



**TREE CITY USA®
BULLETIN**

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Dr. James R. Fazio, Editor • \$3.00

How to Bring 'Nature Explore' to Your Community

Urban foresters, volunteers and tree boards have a long tradition of meeting new challenges and adapting to the changing needs of their communities. Today one of the greatest needs is to re-connect children with nature. This bulletin is designed to show a way to do this that is research-based and field-tested. It is a way to help assure the stewardship of our community trees and other natural resources for generations to come.



Photo by Geoff Johnson

Some call it a crisis. Some say it is a problem. Others say it is simply an issue of our times. However you view it, the separation of children from the outdoors is very real and has serious consequences. The effects of this gap between childhood activities and nature are being felt by our children, parents, schools and society in general. Moreover, the disconnect portends poorly for continued stewardship of our urban forests.

Clearly, action is needed and it is needed now. To help guide this action and provide Friends of Tree City USA with useful tools, the Arbor Day Foundation has responded with a program called 'Nature Explore,' developed in collaboration with Dimensions Educational Research Foundation. Its several components are summarized on page 7, but the focus of this issue is Nature Explore Classrooms. These innovative outdoor learning spaces are designed following research-based principles to provide preschool and elementary children with positive experiences that can help shape their lives. The Classrooms help children realize some of the experiences that came more naturally to those of us who spent our youth playing creatively outdoors without the distractions of computers, TV games, videos, fear of crime and the other things that keep kids inside today.

Rather than viewing this problem with despair, please use this bulletin to join with Arbor Day Foundation staff and its partners in taking action to reverse the trend. Only with your leadership locally can we re-connect young people with the wonders of nature, the fun of outdoor activity, and a sense of stewardship for trees, wildlife and a quality environment.

If we want children to flourish, to become truly empowered, then let us allow them to love the earth before we ask them to save it.

*—David Sobel
Beyond Ecophobia*

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It's a Different World Today

Remember playing outside after school and on weekends? Remember creating ships and forts or performing on a makeshift stage before imaginary audiences? Remember playing in creeks and gathering stones or branches for the little dams, roads and buildings of your dreams? Through these and other free-time activities most of us formed a close relationship with nature and the outdoors. At the same time, without our realizing it, nature was shaping us – our knowledge, our skills, our attitudes, and even our behavior such as that which led us to be Friends of Tree City USA. It made us appreciate nature and have a concern for its well-being.

Today children are deprived of these same opportunities. The Age of Technology combined with other social

changes have given rise to what Richard Louv calls in his book, *Last Child in the Woods*, “nature-deficit disorder.” Randy White of the White Hutchinson Leisure & Learning Group goes even further and worries about what he calls “biophobia” – an aversion to nature. This, he says, may range from discomfort in natural places to actually viewing nature with contempt or as nothing more than a disposable resource. Not only can this be due to lack of positive experiences at an early age, it can be the result of information overload or “premature abstraction” about seemingly overwhelming problems such as acid rain, extinction and other major ecological problems.

What is Happening

- On average, children spend 3 hours every day watching television. Few are shielded from the barrage of advertising, violence, bullying, status symbols and other material real and fictional that are available at all viewing hours on some channels.
- Some schools have eliminated recess time.
- Funding for school field trips has been reduced and teachers are hard-pressed to find time for outdoor activities as they strive to meet various testing standards.
- Single family homes and dual career families have produced a generation of “latch key” children who are instructed to stay safely indoors after school.
- Portable listening devices are so prevalent and widely used – mostly for pop music – that some call this The Wired Generation.
- Life revolves around the computer in most homes with children having free access to compelling computer games, personal web pages and an endless array of other programs and materials.
- Many neighborhoods are not walker-friendly or crime is so prevalent that parents fear letting their children play outside or visit parks.
- Young people are experiencing dramatic decreases in physical exercise, increasing obesity, and more reliance on behavior-regulating medications.
- Structured sports, clubs, and extra-curricular classes and activities have replaced free time and the opportunity to exercise imagination and creativity.

Facing the Challenge Through Nature Explore

Randy White recognizes what every parent also notices – that young children have a natural inclination to love nature. Writing at his Web site, www.whitehutchinson.com, he calls this “biophilia.” He also describes the principle that has formed the basis for the Nature Explore® program. Here is how he explains it:

For children's natural inclination of biophilia to develop and for children to become stewards of the earth, they must be given developmentally appropriate opportunities to learn about the natural world based on sound principles of child development and learning. This includes developmentally

appropriate contact with nature in their early years so they can bond with the natural world, learn to love it and feel comfortable in it.

Building on this principle, the Arbor Day Foundation and Dimensions Educational Research Foundation have formed partnerships with a number of organizations such as the USDA Forest Service to provide tools and guidance to all who are willing to face the challenge of re-connecting young children with nature. Nature Explore is the result. Page 7 showcases some of its evolving components.

The Nature Explore Classroom

Re-connecting children with nature requires a place to do it, and that place should be safe and appealing. The Arbor Day Foundation and Dimensions Foundation can help you create such a place in virtually any urban or rural area. Nature Explore Classrooms are carefully designed based on research in childhood development to provide fun but meaningful experiences for preschool and elementary children. Arbor Day Farm in Nebraska City features two demonstration Nature Explore Classrooms, and others are being created throughout the country. Urban foresters and tree boards have a great opportunity to feature Nature Explore Classrooms to every Tree City USA community in America. Concepts in the following pages are from the *Learning With Nature Idea Book*, available online at arborday.org.

Some of the Benefits

- Enhanced observational skills
- Valuable skill development over all learning domains
- Improved concentration, even among young people with Attention Deficiency Disorders
- Improved fine motor skills
- A doubling of physical exercise
- Fewer behavioral problems
- Increased awareness of and appreciation for the natural environment



Selecting the Site

The existing condition of a site should not be a barrier to creating a Nature Explore Classroom. Asphalt at an inner-city school has been removed and transformed into a 'softer' play area, and the small space by a private child care center has proven sufficient for an effective classroom. Here are the considerations that are important:



Missouri Botanical Garden

- **Easy access** – It should be close to where the young users are located so transportation is not needed.
- **Existing vegetation** – If trees are present, evaluate them for soundness and service they can provide, e.g. shade or windbreak protection. Trees and shrubs can be added, of course, but take advantage of what is already there when possible.
- **Solar orientation** – When there is a choice, consider cooler sites in hot climates and warmer exposures in colder climates.
- **Drainage** – If local regulations allow, flood plains are acceptable but, of course, not where flash flooding may occur. Also consider downspouts from large buildings or runoff from large parking areas.
- **Typical size range**– 2,500 to 10,000-20,000 sq. ft.

Nature Explore Classrooms Blossom Across the C

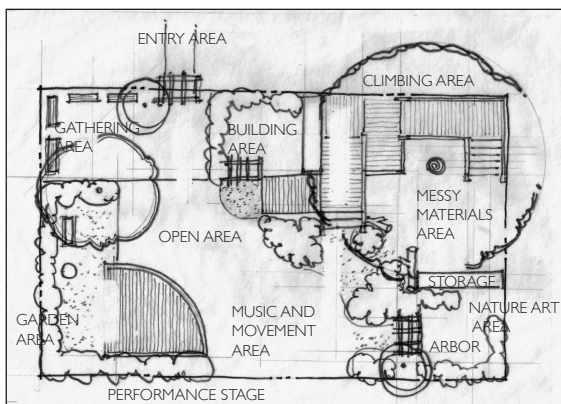


Children need nature. Yet, with today's indoor seduction of TV, videos, computer games, and DVDs, it's no wonder that young children are growing up with few, if any, experiences with nature. Arbor Day Foundation members understand this well. Many of us grew up enjoying "free-range" childhoods, spending hours of time every day outside exploring nature. Our positive childhood experiences with nature helped us become caring adults making a difference in our neighborhoods, communities, and rural lands. Especially in the last several years, our insightful members have encouraged us to do more to reconnect children with nature.

By creating Nature Explore Classrooms at child care centers and elementary schools, and public places such as parks and nature centers, it's possible for children to connect with nature on a daily basis. Field-tested principles from the Nature Explore program are transforming spaces large and small from coast to coast into stimulating outdoor learning environments. From the Child Educational Center in La Canada, California, and the Forest Lake Family Center in Minnesota, to the Farm Fun Day Care in Andover, New Jersey; from the Missouri Botanical Garden in St. Louis to 30 Nature Explore Classroom pilot sites in Nebraska, the program is spreading across the country.

A catalyst has been the new *Learning With Nature Idea Book: Creating Nurturing Outdoor Spaces for Children* published by the Arbor Day Foundation and the Dimensions Foundation. The book provides educators, parents, community planners, and landscape designers with practical information for creating effective outdoor learning spaces.

One important principle is including a complete mix of ten Recommended Activity Areas which are field-tested to enhance childhood development. At the same time, the book offers suggestions for making each space unique to its own environment.



The first step in creating a Nature Explore Classroom is often the development of a Concept Plan. In a 2-day design consultation a Dimensions landscape architect/educator team works with staff and interested participants to incorporate everyone's ideas and priorities with the field-tested principles in the *Learning With Nature Idea Book*.

An Entry Feature gives children a visual clue that they are entering a special place.

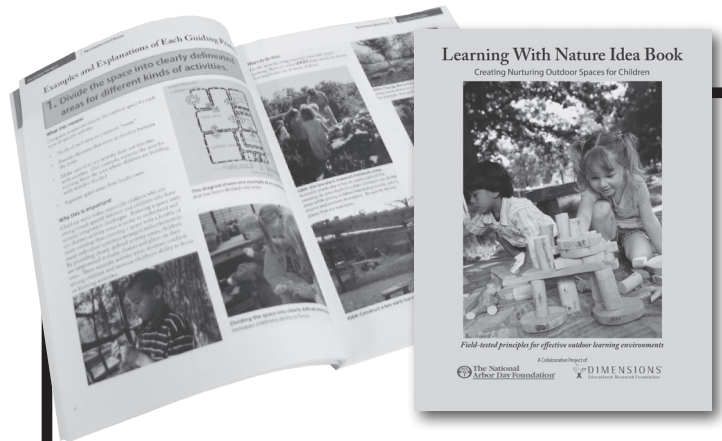
A Music and Movement Area provides children with a chance to create their own music and enjoy expressive movement, vital to children's healthy development.

An Open Area gives children room for running and large movement. This area is often called the "action area."

A Gathering Area provides a place to bring together an entire class or large group of children. In smaller Nature Explore Classrooms such as this, the Gathering Area can double as the Open Area.

A Garden and/or Pathway through Plantings Area lets children experience planting and harvesting and the wonders of nature through the seasons.

Count



Also available from the Nature Explore program are on-site design consultations, workshops for educators and landscape designers, and natural-material classroom resources.

With the support and encouragement of Foundation members, Nature Explore Classrooms are blossoming across the country to provide children with a much-needed connection to nature. These inspiring spaces are truly nurturing the next generation of tree planters and environmental stewards. People interested in bringing Nature Explore to a school or community can call the Arbor Day Foundation's Nature Explore specialists at 1-888-908-8733, or go to arborday.org/explore.

Shortly after the *Learning With Nature Idea Book* was published in 2007, Marjorie Kostelnik, the Dean of the University of Nebraska's College of Education and Human Sciences wrote, "This is a book that deserves to be ... frequently referenced and worn from use. Compact, yet covering a myriad of ideas, the *Learning With Nature Idea Book* is a gem. It is a wonderful contribution to the field and is sure to become one of those classics to which we refer for many years to come."



A Nature Art Area develops children's creativity as they sketch and build 3-dimensional works of art made of pinecones, acorns, sea shells and other natural materials.

A Climbing and Crawling Area gives growing children the chance to safely master physical challenges.

A Messy Materials Area lets children experience nature while gaining a sense of accomplishment and personal mastery over the environment.

A Storage Area gives children easy access to outdoor natural components.

A Building Area complete with organic and geometric building blocks provides enough space for individual creativity while children strengthen mathematical and visual-spatial thinking.

Nature Explore Classrooms can be designed in many possible configurations for large or small spaces. Each classroom reflects the interests of the program's families and staffs, and uses regional plants and materials. This is one example of how the 10 recommended areas can work in a fairly small space.

Nature Explore Classrooms at Work

Dozens of Nature Explore Classrooms have been designed and built. More are on the drawing board. Thousands of children are being re-connected with the outdoors and being shown the fun and wonders of nature by trained, dedicated teachers.

The first – with a second added – at Missouri Botanical Garden

The Children's Garden at the fabulous Missouri Botanical Garden was the nation's first certified Nature Explore Classroom after the prototype at Arbor Day Farm. Staff from the Arbor Day Foundation and Dimensions Foundation helped botanical garden staff create the 3,000 sq. ft. area. A second Classroom has also been designed and construction is underway at the Botanical Garden's rustic Shaw Nature Reserve in suburban St. Louis. This one is a large 2-acre site. Lydia Toth, manager of educational services says the Classroom receives a lot of visits from school groups. She adds, "I'm passionate about getting kids outdoors in an unstructured play environment. It's sort of embarrassing we have to do this, because we didn't need things like this when I was a kid. But it's different today."



Classrooms in Urban Spaces – Los Angeles and Omaha

About a dozen large trees help shade the 80 children a day that use a Nature Explore Classroom created at the Child Educational Center in La Canada, California, just outside Los Angeles. Children helped plan this Classroom and parents and the community provided the labor for its construction. It has the honor of being the first certified Nature Explore Classroom in California. In Omaha, the remarkable Child Saving Institute – for 100 years facilitating healing for children and families in crisis – has found space in its urban setting to create a Classroom for introducing children to nature. "It's amazing! I love it," says Kathleen Feller, Director of Child Care Services. "It is like a little oasis in an immense area of concrete and it is such a holistic approach to learning." Kathleen has observed improvements in team work, creative play, and the chance for young kids to interact with nature who would not otherwise have that chance.



Top Photo: Missouri Botanical Garden. Bottom Photo: Child Education Center in La Canada, California.

Year 'Round Use in Minnesota

Vicki Bolling-Phillipi, an early childhood family educator from the St. Paul area, is an enthusiastic promoter of Nature Explore Classrooms. Her site in the Forest Lake Public School District was constructed in a playground. It is complete with a messy area of limbs, branches, tree cookies and stumps. It also has a marimba that the children love, and all of the 10 recommended areas. "It is absolutely wonderful to see the results," says Vicki. "High energy children have a different pace outdoors; they can focus and are calmer." And as cold as it gets, the Classroom is used all year 'round. "There is no bad weather," says Vicki, "just bad clothing." Teachers make sure the children are dressed appropriately, but the outdoor fun and learning never stop.



Nature Explore Comprehensive Resources

Nature Explore Classrooms

These outdoor classrooms are the keystone of the Nature Explore program.



Workshops

For Educators:

Nature Explore Workshops offer flexible, site-specific help to educators to bring the benefits of nature into both indoor and outdoor classrooms. Each Workshop provides research-based, field-tested activities that support comprehensive learning with nature.

For Architects and Landscape Architects:

The *Designing Outdoor Classrooms for Children Workshop* explores effective ways to apply new research-based, field-tested principles to the design of outdoor classrooms for elementary schools, parks, botanical gardens, children's museums, child-care centers, private homes, and other public spaces.



Sourcebook

The *Nature Explore Sourcebook* provides a way to order field-tested natural components for outdoor learning.



Traveling Exhibit

Explore Trees Inside and Out™ is the name of a traveling exhibit touring major cities throughout the U. S. Like all of Nature Explore, the exhibit is designed to help children and their parents or guardians discover nature together through touch, sound and hands-on activities. The goal is to inspire urban residents to get outdoors and develop personal connections with the trees in their neighborhood.



Networking

Educators, landscape designers, urban foresters and others interested in re-connecting children with nature have formed the Nature Action Collaborative for Children.

This group is an outgrowth of meetings held at Arbor Day Farm by the World Forum Foundation, an organization dedicated to the ongoing global exchange of ideas on the delivery of quality services for young children in diverse settings. More information is available at the Forum's Web site.



www.worldforumfoundation.org/nature

Getting Connected

You are not alone in your concern for the future of children and our environment. The best way to get in touch with others who are actually doing something about it – instead of simply lamenting the current situation – is to start at **arborday.org**. Click on the Nature Explore logo and you'll be connected to all the ways to learn more about the principles and practices behind Nature Explore. There are also links to organized groups and networking opportunities such as the World Forum Foundation and the Nature Action Collaborative for Children.

Obtain National Recognition via Nature Explore Classroom Certification

Nature Explore Classroom Certification recognizes your organization's commitment to providing comprehensive, effective nature education for children.

The criteria for being a Certified Nature Explore Classroom are as follows:

- 1. Well-designed Outdoor Space** following the principles in the *Learning With Nature Idea Book*
- 2. Staff development** including Nature Explore Educators Workshops
- 3. Family involvement** such as participation in the Nature Explore Club

Organizations with Certified Nature Explore Classrooms can demonstrate to funders, parents, and community members that they are taking effective action to provide nature experiences for children, and are part of a growing national network of people committed to making connections with nature an enriching part of the daily lives of children.



To obtain a downloadable application form, or obtain more information or assistance, visit arborday.org/certify or phone 1-888-908-8733.

Note to Urban Foresters: Your leadership is needed. Please help by bringing this bulletin to the attention of educators in your area. You can also provide valuable assistance in the planning and development of Classrooms. Involvement in bringing a Nature Explore Classroom to your community can count for activity points leading to a Tree City USA Growth Award.

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