The Wisdom of Nature
OUT MY BACK DOOR
The Wisdom of Nature

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Outdoor Spaces

By Nancy Rosenow and Susan Wirth

“Once upon a time” in the not-so-distant past, many children left the adult world on a daily basis and entered an outdoor world filled with fantasy and improvisation. Using sticks, branches, logs, sand, dirt, water and other natural materials, they built castles, houses, ships, rockets. As they ran, jumped, dug, climbed, slid, twirled and whirled, their imaginations took them across the prairie in covered wagons, up the tallest mountain, into outer space, and on high sea adventures. At the end of the day, they returned indoors dirty and tired but feeling happy and confident, competent and full of stories.”

Those words were written by our colleagues at Nature Explore as the prologue to a paper outlining their research on the benefits of creating intentionally designed spaces that inspire children to connect with the wonders of nature on a daily basis.

A few generations ago, it wasn’t necessary to design those kinds of spaces. Most children lived close to fields or forests they could explore at their leisure. Some children still enjoy this luxury; sadly, most no longer do. Many of the wild places in our towns are gone, replaced by sprawling malls and other signs of “progress.” The bells and whistles of technology keep children indoors staring at screens. Even when they do go outdoors in centers or schools, children play on sterile “safety” surfacing and plastic structures. In our well-meaning attempts to keep children from harm, we have removed much of what could bring them joy.

It doesn’t have to stay this way. In fact, many are working hard for change. The World Forum Foundation’s Nature Action Collaborative for Children (an international group of educators, environmentalists, and designers) developed a set of principles to support ever-growing efforts to build nature-based outdoor spaces for children. We believe those spaces should:

• celebrate the site’s natural assets, local culture, climate, and history.
• use indigenous plants, natural materials, and community contributions.
• provide multi-functionality and multiple possibilities.
• stimulate all the senses.
• be accessible to all abilities.
• be sustainable and able to develop over time.
• inspire wonder and discovery.

We have seen first-hand the powerful transformation of bodies, minds, and spirits when daily connections with nature’s wisdom are possible. It’s time for our children to again grow up a little dirtier but a lot happier. We hope you will join us in making it so.
...bring nature into your back yard and allow children to explore.

Creating Planet Earth

By Rusty Keeler

What is the most important place on the planet for children? Is it the Amazon Rain Forest? The Pacific Ocean? The Himalayan Mountains? How majestic! As adults we may think of lofty places of great natural importance, and yet the most important place on the planet for young children is... your back yard. That’s right. That small simple place that children visit every day is actually the most important place in the world. It is the place where children use their senses to explore the planet and experience the wonders of nature.

What do your children experience when they step outside? Are they able to touch dirt? Smell flowers? Find worms? Plant seeds? Climb trees? Hug chickens? All children deserve to squish mud and splash in puddles. All children need to smile at the sun and feel its warmth smiling back. Every child should be able to roll down hills and hide in tall grass. All children deserve to have their sense of wonder sparked by the possibilities of the planet.

But doesn’t it take an extensive nature center or national park for children to make friends with the planet? No! All it takes is someone like you to decide to bring nature into your back yard and allow children to explore. Plant bulbs that pop into flowers in spring. Bring dirt, sand, and water into your yard. Plant shade trees and fruit trees and trees that burst into fragrant bloom. Plant pumpkin seeds. Allow corners of your yard to grow wild. Hang birdhouses and bird feeders. Allow children to take naps outside in the grass. Add magnifying glasses and shovels to your outdoor loose parts collection.

Today people all over the world are making beautiful changes to their back yards by creating opportunities like these for children to play and explore in the natural world. As we beautify our back yards we are beautifying the world... and beautifying children’s introduction to the planet.

Dream Big. Start Small. Never Stop.

Creating Planet Earth

By Rusty Keeler
Growing Tree Planters

By John Rosenow

It is my good fortune to know many people with a deep love of the natural world: foresters and wildlife biologists, teachers and naturalists, arborists and park rangers and tree-planting members of the Arbor Day Foundation.

Today’s conservation professionals, and the many citizens who support environmental causes through their personal actions, contributions, and votes, tend to have one thing in common: as children we led “free-range” childhoods. We spent hours and hours of unstructured time outdoors, connected with nature. We climbed trees in the neighborhood or in community parks and explored nearby woods or grassy lots. We made mud pies and collected pine cones and acorns. We floated sticks down streams, jumped in piles of leaves, chased frogs, and captured fireflies. As a result, we developed an emotional connection with the natural world which led us to care about the environment as adults.

Of course for many, free-range childhoods connected to nature are a thing of the past. Today, outdoor experiences for countless children are confined to asphalt playgrounds surrounded by chain-link fences.

In response to this disconnection, many organizations have developed educational programs which teach children about environmental issues such as deforestation or global warming. However, these efforts are often ineffective or even counter-productive if they do not foster an early emotional attachment with nature in children.

In short, we need to help children learn to love the earth before we ask them to save it.

To do that, it is important for children to have positive nature connections where they now spend their days: at child care centers and elementary schools. We need to help teachers and young parents, who are themselves the video generation, learn to support those nature connections, for their own benefit as well.

Our mission focus—developing future generations of tree planters and environmental stewards—is why the Arbor Day Foundation is so engaged, with Dimensions Educational Research Foundation, in creating Nature Explore Classrooms everywhere we can, so that nature can again be an enriching part of children’s daily lives. That is why we’re so committed to the international Nature Action Collaborative for Children.

While growing adult tree planters is our long-term goal, it is an immediate pleasure to see children’s enthusiasm as they build, create, and discover in these nature-rich spaces. Children’s lives are more joyful, and they will always have in them a nature-inspired sense of wonder.
Wonder and delight—that’s what young children often experience as they play in natural environments. As they look, feel, manipulate, and listen, children discover that the world of nature is exciting and filled with endless opportunities for exploring and discovering.

Childhood is a special time in an individual’s life when the world is known through the heart as well as the mind—a way of knowing that combines feeling and thinking. We sometimes refer to this kind of knowing as “wonder”—an emotion wedded to understanding based on intuition and natural instinct.

Children’s way of knowing often leads to a kind of truth that becomes elusive as we get older. As adults, we often think of “truth” as something that conforms to fact or actuality—that is, something that can be proven or arrived at through rational thought. There’s another kind of truth, however, known by children and poets—a truth embedded in wonder.

Wonder is an emotion as well as a way of knowing. This emotion adds zest to life and serves as a spark inside of us. Wonder also takes us outside of ourselves and into a realm that is greater than ourselves. When strongly felt, this experience of being outside of ourselves—and outside of time—is often referred to as ecstasy, an emotion accompanied by intense joy or delight. We often see this type of delight in young children as they become wholly engaged in the moment. They enter into the moment with their whole beings—body, mind, and spirit. This engagement allows them to experience the world—especially the natural environment—in a deep and direct manner, not just as a setting or a background for events.

Watch children play in natural environments and you’ll see spontaneous expressions of joy and excitement. Observe children running through a pile of leaves with total abandon, dancing and spinning when they feel the wind blowing through their hair, and laughing out loud when they see a toad hopping from place to place. You’ll see unbounded exuberance reflecting a deeply-felt emotional response to an unfiltered way of knowing the world of nature. Place young children in natural environments and watch the wonder unfold.

This article was adapted from a longer piece originally published in Exchange (May/June, 2010).
Anyone who doubts that the outdoor world of play is of value to children needs to go back into that world themselves.

Advice to Teachers

By Lorayne Carbon

When I was in Kindergarten, forty-three years ago, there was a space on my report card giving a grade for play skills, both indoors and outdoors. I am happy to report I earned a vigorous “E” for excellent, in both. Imagine that in today’s testing culture, teachers would be asked now to assess and evaluate children’s playtime outdoors. (Sadly, some children don’t even HAVE outdoor play time during school.)

When I observe children playing outdoors I am gently reminded of how much they would be missing had they not the opportunity to be there. Playing outside is one of the truest ways to recognize that each of us see the world through varying lenses. Children’s responses to the natural world are as unique as children themselves. Nature calls to them in different voices, and they respond with their own song. A good teacher recognizes and distinguishes each child’s particular “song” and encourages each child to sing: the louder the better!

We know that children learn through their senses. Nature provides the perfect outlet to use each sense to its fullest. How can a child paint a picture of the sky without noticing the hues of blue, and sometimes purple and pink? How is it possible to know that a bucket of rocks will feel heavier than a bucket full of grass and leaves unless you’ve had the opportunity to try it out? It’s in these discoveries, and more, that children begin to scaffold their knowledge, make broader assumptions, and create new knowledge. Children describe the outside world in varying ways. I love to listen to the children in my school on the way to the outside classroom:

“I am going to be first to the top of the rocks…let’s turn the water on to make mud…do you want to pretend?…I am going to the bushes to make soup and pancakes…let’s hide and pretend no one can see us…” In their excitement to be outdoors, their words tell us only a fraction of the possibilities that they see and can discover.

Anyone who doubts that the outdoor world of play is of value to children perhaps needs to take a bit of time to go back into that world themselves. Take your shoes off in the grass, climb up some rocks, turn over a rock to see what is there; let yourself bask in the unknown delights that you were more familiar with as a child. It is in those reminders that you will see the countless possibilities. And it is in those reminders that we become better teachers, parents and advocates of children.
Nature must abound in children’s spaces.

**Gift of Nature**

By Sandra Duncan

*Nature is a gift.* Nature’s beauty is a gift to our senses, minds, and hearts. Children who are surrounded by nature experience benefits to their physical, social, and cognitive development. Nature’s greatest gift, however, is giving children a beautiful and creative perspective of the world. It is vitally important for children to experience bountiful opportunities for interacting with nature.

**Bringing nature inside.** Nature must abound in children’s spaces. It should be found on every surface and in every form. Seashells and sponges, twigs and petrified wood, nuts and lentils, stones and minerals, pampas grass and sea grass rugs, and dried and fresh herbs are some examples of nature’s gifts. Children use these natural materials as palettes for their creations and compositions. Natural materials can also be used as art tools in the creative process.

**Gifting nature.** Giving and receiving gifts is one of the greatest joys that children can experience. Perhaps it is because of anticipation or the element of surprise that children are drawn to pretty packages. Or perhaps it is the pleasure of receiving something special from a loved one or friend. Likewise, teachers who provide young children with opportunities to give gifts of nature to their classrooms experience the same feelings of curiosity and desire to explore. Through the act of gifting, children assume three roles: gatherer, observer, and creator.

- **Gathering.** Much of nature’s gifts come in small packages: a shiny speckled pebble, a crumbly piece of tree bark, a tiny blade of deep green grass, or a fluffy dandelion. Because children are multi-sensory beings, they love to collect and gather these gifts of nature. An outing to collect nature’s gifts not only awakens children’s senses, but also stimulates their sense of wonder. After choosing a collecting buddy, they begin gathering natural items that are beautiful to them.

- **Observing.** Back in the classroom, children enjoy exploring their collections and making collaborative decisions about how and where their found items will be displayed.

- **Creating.** The children then express their feelings and ideas as they arrange their gifts through sculpting, painting, and drawing. Finally, they take great pride in gifting their work to the classroom and understand that they are competent, can make decisions, and have ownership of their work that is worthy of display.

**Begin fostering** the roles of gatherer, observer, and creator in young children. You will be amazed at how the children’s gifts will add vitality and new life to the classroom, their teacher, and the children themselves.
Mobilizing a Community

By Dana E. Friedman and Hillary Olson

In 2008, the Long Island Nature Collaborative for Kids (LINCK) was designated as a national demonstration site for connecting children and nature by the Dimensions Educational Research Foundation. This emboldened 50 people from the environmental, educational, and health fields who joined our steering committee to focus on three key strategies for living up to our potential: building outdoor classrooms, training adults about why and how to help children enjoy nature, and conducting a public education campaign.

We attribute our success to all of our partners. Stakeholders were carefully chosen and cultivated—we needed the best and the brightest minds on Long Island to help in our endeavors. We also needed key people in communities all over Long Island—the leaders and trusted advocates—to help motivate the neighborhoods and families to make it all happen. Today, each stakeholder brings to the table another dimension to our efforts. We enlist the help of parks staff, environmentalists, and horticulturalists to help us by encouraging families to bring their children to parks, preserves, farms, and environmental learning centers. Pediatricians make sure that we focus on physical exercise and healthy, garden-based eating habits to combat childhood obesity and the growing number of children with Type II Diabetes. Two local Cooperative Extension groups have assisted our efforts by promoting gardening as an intergenerational activity. Local land trusts make sure we focus on preserving open space. Youth organizations bring in the desire to learn about environmental careers and to teach younger children. Neighborhood associations and sustainability groups have drawn us to brownfields (abandoned or under-used industrial sites available for re-use) and helped LINCK focus on community development. We work with each of our partners by helping build their capacity to contribute to the mission we jointly created.

As our group continues to grow, we become more integral to individual communities and the region as a whole. We encourage action and promote not only specific LINCK-run projects, but the events and programs of all of our partners. One of the reasons that our partners return to meetings and help us in planning our programs is the opportunity to reach more Long Islanders by having their programs promoted on our community calendar.

LINCK has become a trusted source of information, resources, and support for educators, parents, policy makers and others seeking to connect children to nature. We continue to bring national leaders to Long Island and provide new ideas to “leave no child inside.” Our latest initiative was a contest to name our two Madagascar Hissing Cockroaches. We expect Matilda and Scarlett to help us attract new supporters to our cause.

...training adults about why and how to help children enjoy nature...
Nature as a Healer

By Elizabeth Goodenough

In Frances Hodgson Burnett’s The Secret Garden, sickly ten-year-old Colin, whose chief ailment is “temper and hysterics,” finds healing and life in the garden:

“And the sun fell warm upon his face like a hand with a lovely touch. And in wonder Mary and Dickon stood and stared at him. He looked so strange and different because a pink glow of color had actually crept all over him—ivory face and neck and hands and all. "I shall get well! I shall get well!" he cried out. “Mary! Dickon! I shall get well! And I shall live forever and ever and ever!”

What this author intuited about the healing power of nature has now been verified by research. That outdoor play is critical to the health of children has been widely documented. Less well-known is evidence that nature heals and renews vitality. Works of past artists and writers gain coherence and credibility from studies showing that old-fashioned play reduces obesity, stress, and aggression. Activities in natural settings may also help to decrease symptoms of Attention Deficit Disorder. Directed Attention Fatigue—that makes concentration difficult and even induces irritability—is remedied by time spent in natural environments. Cognitive weariness is relieved by journeys into nature, even if that nature is in our backyard.

Uninterrupted time outside has been celebrated as tonic in children’s books from Heidi and Swiss Family Robinson to Little House in the Big Woods. These classics dramatize the benefits of fresh air, exercise, and animal friendships to restore children who are irritable, anti-social, and hypochondriacal. They ascribe to the human species an instinct to affiliate with living things.

Children now growing up with nature near their homes are more resistant to stress and have a lower incidence of behavioral disorders. Even a view of nature fosters self-regulation and a capacity to delay gratification among girls living in Chicago public housing. In the words of Rachel Carson:

“Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts. There is symbolic as well as actual beauty in the migration of birds, the ebb and flow of the tides, the folded bud ready for the spring. There is something infinitely healing in the repeated refrains of nature: the assurance that dawn comes after the night, and spring after the winter.”

– A Sense of Wonder

As our sense of endangered survival on this shrinking planet becomes acute, children are our last and best resource. Yet their bodies and minds are under assault. Psychologist Hara Marano connects a “huge rise in self-harm and self-mutilation among the young” with “the shrinking sphere in which they are free to act out their anxieties.” Conservation properties that include natural areas may not provide a complete medicine cabinet, but they combat the psychological and physical distress robbing the next generation of agency and fullness of life.
Memories of Childhood

By Rolland G. Smith

When I was a youngster my mother would say, “Go outside and play.” And I would, with all the other kids in the neighborhood. We learned a lot about nature and ourselves playing outside. For one thing, we quickly learned to recognize poison ivy.

A few years ago I was fortunate to be asked to join the advisory board of Children and Nature Network (C&NN). This is a growing organization created by author Richard Louv. His book, Last Child in the Woods, became a best-seller as people realized we have a generation of children so connected to electronics that they are losing their connection to nature. As Louv writes, “We are fast approaching a generation of children where no child will have played outdoors.”

Nature is more than the flora and fauna we observe each day. Nature is a shared spirit of being with all things. Through nature we learn that everything is cyclical, that life begins and life passes, that every life is in balance with all other life forms, and each one helps the other fulfill its intrinsic purpose.

My neighbors (the community behind Community Playthings) in Rifton, New York embody the actions and nature philosophy that Louv suggests in his book. They plant, they play, and they teach their children that nature has her purpose. They live out the philosophy that we are part of nature, and when we abuse her, we abuse ourselves.

Spending time outdoors both in solitude and at play is an important education for children. The outdoors encourages an inner connection to nature, and if you stay there for a little while in meditation, you will see all the natural connections as pulses of soothing and loving light. You will connect to the chlorophyll of plants, the flight of insects and birds, the awareness of mammals, and especially the knowing of the earth herself.

In Shakespeare’s As You Like It, the Duke in the Forest of Arden says: “…there are tongues in trees, books in running brooks, sermons in stones, and good in everything…” 🍃
Why I like Nature

I like nature because there is wild flowers and birds! I can pick grasses and flowers and give them to my mom. I can look for nests with eggs. I also saw a fawn lying helpless in the grass. Now you see why I like nature.

By Karilyn, age 9
Risk

By Deb Curtis

Remember the powerful feeling of being at the top of a tree, the exhilaration of rolling down a hill, or the sense of accomplishment from turning the earth using a real shovel? The natural world offers children open space with grass, hills, sky, and trees that call out to their innate quest for action, adventure, and competence using their bodies. Children deserve and benefit from these experiences. Yet because much of what goes on outdoors involves risk, we are limiting these opportunities in children’s lives.

Keeping children safe is paramount. It is equally imperative for children to have opportunities to take up the adventures the natural world offers. The following suggestions can help you negotiate risks with the goal of providing rewarding, yet safe challenges that are vital for enhancing children’s confidence, physical skills, and joy.

Know your disposition toward risk.
We all have different reactions to challenging situations and what we perceive as too risky. Examine your view of outdoor activities to notice how your personal feelings may hinder children’s strong desire for adventures in nature.

Observe for children’s capabilities.
Often we stop children from negotiating a new challenge without taking into account their competence. Children usually pursue challenges within their abilities. Marvel at children’s unwavering determination and know-how while staying close to intervene if necessary.

Practice risk management.
A risk is possible to negotiate, and appropriate for particular situations and children. A hazard is inherently dangerous. Make distinctions between risks—common childhood accidents that cause bumps, skinned knees and scratches—and hazards that result in serious injuries.

Create an environment for safe challenges.
We can go so far in stripping the outdoors of any challenge that children have nothing interesting to do, making injuries more likely to occur. Engaging children by carefully planning for the outdoors helps focus their eagerness for exploration, which results in fewer falls and scuffles.

Remember, you are there.
When our concern for safety leads to eliminating anything challenging for children, we diminish the role of the teacher. When teachers take a less active role in thinking through safety issues, children are more at risk. Children are not alone outdoors. We are there, too! It is our job to supervise children’s safety and equally essential to provide for their curious minds and active bodies.

Provide challenging alternatives.
When children are involved in risky situations, rather than just stopping them, offer safe alternatives while preserving opportunities for feeling powerful and developing physical skills.

With attention and ongoing negotiation, we can ensure that children grow up developing skills and confidence, and feel joy and exhilaration, while still being protected and supported. What’s the risk if children don’t have the opportunity for these vital experiences outdoors?
Susan Wirth serves as Nature Explore Outreach Director for the Arbor Day Foundation and Dimensions Educational Research Foundation. The Nature Explore program provides resources to help educators, families, and others working to connect children with nature. Susan writes articles on the subject for national publications, presents at conferences, and conducts design consultations to help people create nature-rich, research-based outdoor classrooms in diverse settings. She heads the Early Childhood and Environmental Education committee for the North American Association for Environmental Education.

Nancy Rosenow is Executive Director of Dimensions Educational Research Foundation which works collaboratively with the Arbor Day Foundation on a national initiative called Nature Explore, a program that provides research-based workshops, design consultations, and field-tested resources to early childhood programs, schools, parks, zoos, and other public spaces. She delivers trainings and keynote addresses, writes for publications such as Exchange and Young Children, and provides support for the World Forum Foundation’s Nature Action Collaborative for Children Leadership Team.

Rusky Keeler is an artist/designer with a unique sensitivity to the sights, sounds and experiences of childhood. Rusky works throughout the world creating play environments for children, and lectures at colleges and conferences internationally. He is the author of Natural Playscapes (2008: Exchange Press). Rusky lives among the woods and gorges of the Finger Lakes region of upstate New York. When not designing or building, you may find him barefoot in his garden. For more information visit: www.earthplay.net.

Ruth Wilson, Ph.D. is an educational consultant and curriculum writer. Her primary areas of interest are early childhood environmental education and peace education. Dr. Wilson’s publications include several books and numerous articles. Her most recent book, Nature and Young Children: Encouraging Creative Play and Learning in Natural Environments, was published by Routledge in 2008. Dr. Wilson lives in Olympia, WA with her husband, Fred. Together, they’ve written stories and songs for young children. Dr. Wilson can be reached at wruthwilson@aol.com.

John Rosenow is the founder and Chief Executive of the million-member Arbor Day Foundation which sponsors the Tree City USA, Trees for America, and Rain Forest Rescue programs. Arbor Day Farm’s Lied Lodge & Conference Center hosts national and international conferences dedicated to conservation and education. The Arbor Day Foundation collaborates with Dimensions Educational Research Foundation to support the design and development of Nature Explore Classrooms, and to train educators and engage parents in connecting children with nature. John has been a strong supporter of World Forum Foundation’s Nature Action Collaborative for Children.

Lorayne Carbon is Director of the Sarah Lawrence College Early Childhood Center. She is a former classroom teacher and adjunct professor. She also leads workshops at seminars and conferences, and is the co-author of "Treasure Islands: The Lifelong Impact of Outdoor Play," in the 2007 collection Where do the Children Play? She has a BA from SUNY Buffalo and an M.S.Ed. from Bank Street College. Her special interests include social justice issues and creating aesthetic learning environments for children.

We are especially grateful for the help and support of these authors, without whom this booklet would not have been possible. Thank you for your time, creativity and enthusiasm in writing these beautiful chapters. Thank you for your care and respect for children everywhere and your tireless work in celebration of childhood.

Author Biographies

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Rolland Smith has over forty years of professional broadcast experience as an anchor, reporter, producer and commentator. During his career he has received 11 Emmy Awards. His extensive experience in broadcasting, along with his expressed interest in global issues, including the future of the environment (both physical and spiritual), have made Mr. Smith highly sought after as a public speaker. Currently he is writing and producing independent documentaries. He resides with his wife, Ann, in the Hudson Valley of New York.

Elizabeth Goodenough, Ph.D. and Lecturer in Literature at the University of Michigan Residential College, helped produce "Where Do the Children Play?" an Emmy award-winning PBS documentary, as well as a three-volume anthology and an outreach campaign to promote outdoor play throughout the US. In addition to A Place for Play, Goodenough’s books include Infant Tongues (1994), Secret Spaces of Childhood (2003), Under Fire: Childhood in the Shadow of War (2008), and Where Do The Children Play? A Study Guide to the Film (2010).

Dana Friedman, Ed.D., is a nationally-recognized researcher and policy analyst for children, family and women’s issues. She is the founder and president of the Early Years Institute. In addition to a variety of articles and research reports, Dana wrote The Juggling Act column for Working Mother Magazine from 1990 to 1997. She has degrees in child development, social policy and organizational behavior from Cornell, University of Maryland, and Harvard. Dana has three daughters, an understanding husband, and a big dog.

Sandra Duncan, Ed.D., an educator for over 40 years, has extensive experience in the early childhood field. She has authored preschool curriculums and teacher resource books. She is a frequent speaker at conferences, and teaches early childhood education at Ivy Tech Community College. Sandra recently co-authored Inspiring Spaces for Young Children and Rating Observation Scale for Inspiring Environments (ROSIE). These two books invite teachers to examine their classrooms from a new aesthetic perspective by considering environmental qualities that are often overlooked.

Elizabeth Goodenough, Ph.D. and Lecturer in Literature at the University of Michigan Residential College, helped produce "Where Do the Children Play?" an Emmy award-winning PBS documentary, as well as a three-volume anthology and an outreach campaign to promote outdoor play throughout the US. In addition to A Place for Play, Goodenough’s books include Infant Tongues (1994), Secret Spaces of Childhood (2003), Under Fire: Childhood in the Shadow of War (2008), and Where Do The Children Play? A Study Guide to the Film (2010).

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Deb Curtis has been in early childhood education for over 30 years. She leads seminars for teachers and administrators, and is a consultant in a variety of early childhood settings nationally and internationally. She is co-author of several books related to visionary practices in early childhood programs, and writes articles for a number of early childhood publications. She is passionate about protecting children from the pressures of modern life and institutional childcare settings. Learn more at www.ecetrainers.com or www.redleafpress.org.

Hillary Olson is a respected non-profit leader with more than 16 years of experience in science education settings including parks, museums and schools. As the Director of LINCK, the Long Island Nature Collaborative for Kids, she works to create and promote outdoor learning experiences for young children. She has an M.S.Ed in Museum Leadership from Bank Street College and a B.S. in Geology from Stony Brook University. Hillary has a two year old daughter and an 8-year-old step-son. Find out more about LINCK at www.linck.org.
**Recommended Reading**

- **A Child's Garden: 60 Ideas to Make Any Garden Come Alive for Children**  
  *Molly Dannenmaier, Portland: Timber Press, 2008*

- **Caring Spaces, Learning Places**  
  *Jim Greenman, Exchange Press, 2005*

- **Childhood and Nature: Design Principles for Educators**  
  *David Sobel, Portland: Stenhouse Publishers, 2008*

- **Earth Child 2000: Earth Science for Young Children - Games, Stories, Activities, and Experiments**  
  *Kathryn Sheehan & Mary Waidner, Tulsa: Council Oak Books, 1994*

- **Free Range Kids: Giving our Kids the Freedom We Had Without Going Nuts with Worry**  
  *Lenore Skenazy, San Francisco: Jossey-Bass, 2009*

- **Last Child in the Woods**  
  *Richard Louv, Chapel Hill: Algonquin Books, 2006*

- **Learning With Nature Idea Book: Creating Nurturing Outdoor Spaces for Children**  

- **Natural Learning: The Life History of an Environmental Schoolyard**  
  *Robin Moore & Herb Wong, Berkeley: MIG Communications, 1997*

- **Natural Playscapes: Creating Outdoor Play Environments for the Soul**  
  *Rusty Keeler, Exchange Press, 2008*

- **Nature and Young Children: Encouraging Creative Play and Learning in Natural Environments**  
  *Ruth Wilson, NY: Routledge, 2008*

- **Secret Spaces of Childhood**  
  *Elizabeth Goodenough (Ed.), Ann Arbor: Michigan University Press, 2003*

- **The Great Outdoors: Restoring Children's Right to Play Outdoors**  
  *Mary S. Rivkin, Washington, DC: NAEYC, 1999*

- **The Geography of Childhood: Why Children Need Wild Places**  
  *Gary Paul Nabhan & Stephen Trimble, Boston: Beacon Press, 1994*

- **When Learning Comes Naturally**  
  *Documentary Film, American Public Television, 2009*

- **Where Do the Children Play?**  
  *Documentary Film, Michigan Television, 2008*

**Organizations**

- **Children & Nature Network**  
  *www.childrenandnature.org*

  The Children & Nature Network (C&NN) was created to encourage and support the people and organizations working nationally and internationally to reconnect children with nature. The network provides a critical link between researchers and individuals, educators and organizations dedicated to children’s health and well-being.

- **Natural Learning Initiative**  
  *www.naturalearning.org*

  Creating environments for healthy human development and a healthy biosphere for generations to come.

  The purpose of the Natural Learning Initiative is to promote the importance of the natural environment in the daily experience of all children, through environmental design, action research, education, and dissemination of information.

- **Nature Explore**  
  *www.natureexplore.org*

  Nature Explore is a complete research-based program of fun, effective resources to help educators, families, and others working to connect children with nature. These resources were created to provide you with the help you need to promote and support the creation of Nature Explore Classrooms in your home, community, school or organization.

**Special Thanks**

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  *www.countrychildrenscenter.org*

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  *theseeddaycare.com*

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Community Playthings
Manufacturers of solid maple furniture and toys for over 60 years.

The ‘community’ in Community Playthings is a group of families that shares a faith, a way of life, and a belief in the importance of creative play in each child’s development. Together, we express our reverence for children by creating spaces of beauty and simplicity that nurture discovery and learning. To order our Community Playthings Catalog and other free resources, call 800-777-4244 or visit us at www.communityplaythings.com/resources, where you can also request hard copies from Customer Service.

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Connecting Children with Nature

Nature Action Collaborative for Children is an initiative of the World Forum Foundation with the mission of re-connecting children with the natural world by making developmentally appropriate nature education a sustaining and enriching part of the daily lives of the world’s children.

World Forum Foundation is the non-profit global outreach of Exchange magazine, connecting the Early Childhood Education profession for over 32 years.

www.worldforumfoundation.org
“It is a strange time. We live in an age when our children may know far more about bizarre people we care nothing about or a cartoon world than the workings of their own back yard—that marvelous ecosystem teeming with life.”