



Leading the Movement to Connect Children & Nature

Nature for Life Workshop

Healthy Communities Partnership
September 30, 2014

Presentation by Cheryl Charles, Ph.D.
Co-Founder, President and CEO Emerita

Why Care?



Vision

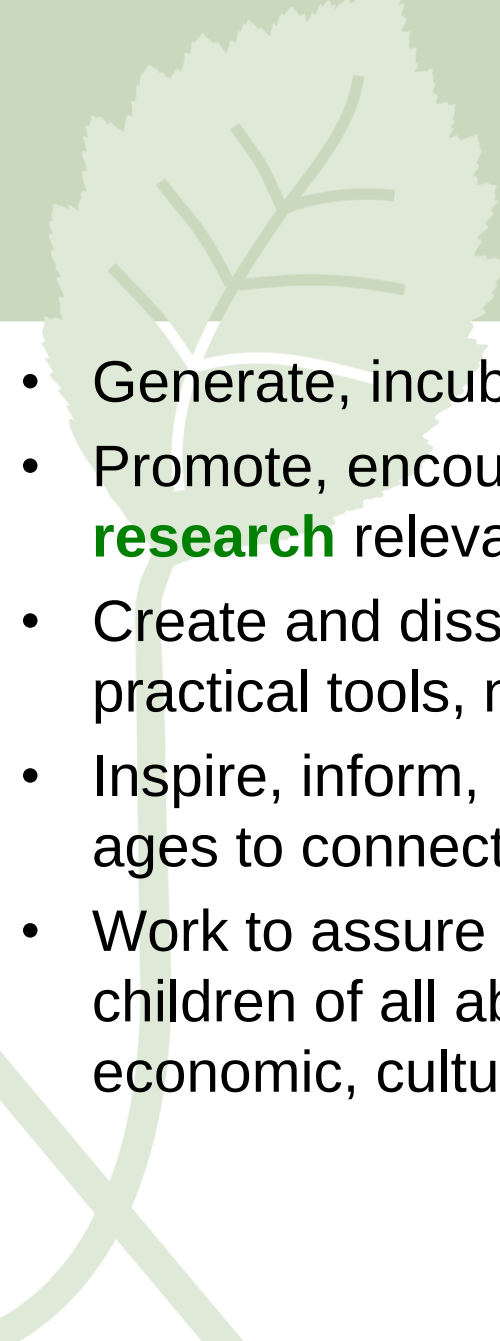
- The vision of the Children & Nature Network (C&NN) is a world in which all children play, learn and grow with nature in their everyday lives.



Mission

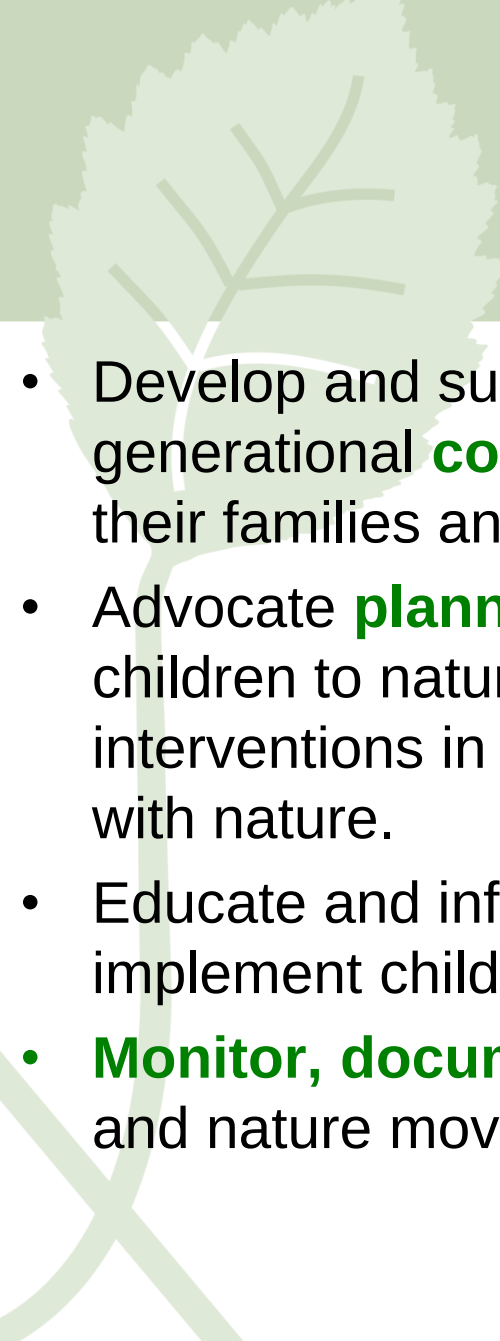
- The Children & Nature Network is leading a movement to connect all children, their families and communities to nature through innovative ideas, evidence-based resources and tools, broad-based collaboration and support of grassroots leadership.





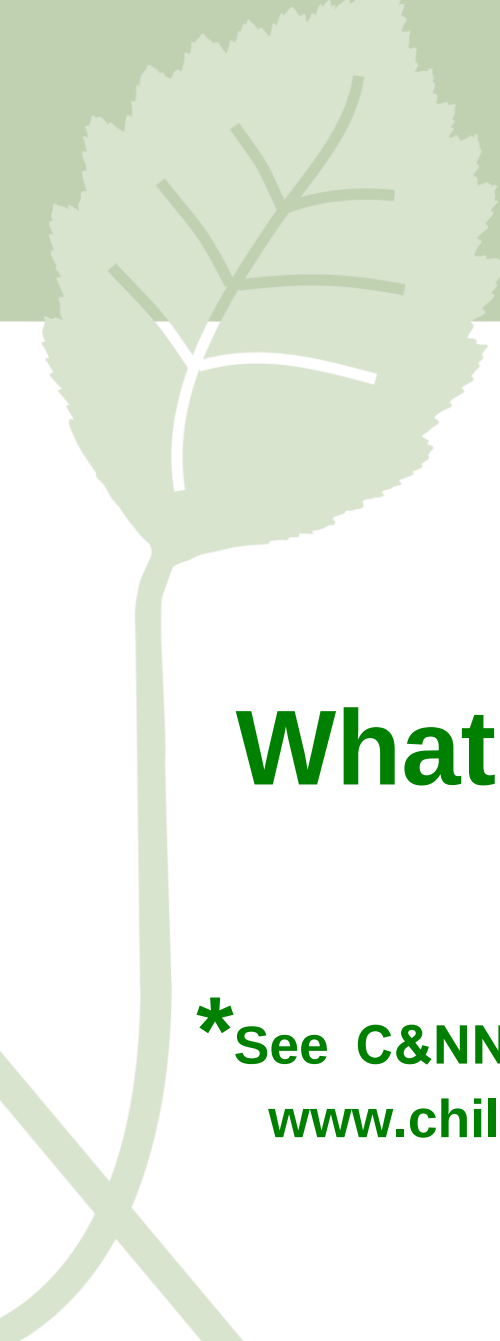
Children & Nature Network Goals

- Generate, incubate and disseminate **innovative ideas**.
- Promote, encourage, Identify, assemble, synthesize and report **research** relevant to the children and nature movement.
- Create and disseminate **evidence-based resources** including practical tools, news and commentary.
- Inspire, inform, prepare and support **grassroots leaders** of all ages to connect all children to nature in their everyday lives.
- Work to assure that connecting to nature **equitably benefits** children of all abilities and families and communities of all economic, cultural, geographic and linguistic backgrounds.



C&NN Goals, continued

- Develop and support cross-sector, multi-cultural, and inter-generational **collaborations** to take action to connect all children, their families and communities to nature.
- Advocate **planning and design policies** that support bringing children to nature and bringing nature to children through interventions in the physical environment to improve engagement with nature.
- Educate and inform **decision-makers** at all levels to create and implement children-and-nature-friendly policies and practices.
- **Monitor, document and evaluate** the progress of the children and nature movement.



What the Evidence Suggests*

*See C&NN's annotated bibliographies of research at
www.childrenandnature.org/research/

What the Evidence Suggests: Risks and Trends

- Many children are spending 40 to 65 hours or more a week connected with electronic media. (Kaiser Family Foundation)
- Fewer than 1 in 5 children walk or ride a bike to school. (Centers for Disease Control)
- Childhood obesity and severe overweight in children and youth has increased from 4% in the 1960s to about 20% today, and is substantially higher in some communities. (Centers for Disease Control)

Risks and Trends, cont.

- Approximately 60% of obese children ages five to ten have at least one cardiovascular risk factor, such as high cholesterol. (Centers for Disease Control)
- There is an upward trend in high blood pressure in children ages eight to 18. (Journal of American Medical Association)
- Obese young people are more likely than children of normal weight to become overweight or obese adults. (Centers for Disease Control)

Risks and Trends, cont.

- There is a dramatic increase in diabetes in children and adolescents. (National Institutes of Health)
- The prevalence of childhood asthma has increased significantly in the past 20 years and is particularly high in poor urban communities. (Journal of Epidemiology and Community Health)
- In countries throughout the world, children's major free-time activity is watching television and little time is spent in free play exploring nature. (Singer *et al.*)

Risks and Trends, cont.

- Myopia or nearsightedness has become increasingly common in young children. (Ophthalmology)
- Worldwide there is a high prevalence of vitamin D deficiency in infants, children and teens, and is associated with chronic diseases. Reduced sun exposure is a risk factor for vitamin D deficiency. (Reviews in Endocrine and Metabolic Disorders)

Risks and Trends, cont.

- Youth spend significantly less time in moderate-to-vigorous physical activity as they move from childhood to the teen years. Only 17% of 15 year olds were found to get an hour a day of MVPA. (Journal of the American Medical Association)
- Children have less time for unstructured, creative play in the outdoors than ever before in human history. (Various researchers)
- This may be the first generation not to live as long as their parents. (US Surgeon Generals)

What the Evidence Suggests: The Benefits

- Children are happier, healthier and smarter when they connect with nature.
 - **Happier:** Nature play increases self esteem, improves psychological health and reduces stress. Children learn self-discipline and are more cooperative.
 - **Healthier:** Nature play improves physical conditioning, reduces obesity and mitigates other health risk factors.
 - **Smarter:** Nature play stimulates creativity and improves problem solving. Children do better in school.

Benefits, cont.

- Daily exposure to natural settings is associated with children's ability to focus and enhances cognitive abilities. (Wells)
- Children are less stressed, more self-disciplined, and have better social relationships with access to—and even a view of—nature in their daily lives. (Kuo, Kuo and Sullivan)
- Outdoor classrooms and nature-based education is associated with significant student gains in academic achievement. (American Institutes for Research)

The Benefits, cont.

- The greener a child's everyday environment, the more manageable and mitigated are their symptoms of Attention-Deficit Disorder. (Faber Taylor and Kuo)
- Higher street tree density is associated with a lower prevalence of childhood asthma. (Journal of Epidemiology and Community Health)
- Higher levels of total time spent outdoors is associated with lower prevalence of myopia among twelve-year olds. (Ophthalmology)

What Research Says About People Who Grow Up Caring Deeply about the Environment

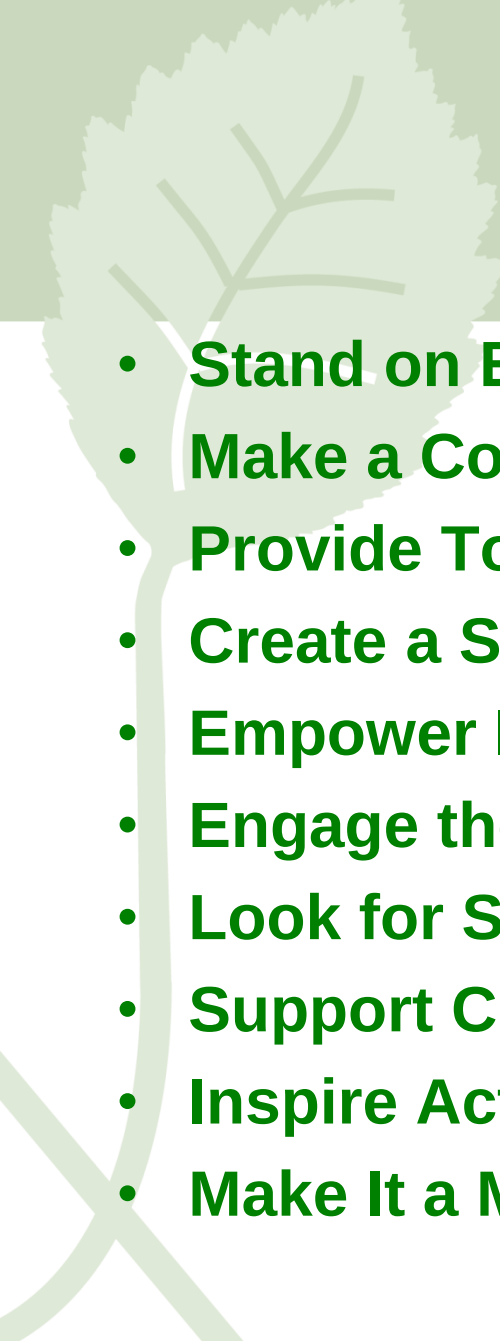
- Nearly to a person, those who grow up to be committed to active outdoor lives and conservation of natural resources had meaningful experiences outdoors on a regular basis between the ages of birth and 11 or 12 years of age

Brief History 2005 - 2014

- 2005: First Edition of Richard Louv's *Last Child in the Woods—Saving Our Children from Nature-Deficit Disorder* was published and is now available in more than a dozen languages
- 2006: Children & Nature Network was founded and a handful of campaigns were launched in North America
- 2009: The movement grew to more than 40 campaigns getting **one million** children and youth outdoors in nature annually
- 2011: More than 50 campaigns reported getting **3 million** children and youth outdoors in nature annually
- 2014: More than **14 million** children and youth are projected to have gotten outdoors in nature through these campaigns in seven years!
- 2014: People from more than 200 nations visit the www.childrenandnature.org web site and from 100 nations download C&NN's free resources in multiple languages.

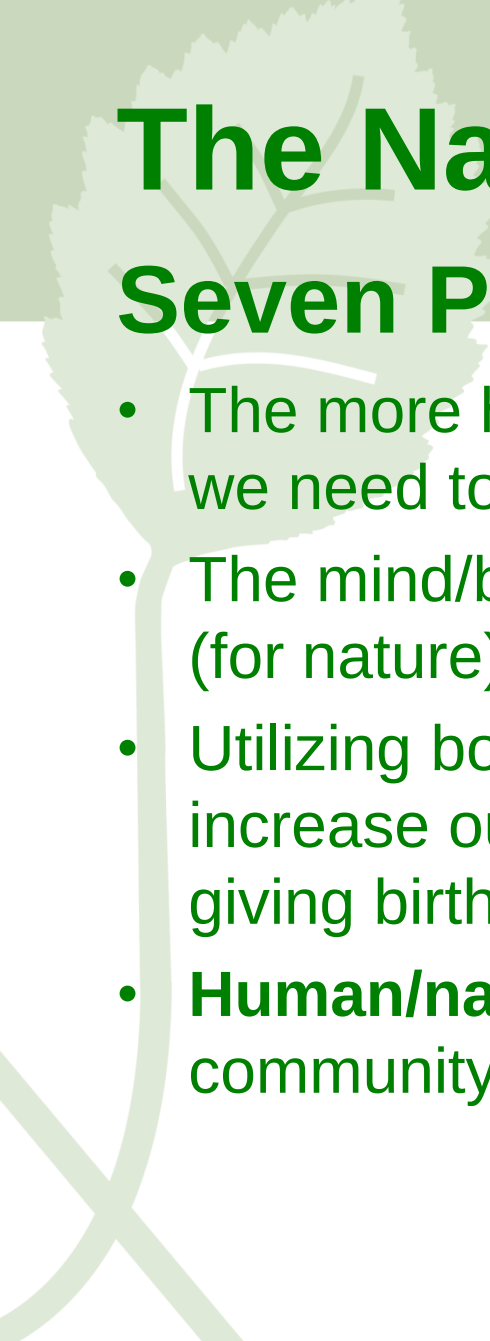
Moving the Movement

- This disconnect from nature is an issue that affects all children—every economic and ethnic group—in rural, suburban and urban settings throughout North America and the world.
- The children and nature movement must create systemic change while nourishing a do-it-yourself, do-it-now philosophy.
- We need more research, but we know enough to act.

A large, stylized leaf graphic in a light green color, positioned on the left side of the slide. It has a central vein and several branching veins, with a jagged, leaf-like edge. The leaf is partially obscured by the title and the list of lessons learned.

Lessons Learned

- **Stand on Evidence**
- **Make a Compelling Case**
- **Provide Tools and Resources**
- **Create a Sense of Community**
- **Empower Individuals and Families**
- **Engage the Media**
- **Look for Strategic Multipliers**
- **Support Credible Spokespeople and Partners**
- **Inspire Action**
- **Make It a Movement**



The Nature Principle:

Seven Precepts by Richard Louv

- The more high-tech our lives become, the more nature we need to achieve **natural balance**.
- The mind/body/nature connection, also called **Vitamin N** (for nature) will enhance physical and mental health.
- Utilizing both technology *and* nature experience will increase our intelligence, creativity and productivity, giving birth to the **hybrid mind**.
- **Human/nature social capital** will enrich and redefine community to include all living things.

The Nature Principle*, cont.

- In the new **purposeful place**, natural history will be as important as human history to regional and personal identity.
- Through **biophilic design**, our homes, workplaces, neighborhoods, and towns will not only conserve watts but also produce human energy.
- In relationship with nature, the **high-performance human** will conserve and create natural habitat—and new economic potential—where we live, learn, work and play.
- *The Nature Principle: Human Restoration and the End of Nature-Deficit Disorder* by Richard Louv. Algonquin, 2011. Page 5.

Definition of Children and Nature-Centered Experiences

- Nature-centered experiences for children are those that instill wonder and engender curiosity; occur in outdoor settings ranging from backyards to neighborhoods to schools to city parks to wilderness; and occur in the form of guided activities as well as unstructured nature play and learning in children's everyday lives.



A stylized, light green tree graphic is positioned on the left side of the slide. It features a thick, curved trunk that branches into a large, rounded canopy. The canopy is filled with a lighter shade of green and has several thin, dark green lines representing branches and veins. The background is a solid light green color.

Natural Benefits to Children's Healthy Development

© 2014

Awe



Empathy



Photo by Milton McClaren.

Socialization



Photo Nathaniel Brooks for New York Times, Waldorf School, Saratoga Springs, New York

Resilience



Sense of Place



Cooperation



Problem Solving



Self Esteem



Exhilaration



Photo Courtesy of Children in Nature Collaborative, Bay Area

Creativity



© 2014

Photo Courtesy of Cincinnati Nature Center.

Confidence



Focus

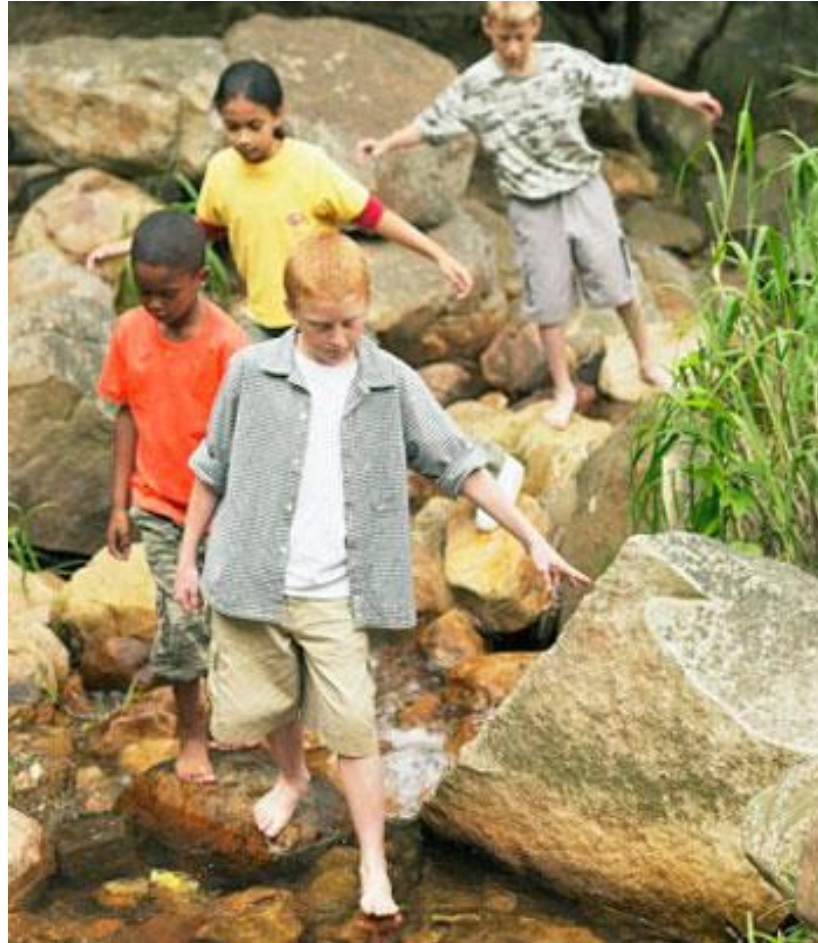


Photo Courtesy of Children in Nature Collaborative, Bay Area

Understanding



© 2014

Photo Courtesy of Children in Nature Collaborative, Bay Area.

Courage



Photo Courtesy of Brother Yusuf Burgess.

Wonder



Photo by Cheryl Charles.

Places and Spaces

- Age appropriate
- Mix of activity areas
- Small for small, big for bigger
- Loose parts
- Wild, complex, natural, diverse
- Backyards to rooftops
- Through the seasons
- A sense of place and home

Design Elements

- Special entry
- Climbing and crawling space
- Messy materials
- Natural art
- Garden and pathways
- Secret rooms
- Water
- Dirt-digging space
- Sand

Special Entry



Climbing and Crawling Space



Climbing and Crawling Space



Messy Materials



Natural Art



Garden and Pathways



Secret Rooms



Water



Dirt Digging Space



Sand



Other Elements



Other Elements, cont.



What Teachers and Caregivers Can Do

- Open the door and go outside.
- Integrate the outdoors throughout the day care and school curricula.
- Reinstate recess where it has been eliminated.
- Affirm those teachers and caregivers who have always brought the outdoors indoors, with live plants, natural materials, ecologically-based learning laboratories and opportunities to connect with the outdoors.

What Teachers and Caregivers Can Do, cont.

- Maintain, expand or add areas of native plantings, schoolyard habitat projects, school gardens and diverse natural areas to the day care or school grounds and nearby neighborhoods.
- Get parents and the community involved—because nature-based learning is good for everyone.

What Each of Us Can Do

- Take a child outside.
- Encourage nature-based, children-friendly spaces and places throughout our communities.
- Make re-connecting children and nature a priority.
- Educate parents, grandparents and other caregivers about the cognitive, physiological, and emotional benefits to children who play in the out-of-doors on a regular basis.

-

What Communities Can Do

- Engage the physicians to encourage them to prescribe nature-play, because it is good for children.
- Educate architects, builders, community planners, the clergy and civic leaders about the need for areas of native habitats in planned developments and existing neighborhoods, so children have places to play that foster their imagination.

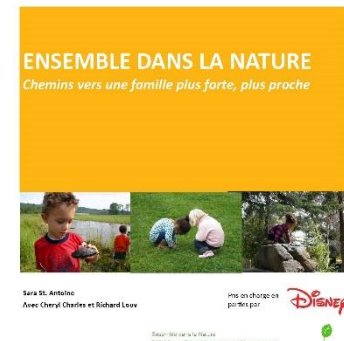
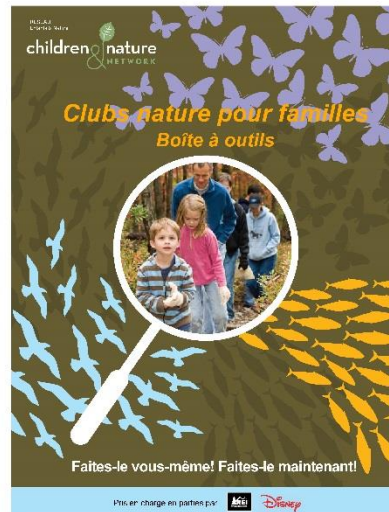
What Communities Can Do, cont.

- Assemble a group of creative and constructive attorneys to help reduce liability fears and constraints.
- Build new partnerships, and support existing efforts, to bring the resources of the private sector together with public agencies in bold, balanced and conserving ways to achieve a sustainable future.
- Engage the whole community in a children and nature initiative, now and for the future.

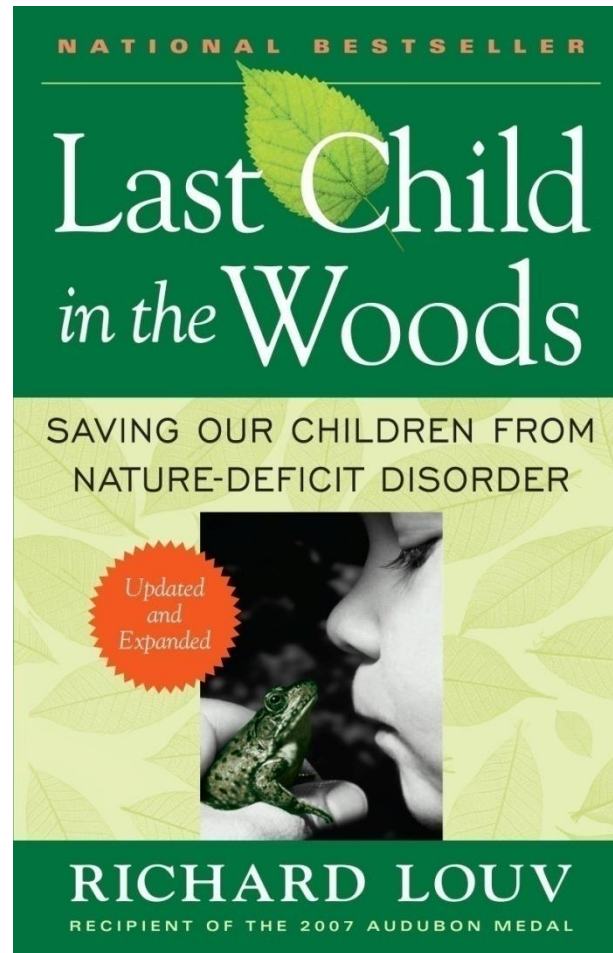
A Few C&NN Resources



www.childrenandnature.org



A Book that Launched a Movement



For Additional Information, contact:

Children & Nature Network

808 14th Avenue SE

Minneapolis, MN 55414

www.childrenandnature.org

info@childrenandnature.org

C&NN is a 501c3 non-profit educational organization.