- Objects and books that relate to your trip (pictures of butterflies and a magnifying glass for a trip to the butterfly garden, for example)
- Changes of clothing in case of mishaps (extra unisex T-shirts, sweatpants, underpants, and such)

