

**DRAFT**

**NH Children in Nature Coalition  
Communications Plan**

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## NH Children in Nature Coalition

### **Lay of the land**

In 2006, a national conversation was ignited by Richard Louv's groundbreaking book, *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*. In it, Louv traces the causes and impacts of children's disconnect from nature through interviews with educators, parents and health professionals, as well as with children themselves.

Louv describes a growing body of research that reveals the necessity of contact with nature for healthy child development – and for adults, neighborhoods, whole communities and the very future of our society.

The social, physical, cognitive, and psychological benefits of spending time in nature are being recognized by more people every day. Research shows that outdoor play can help develop full use of the senses, protect psychological wellbeing, soothe the symptoms of attention-deficit disorders, reduce obesity, diminish stress and anxiety. In New Hampshire, where more than 32 percent of children aged 6-12 are overweight or obese (source: Foundation for Healthy Communities) and more than 9 percent of those aged 4-17 have at some point been diagnosed with ADHD (source: CDC.gov), the need for a nature-based culture shift are clear. *For more information about the benefits to children and youth from experiences in nature, see [Appendix 1: Evidence](#), which contains relevant research abstracts compiled by the national Children & Nature Network.*

Yet as of 1990, the radius around the home where children were allowed to roam on their own had shrunk to one-ninth of what it had been in 1970, and their “free” time is now largely structured. The reasons are many: lack of knowledge, busy schedules, limited access to nature, fear of strangers, popularity of video games, TV, and computers, perceived safety risks, fear of lawsuits, loss of recess periods, and so forth. Well-meaning but frightened or uninformed parents, school systems and media are keeping kids out of the fields and the woods. **By moving childhood indoors, we are depriving children of a full connection to the world.** The implications – for children's physical and mental health, for the future of our natural resources, and even for our communities' economies – are far-reaching.

The NH Children in Nature Coalition was formed in response to these challenges, with the ambition to get today's children and families to explore and embrace their wild roots, and simply spend more time outdoors – for the mental and physical wellbeing it brings to people, and the long-term benefits it can have for our society and the earth.

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Coalition members have identified dozens of challenges that could be addressed by the coalition while it works to encourage children and families to get into nature. Here are a few:

- People have lost awareness of the values of being outdoors and have become disconnected
- Americans today have a largely sedentary lifestyle, which has led to child and adult obesity and other health issues
- There are many fears and misconceptions about what's healthy, safe, and right for kids
- Negative messages about the outdoors are propagated by the news media
- Most people may not even aware that there is a problem and an easy, no-cost solution



#### **Our mission**

The mission of the New Hampshire Children in Nature Coalition is to foster experiences in nature that:

- Improve physical and emotional health and wellbeing;
- Increase understanding of and care for the natural world;
- Promote stronger connections to community and landscape;

And to provide a forum for continued collaboration by Coalition participants and others.



#### **History**

In January of 2007, staff from the New Hampshire Fish and Game Department's Public Affairs division gathered partners to discuss the possibility of creating a statewide initiative on the topic of children in nature, and to propose a summit on the topic of "Leave No Child Inside."

Soon, a steering committee was created, comprised of staff from various organizations and groups, including NH Parks and Recreation Association, NH DRED/Division of Parks, NH Fish and Game, NH Department of Environmental Services, University of New Hampshire, Plymouth State University, the Student Conservation Association, UNH Cooperative Extension, and the Appalachian Mountain Club.

During spring, the steering committee worked to plan the first New Hampshire "Leave No Child Inside" Summit, which took place at the PSNH Five Rivers Auditorium in Manchester, NH, on May 30, 2007, and served as a kickoff to the issue and the organization that would become the Children and Nature Coalition. The Summit gathered more than 100 people, with participants

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representing health, education, environment, recreation, media, culture and the built environment. Dr. Susan Lynch served as Honorary Chairperson, delivering a video message to the gathering; and Dr. Cheryl Charles, President of the national Children and Nature Network, delivered the keynote address. *For a list of participating groups, see Appendix 2: Summit Participants.*

A follow-up meeting was held in June to review the Summit Summary and Strategies, and organize working groups.

In summer and fall of 2007, the working groups started meeting regularly, to name the initiative; develop a mission statement and goals for the group; determine messages, audiences and communication methods; and to plan the “Leave No Child Inside” Forum.

The partnership of groups, organizations and individuals supporting the effort was named the “New Hampshire Children in Nature Coalition” in fall of 2007. The coalition’s “Leave No Child Inside” Forum was held at the Capital Center for the Arts in Concord in November 2007, involving 240 people in working sessions and more than 600 in a public forum featuring “Last Child in the Woods” author Richard Louv. The event was co-hosted by the NH Children in Nature Coalition, the Sierra Club, and the Children & Nature Network.

A listserv was established following the forum. As of June 2008, more than 130 people have joined the listserv to learn more about the coalition and information and programs related to children and nature in New Hampshire.

As the need for organizing coalition efforts and structures emerged, the Organizational Development Committee was formed. The group is currently working on setting up coalition structures and operating procedures, including designing the procedures for writing and receiving potential grant monies, using designated fiscal agents for each project. As of spring 2008, the coalition is preparing to register with the State of New Hampshire.

At this writing, dozens of volunteers remain actively involved with the NH Children in Nature Coalition at many levels. The original Steering Committee evolved into the Mission and Goals Committee, which is now working on the coalition’s strategic plan; and the Messages, Audiences and Communications Committee has met regularly to develop ideas for communications and outreach. In addition, the ad hoc We Do Science Committee is working to connect nature experiences with New Hampshire science curricula; and the new ad hoc Natural Leaders Committee is devising a program for high school students to promote youth environmental leadership.

Awareness continues to grow while the various working groups and “member” organizations do their part to carry out the coalition’s mission.



## Goals

Many New Hampshire organizations, individuals, and agencies are already working on issues related to children in nature; one important goal of the Coalition is to connect them with each other and help them bring their work into communities where children and families will directly benefit.

We have a large and active coalition representing several areas of interest in New Hampshire, including education, health, natural resources, the built environment, and recreation. The coalition is politically neutral, and its ideals can be embraced by anyone who'd like to see positive changes in our society. Coalition partners have committed time and resources to the effort, and have expressed a desire to work together, build the network, and make use of any tools and opportunities the coalition can offer.

This plan outlines the first steps in creating those tools and facilitating needed connections.



## Defining Audiences

The coalition will need to communicate with a wide range of audiences throughout New Hampshire – and there will certainly be crossover among audiences. Many of these people will also be coalition members and thus a part of internal communications as well.

Audiences we intend to eventually reach include:

- Families
- Natural experience “facilitators”
- Health care profession: administrators, insurers, physicians, nurses, school cafeterias, health food/grocery stores, physical therapy and rehabilitation centers, mental health agencies
- Built environment: architects, designers (landscape designers and landscape architects) contractors, developers, engineers, transportation officials, civic organizations, planners, government agencies (local, state, regional)
- Policymakers/legislators, school boards, zoning boards, conservation commissions
- Outdoor retailers
- Natural resource artists and cultural professionals
- School-age children, including those with special needs
- Colleges and universities
- Coalition members

A great deal more planning and prioritizing of audiences and activities will be needed, so that limited resources can be put to best and most efficient use.



## Communications – Families

### **Audience description**

The “family” audience is primarily parents and caregivers – those who reach children and youths in their homes and make the majority of decisions about how and where they spend their time.

### **Goals**

New Hampshire families will:

- Understand and appreciate the many benefits of spending time outdoors.
- Are inspired to get out and play and enjoy the natural world, in an unstructured way, with their children.
- Make use of local resources, such as open spaces and the organizations that can enhance the outdoor experience

### **Key messages**

*Spending time in nature...*

- Is fun
- Is safe
- Reduces stress
- Makes children more focused
- Enhances children’s emotional and social development
- Improves school performance
- Enhances creativity, problem solving ability, self-esteem and self control
- Improves cognitive ability
- Improves health and wellbeing
- Reduces obesity
- Gives kids a reason to care about and conserve their environment
- Can lead to careers in the environment
- Can inspire a lifelong lifestyle
- Can happen near where you are, whenever you’re ready

### **Tools and tactics**

*Branding*

The NH Children in Nature Coalition has a name and has generated significant buzz since its inception. Moving forward, we must develop a coalition “brand” – including a logo; a “look” to

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include colors, typefaces, and a distinctive graphic style that reflects the coalition's vision; and a tagline. These branding items will be carried across all coalition materials, whether print or electronic, and will be offered for use by coalition members in their own outbound communications.

#### *Awareness campaign*

The awareness campaign will be developed for a family audience, with the understanding that coalition partners and members – both individuals and organizations – will play a substantial part in delivering it to audiences, through their own existing communications mechanisms and through forums that they seek out.

Some of the elements of the campaign:

#### Materials

- Website – A one-stop site where families can go to find things to do, places to go, organizations to get involved with (see “facilitators” section).
- PSA/advertising – Professionally developed public service announcements and advertisements that could be used by the media AND used or adapted by coalition members or volunteers as they do their own outreach. This may include print, web, audio, and eventually video, and would be based on coalition messaging.
- Articles for reprint – Invite coalition members to write or submit articles that could be repackaged for the media, or for organizational newsletters.
- Printed materials – A bookmark, brochure, or other printed piece(s) that could be distributed through schools and community facilities, to encourage families to get outside.

#### Speakers' bureau

- Messengers – A “stable” of coalition partners/members who are willing to go out to other organizations and talk about the coalition.
- Training – A half-day or shorter workshop to train messengers.
- Talking points – Containing the coalition's main messages and stories that can be delivered to an audience (long form and short form to be developed for use in different contexts).
- Slide show – An electronic slide presentation that could be used or adapted by coalition partners/members when they speak with other audiences.
- Display – A portable standup display that could be used when the coalition is asked to present at or “table” an event.

#### Media relations

- Coalition members – especially speakers' bureau members – will be invited to be spokespeople for the coalition and encouraged to interact with the news media.
- News releases – could be prepared by coalition members (or, one day, staff), and sent out via the e-mail system (see “facilitators” section).

## **Evaluation**

Because we are looking for changes in attitude and behavior that can be quite difficult or expensive to measure, we will need to rely on the baseline and post-project research being planned by the Mission and Goals group to show any movement.



## **Communications – Facilitators**

### **Audience description**

The Coalition defines “facilitators” as people who in some way influence the way that children and families spend their time, who have the potential to engage children in nature pursuits, including: educators and school administrators; presenters of educational programs such as Project WET, Project Wild, and Project Learning Tree; day-care providers; recreation specialists such as coaches and camp counselors; staff and volunteers of outdoors organizations; leaders of faith-based organizations; and many more.

These are the people that this initial communications and outreach plan will address in the near term; many of them are already involved with the coalition. This startup portion of the plan could be phased in over 6-12 months.

Our expectation is that once more “facilitators” are actively involved with the coalition, momentum will build for them to bring in other audiences where their lives intersect, at which point the plan could be expanded with a 2-4 year horizon.

### **Goals**

Facilitators will:

1. Embrace the vision of children in nature in an active way
2. Join the coalition and get involved in the movement at some level
3. Provide time and resources to get kids into nature
4. Spread the word – talk about children in nature and what *they’re* doing to help make change in their community
5. Share their stories so that others can learn from their experience

### **Key messages**

- The NH Children in Nature Coalition can connect you with a bigger sense of mission and bring greater meaning to your work.
- There are many existing resources that you can tap to learn about the issue of children in nature and to help you develop knowledge and skills that you can share with others.
- You can be a change agent, helping to bring about a new cultural movement that values engagement in nature.

## Tools and tactics

### *Website*

At meeting after meeting, coalition members have agreed that an interactive, Web 2.0-based website will be critical to the coalition's success. The domains [www.nhchildreninnature.com](http://www.nhchildreninnature.com) and [www.nhchildreninnature.org](http://www.nhchildreninnature.org) have been secured and currently point to a bare-bones page about the coalition. The website would ultimately include:

- Information about the coalition – including mission, goals, how to get involved
- A clearinghouse where coalition member organizations can enter their own information, including:
  - Name
  - Mission
  - Contact info, including website
  - Description of activities and/or program offerings
  - Event and program dates

These data would be uploaded into a web-enabled resource database and activity calendar that would be searchable by any web user

- Breaking news related to the topic of children in nature and/or the activities of the coalition and its member organizations; plus a blog option to invite conversation among partners and the public
- A resource library, to include such things as New Hampshire-specific research and classroom curricula
- Advocacy tools such as talking points and reprintable materials that support the coalition's work; eventually, separate sections for audiences such as health workers
- Links to the national Children & Nature Network and other relevant national or regional efforts
- An e-mail signup mechanism

Implementation needs:

- The website and blog would need to be built by professionals.
- The website would need to be maintained and the blog written and monitored by someone, possibly a paid coalition staff member, with the time and ability to do a good job, vet the information entered by member organizations, and keep everything up-to-date.
- Financial support for above activities.

### *e-mail list*

A one-way e-mail list is needed so that people who are members of or interested in the coalition can remain engaged and stay apprised of goings-on. This email list is a separate list from the internal coalition listserv. This list would:

- Have a welcome message including information about the topic; a link to the website; and an invitation to become a part of the website's organization clearinghouse

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- Be used to send information about the coalition – new activities or research; member program highlights; partnership, training, or funding opportunities; and the like
- Help keep momentum going among coalition members by sending information or materials that they can use in their programs or for further advocacy

The email list would need to be administered, possibly by the same person who maintains the website, so that the two information sources would stay in sync.

#### **Evaluation**

One year after implementation of this plan begins, we expect that the website will be up and running; the number of unique visitors is reaching the thousands each month; the e-mail list will have been established, and at least 2 e-mails are going out to members each month.

A survey of the facilitators should be conducted after the first year to determine whether they are getting the information they need and to ask what else the coalition can do to help them be more successful connecting children with nature.



#### **Communications – Coalition members**

As an inclusive coalition, creating and preserving a consistent flow of information within the coalition member group is imperative. Since no one organizational member is leading the coalition, ideas, information, and activities can come from any member. The perception and existence of this democratic base is extremely important.

**This section is under development.**



## **Appendix 1: Evidence**

The national Children & Nature Network, with support from the Texas Parks and Wildlife Department, has developed an annotated bibliography of studies that highlight the benefits to children and youth from experiences in nature – abstracts may be found on the following pages, with links to full results from the research where available. An additional volume of research related to changes in children’s experience of nature may be found at [www.childrenandnature.org/research/volumes](http://www.childrenandnature.org/research/volumes).

### Childhood Development

#### **Direct Experience in Nature Is Critical and Diminishing**

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Nature is important to children's development in every major way—intellectually, emotionally, socially, spiritually, and physically. In his newest book, *Building for Life: Designing and Understanding the Human-Nature Connection* (Island Press, 2005), Dr. Stephen R. Kellert of Yale University devotes a chapter to the subject of "Nature and Childhood Development." Combining his original research with well-documented references to the research of others, this chapter is a powerful synthesis of what we know, and what we do not know, about the importance of nature to children's healthy development. Kellert states, "Play in nature, particularly during the critical period of middle childhood, appears to be an especially important time for developing the capacities for creativity, problem-solving, and emotional and intellectual development." He includes research to indicate optimal learning opportunities at age-appropriate times and differentiates between indirect, vicarious, and direct experiences with nature — with the latter less and less available to children. He urges designers, developers, educators, political leaders and citizens throughout society to make changes in our modern built environments to provide children with positive contact with nature—where children live, play, and learn. (Original Research and Synthesis)

Kellert, Stephen R. "Nature and Childhood Development." In *Building for Life: Designing and Understanding the Human-Nature Connection*. Washington, D.C.: Island Press, 2005.

#### **Unstructured Free Play Brings Cognitive, Social and Health Benefits**

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Unstructured free play in the out-of-doors brings a host of benefits to children—from being smarter to more cooperative to healthier overall. This well-documented article by two physicians builds a strong case for the importance of unstructured free play in the out-of-doors for all age groups, and especially young children. While concerned about the “obesity epidemic” in young children, the authors say that the health benefits from outdoor play are only one aspect of the overall benefits. They suggest that the concept of “play” is more compelling and inviting to most adult caregivers, parents and guardians than “exercise.” The authors cite cognitive benefits from play in nature, including creativity, problem-solving, focus and self-discipline. Social benefits include cooperation, flexibility, and self-awareness. Emotional benefits include stress reduction, reduced aggression and increased happiness. Children will be smarter, better able to get along with others, healthier and happier when they have regular opportunities for free and unstructured play in the out-of-doors. (Synthesis)

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Burdette, Hillary L., M.D., M.S.; and Robert C. Whitaker, M.D, M.P.H. "Resurrecting Free Play in Young Children: Looking Beyond Fitness and Fatness to Attention, Affiliation and Affect." © 2005 American Medical Association.

#### **Direct Experience and Mentoring Are Key Elements**

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The focus of this recent research from Dr. Louise Chawla is on those factors that contribute to individuals choosing to take action to benefit the environment when they are adults. This is a reprise of earlier research by Dr. Chawla in the 1990s (*Journal of Environmental Education*, 1998, 1999). Positive, direct experience in the out-of-doors and being taken outdoors by someone close to the child—a parent, grand parent, or other trusted guardian—are the two most significant contributing factors. While lifelong activism is the primary focus of Dr. Chawla's inquiry, as reported in this article, her well-documented study includes citations and explanations of many additional benefits to children from early experiences in the out-of-doors. Creativity, physical competence, social skills, environmental knowledge, confidence, and problem-solving ability are among those benefits to children's development.

Given the important role of adults in taking children into the out-of-doors, Dr. Chawla is specific about the attributes of the experiences those adult mentors provide. She states, the "adults gave attention to their surroundings in four ways—care for the land as a limited resource essential for family identity and well-being; a disapproval of destructive practices; simple pleasure at being out in nature; and a fascination with the details of other living things and elements of the earth and sky." Modeling those attributes while in the presence of the child does even more. As Dr. Chawla states, "The very fact that a parent or grandparent chose to take the child with them to a place where they themselves found fascination and pleasure, to share what engaged them there, suggests not only care for the natural world, but, equally, care for the child." (Original Research and Synthesis)

Chawla, Louise. "Learning to Love the Natural World Enough to Protect It," in *Barn* nr. 2 2006:57-58. © 2006 Norsk senter for barneforskning. *Barn* is a quarterly published by the Norwegian Centre for Child Research at the Norwegian University of Science and Technology, Trondheim, Norway. This article was written for a special issue in honor of the Norwegian child psychologist, Per Olav Tiller.

#### **Contact with Nature Is Important for Children**

Andrea Faber Taylor and Frances E. Kuo have contributed important research to the understanding of the impact of nature on people's lives, and specifically to the well-being of children. This particular article is a recent review of the literature and establishes what is known, and what is still missing, about the effects of contact with nature on children's lives. While the evidence is growing, this article is an important call to action for further research.

Taylor, Andrea Faber; and Frances E. Kuo. "Is Contact with Nature Important for Healthy Child Development? State of the Evidence." In Spencer, C. & Blades, M. (Eds.), *Children and Their Environments: Learning, Using and Designing Spaces*. Cambridge, UK: Cambridge University Press, 2006.

Outdoor Learning Enhances School Achievement, Self-Esteem and Self-Discipline

**Nature-Smart Kids Get Higher Test Scores**

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The American Institutes for Research® conducted a study, submitted to the California Department of Education, of the impact of weeklong residential outdoor education programs. The focus was on at-risk youth, 56% of whom reported never having spent time in a natural setting. Comparing the impact on students who experienced the outdoor education program versus those in a control group who had not had the outdoor learning experience, results were statistically significant. Major findings were: 27% increase in measured mastery of science concepts; enhanced cooperation and conflict resolution skills; gains in self-esteem; gains in positive environmental behavior; and gains in problem-solving, motivation to learn, and classroom behavior. (Original research)

"Effects of Outdoor Education Programs for Children in California." American Institutes for Research: Palo Alto, CA: 2005. Available on the Sierra Club web site.

Environment-Based Learning Enhances School Achievement and Civic Responsibility

**School Achievement Is Enhanced When Curricula Are Environment Based**

Sponsored by many state departments of education, this 1998 study has an important place in documenting the enhanced school achievement of youth who experience school curricula in which the environment is the principal organizer. This study, completed in 1998, was followed by two related studies, conducted by the State Education and Environment Roundtable (SEER), both of which produced results consistent with this original study. (Original Research)

Lieberman, Gerald A.; and Linda L. Hoody. "Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning." SEER: Poway, CA, 1998. "California Student Assessment Project." SEER: Poway, CA, 2000. Both of these studies are available at [www.seer.org](http://www.seer.org). The third and most recent of the SEER studies we are featuring is described below.

[\[>\] read online](#)

**More Evidence Corroborates Environment-Based School Achievement**

This study provides further evidence to support the positive benefits on school achievement from environment-based study in schools. This 2005 study is consistent with the results of two precursor studies, cited above, "Closing the Achievement Gap" (1998) and the "California Student Assessment Project" (2000). Students in environment-based instructional programs score as well or better on standardized measures in four basic subject areas—reading, math, language and spelling. The environment-based programs also foster cooperative learning and civic responsibility, using the natural characteristics of the school grounds and local community as the foundational framework for the curricula. While the benefits are significant, this study also provides evidence for the challenges inherent in maintaining environment-based curricula in schools on a longitudinal basis, despite substantial evidence of benefits. (Original Research)

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"California Student Assessment Project Phase Two: The Effects of Environment-Based Education on Student Achievement." SEER: Poway, CA, 2005. Available on the Web site of the State Education and Environment Roundtable (SEER) at [www.seer.org](http://www.seer.org).

[\[>\] read online](#)

#### **Outdoor Experience for Teens Has Self-Reported Life-Changing Results**

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A classic 1998 study by Dr. Stephen R. Kellert of Yale University, with assistance from Victoria Derr, remains the most comprehensive research to date to examine the effects on teenage youth of participation in outdoor education, specifically wilderness-based programs. Subjects were participants in programs offered through three old and well-respected organizations: the Student Conservation Association (SCA), the National Outdoor Leadership School (NOLS), and Outward Bound. The researchers used quantitative and qualitative research techniques, and parallel use of both retrospective and longitudinal study techniques. Results indicate that the majority of respondents found this outdoor experience to be "one of the best in their life." Participants report positive effects on their personal, intellectual, and, in some cases, spiritual development. Pronounced results were found in enhanced self-esteem, self-confidence, independence, autonomy and initiative. These impacts occurred among both the retrospective and longitudinal respondents in this study, which means, in part, that these results persisted through many years.

Kellert, Stephen R.; with the assistance of Victoria Derr. "A National Study of Outdoor Wilderness Experience." New Haven: Yale University, 1998. Available at the National Outdoor Leadership School web site.

#### Naturalized School Grounds Enhance Creativity, Self Discipline, Health and Academic Achievement

#### **Green School Grounds Foster Achievement and Responsibility**

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There are numerous studies that document the benefits to students from school grounds that are ecologically diverse and include free-play areas, habitat for wildlife, walking trails, and gardens. One major study is "Grounds for Action: Promoting Physical Activity through School Ground Greening in Canada" by Anne C. Bell and Janet E. Dymont. While this study has roots in concern about obesity in children, it documents results and benefits beyond weight loss. Children who experience school grounds with diverse natural settings are more physically active, more aware of nutrition, more civil to one another, and more creative. One of the major benefits of green school grounds is increased involvement by adults and members of the nearby community, from helping with gardens to enriching the lifescape of the school grounds. Concerned about policy implications, this report offers specific recommendations for actions communities can take, from local neighborhoods to cities, states, and provinces. (Original Research)

Bell, Anne C.; and Janet E. Dymont. "Grounds for Action: Promoting Physical Activity through School Ground Greening in Canada." © 2006 Evergreen.

### **Naturalized School Grounds Benefit Children and Communities**

[\[+\] view print version \(PDF\)](#)

A precursor to the study above, this report, "Nature Nurtures: Investigating the Potential of School Grounds," is an important compendium of documented benefits from "greening" school grounds. It includes citations of benefits to students, from improved academic performance to lower exposure to toxins; benefits to teachers, from increased enthusiasm for teaching to fewer classroom discipline problems; benefits to schools, from reduced absenteeism to fewer discipline problems; and benefits to communities, from better community health to "banked social capital." The report provides recommendations and tangible examples of ways to transform traditional school grounds into "green" school grounds for enriched learning and other benefits. (Synthesis) "Nature Nurtures: Investigating the Potential of School Grounds." © 2000 Evergreen. Available online at [www.evergreen.ca](http://www.evergreen.ca)

### **There Are More Benefits from Naturalized Playgrounds and School Grounds**

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Randy White offers a variety of resources, articles, and recommendations for designing school grounds and playgrounds to optimize the benefits to children's development. One of his many excellent articles is "Young Children's Relationship with Nature: Its Importance to Children's Development & the Earth's Future." In addition to citing references and providing a succinct summary of the many benefits of informal and unstructured natural play environments for children, he distills the findings into a list of beneficial elements of naturalized play environments that any of us can use, from back yards to school grounds to neighborhood parks. Visit Randy White's Web site for additional resources and information at [www.whitehutchinson.com](http://www.whitehutchinson.com). (Synthesis)

White, Randy. "Young Children's Relationship with Nature: Its Importance to Children's Development & the Earth's Future."

### **Schoolyard Habitat Projects Bring Natural Benefits to School and Students**

This brief article by Mary Rivkin is an important reminder of the importance of bringing natural habitats to school grounds as places for natural learning. When the article was written in 1997, there was a burgeoning movement in the U.S. to have schoolyard habitat projects—places of natural and rich learning, integral to the curriculum, and a respite for teachers, students and the community overall. We've literally lost ground in this respect. The concept remains accessible, important, and healthy. This article is a short, succinct summary of the natural benefits afforded from schoolyard habitat projects. (Synthesis)

Rivkin, Mary. "The Schoolyard Habitat Movement: What It Is and Why Children Need It." *Early Childhood Education Journal*. Volume 25, No. 1, 1997. Available on the National Wildlife Federation web site (Synthesis)

[\[>\] read online](#)

### **Natural Settings Provide Psychological Benefits**

"Coping with ADD: The Surprising Connection to Green Play Settings," by Andrea Faber Taylor; Frances E. Kuo; and William C. Sullivan (2001) is one of the earliest studies to explore the potential for contact with nature to have a positive effect in reducing the impact of attention deficit disorder in children. The study was designed to test two hypotheses: 1) Attention deficit

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symptoms will be more manageable after activities in green settings than after activities in other settings; and 2) The greener a child's everyday environment, the more manageable their attention deficit symptoms will be in general. The results were positive. (Original Research)

Taylor, Andrea Faber; Frances E. Kuo; and William C. Sullivan. In *Environment and Behavior*, Vol. 33, No. 1, January 2001. © 2001 Sage Publications, Inc. Available on the web site of the University of Illinois Urbana-Champaign, at [www.lhhl.uiuc.edu](http://www.lhhl.uiuc.edu)

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#### **Access to Nature Nurtures Self-Discipline**

This study focuses on the positive benefits to inner city youth, particularly girls, from access to green spaces for play. Even a view of green settings enhances peace, self-control, and self-discipline. While the results are most notable for girls, the evidence is not limited to the positive impact on girls. (Original Research)

Taylor, Andrea Faber; Frances E. Kuo; and William C. Sullivan. "Views of Nature and Self-Discipline: Evidence from Inner City Children." In the *Journal of Environmental Psychology*, 21, 2001. © 2001 Academic Press. Available on the Web site of the University of Illinois Urbana-Champaign, at [www.lhhl.uiuc.edu](http://www.lhhl.uiuc.edu).

[\[>\] read online](#)

#### **Nearby Nature Reduces Stress in Children**

This study, reported in 2003, by Cornell assistant professor Nancy Wells, focuses on rural children and finds that even a view of nature—green plants and vistas—helps reduce stress among highly stressed children. Further, the more plants, green views and access to natural play areas, the more positive the results. (Original Research)

Wells, N.M., and Evans, G.W. "Nearby Nature: A Buffer of Life Stress Among Rural Children." *Environment and Behavior*. Vol. 35:3, 311-330. This study is not available online without purchase; it can be obtained by contacting Sage Publications.

[\[>\] purchase this study](#)

#### **Nearby Nature Boosts Children's Cognitive Functioning**

A precursor to Nancy Wells' study reported above, this research, reported in 2000, shows that proximity to, views of, and daily exposure to natural settings increases children's ability to focus and therefore enhances cognitive abilities. (Original Research)

Wells, N.M. "At Home with Nature: Effects of 'Greenness' on Children's Cognitive Functioning." *Environment and Behavior*. Vol. 32, No. 6, 775-795. This study is not available online without purchase; it can be obtained by contacting Sage Publications.

[\[>\] purchase this study](#)

### Design Places for Learning and Living with Children in Mind

#### **Design Cities Where Children Can Play and Learn Independently**

City planners and city leaders need to create safe and accessible places for children to play. As more and more children live in urban settings, cities need to be redesigned with children in mind. This study offers explicit evidence for the importance of natural play areas in cities, and suggestions for actions to take to achieve this outcome. The study includes a summary of the

## Attachment 9

### New Hampshire Children in Nature Coalition Communications Plan

characteristics of cities and neighborhoods that need to be considered in order to create safe places for children to play independently, with all of the associated and documented benefits that will result. (Original Research)

Churchman, Arza. "Is There a Place for Children in the City." In the Journal of Urban Design, Volume 8, No 2, 99-111, June 2003. Available on the Web site of the University of North Carolina, College of Design, Natural Learning Initiative.

[\[>\] read online](#)

#### **City Parks Bring Social, Community Health and Economic Benefits**

[\[+\] view print version \(PDF\)](#)

The Trust for Public Land (TPL) is a premier conservation organization, responsible for protection of special public lands throughout several generations. Today TPL is concerned not just about setting lands aside for future generations, but making sure that young people and families enjoy them today. TPL recognizes that to connect with nature is to appreciate nature, now and for the long term. This comprehensive report, "The Benefits of Parks: Why America Needs More City Parks and Open Space," offers a clear look at socioeconomic factors affecting the availability of parks, the history of city parks, and the hopes for a revival of commitment to city parks. The report outlines benefits in a number of areas: physical, including remedies for inactivity and obesity; economic, with increased property values; environmental, with pollution abatement; and social, from crime reduction to strengthening communities. Add this report to your collection of those that serve to document how safe places for children to play contribute to everyone's health and well being. Available on the Trust for Public Land web site. (Synthesis)  
The Trust for Public Land (TPL), "The Benefits of Parks: Why America Needs More City Parks and Open Space."

#### **City Parks Offer a Sense of Place**

This brief article draws on solid research, some of which is independently referenced elsewhere in this list. Among the points made are that city parks offer a sense of place, opportunity for daily experience with nature, experiences that enhance school achievement, and antidotes to alienation. This American Planning Association City Parks Forum Briefing Paper is largely inspired by the work of Robin Moore, noted and pioneering landscape designer with a commitment to creating learning landscapes that optimize children's learning. "Natural spaces and materials stimulate children's limitless imaginations and serve as the medium of inventiveness and creativity," says Moore. Readers will find tangible reasons for the benefits associated with using city parks as places for learning as well as community-based examples and resources. (Synthesis)

"How Cities Use Parks to . . . Help Children Learn," Chicago, IL: American Planning Association, 2003 is available on line at [www.naturalearning.org](http://www.naturalearning.org) and [www.planning.org](http://www.planning.org).

## Attachment 9

### New Hampshire Children in Nature Coalition Communications Plan

#### **Appendix 2: Summit Participants**

*New Hampshire Leave No Child Inside Summit, May 30, 2007*

|                     |  |
|---------------------|--|
| Karen Acerno        | Massabesic Audubon                             |
| Tim Albers          | SCA New Hampshire Conservation Corps           |
| Andrea Alley        | NH Hospital Association                        |
| Dave Anderson       | Society for the Protection of NH Forests       |
| Jenn Barton         | White Mountain Regional School                 |
| Amy Bassett         | NHDRED, Division of Parks and Recreation       |
| Karen Bennett       | UNH Cooperative Extension                      |
| Greg Bisson         | NH Recreation and Parks Association            |
| Debbie Black        | Keene State College                            |
| Jennifer Bourgeault | GLOBE Program UNH                              |
| Wendy Brock         | UNH Cooperative Ext, 4-H Youth Development     |
| Philip Bryce        | NHDRED, Division of Forests and Lands          |
| Thomas Burack       | NH Dept of Environmental Services              |
| Doris Burke         | Public Service Company of New Hampshire        |
| Jim Campbell        | NH Planners Association                        |
| Alice Chamberlin    | Executive Dept Office of the Governor          |
| Cathy Chesley       | Hopkinton Independent School                   |
| Chelsea Conaboy     | Concord Monitor Publishing Company             |
| John Corrigan       | NH Department of Transportation                |
| Esther Cowles       | NH Project Learning Tree                       |
| Helen Dalbeck       | Amoskeag Fishways                              |
| Jenny DeVost        | Upper Valley Lake Sunapee Regional Plan Commis |
| Kerrie Diers        | Nashua Regional Planning Commission            |
| Joe Drake           | PLUS Time NH                                   |
| Robert Dupont       | Open Head Media                                |
| Regina Flynn        | NH Department of Health & Human Services       |
| Katy Fralick        | Plymouth State University                      |
| Charlie French      | UNHCE/Facilitator                              |
| Jef Fries           | Horton Center on Pine Mountain                 |
| Michelle Gagne      | University of New Hampshire                    |
| Denis Gleeson       | The Nature of Things                           |
| Debbie Gleeson      | The Nature of Things                           |
| Mary Goodyear       | NH Project WILD / NH Fish and Game Department  |
| Carrie Green        | Girl Scouts of Swiftwater Council              |
| Lillie Green        | Office of Governor Lynch                       |
| Sharon Guaraldi     | NH Fish and Game Department                    |
| Bonnie Guevin       | NH Association of Realtors                     |
| Carol Hall          | Russell Piscataquog River Watershed Foundation |
| Pam Hess            | Appalachian Mountain Club                      |
| Ethan Hipple        | SCA New Hampshire Conservation Corps           |
| Beth Hogan          | UNH Family Studies                             |
| Karina Jolles       | Let's Go Fishing / NH Fish and Game Department |
| Donna Kuethe        | NH Recreation and Parks Association            |

## Attachment 9

### New Hampshire Children in Nature Coalition Communications Plan

|                    |  |
|--------------------|--|
| Shawn LaFrance     | NH Hospital Assoc/Foundation for Healthy Com   |
| Thom Linehan       | UNHCE Family Development/Facilitator           |
| Clare Long         | US White Mountain National Forest              |
| Iain MacLeod       | Squam Lakes Natural Science Center             |
| Linda Mattlage     | Concord Pediatrics                             |
| Julia Steed Mawson | UNH Cooperative Extension                      |
| Jan McLaughlin     | NH Dept of Education                           |
| Allison McLean     | NHDRED, Division of Parks and Recreation       |
| Lelia Mellen       | National Park Service Rivers & Trails Program  |
| Judy Mitchell      | Concord Pediatrics                             |
| Terri Mitchell     | Hillsboro Deering Elementary School            |
| Jess Morton        | NH Project WET/NH Dept of Env Svs/Recorder     |
| Heather Tall Noyes | UNH/Facilitator                                |
| Elizabeth Obelenus | Northeastern Organic Farming Association       |
| Catherine O'Brian  | NH State Council on the Arts                   |
| Marianne O'Connor  | Bicentennial Elementary School                 |
| Richard Pendleton  | Nubanusit Neighborhood and Farm                |
| Dale Penny         | Student Conservation Association               |
| Lee Perry          | NH Fish and Game Department                    |
| Kevin Peterson     | NH Charitable Foundation                       |
| Liza Poinier       | NH Fish and Game Department/Recorder           |
| Emilea Raymond     | 4-H  |
| Dan Reidy          | UNHCE/Facilitator                              |
| Laura Remick       | North Country Health Care Consortium           |
| Angela Roberge     | NH Parent Teacher Association                  |
| Cathy Robjent      | Kearsarge Regional Elementary School           |
| Matthew Routhier   | Granite State Landscape Architects             |
| Gordon Russell     | Russell Piscataquog River Watershed Foundation |
| Laura Ryder        | NH Fish and Game Department                    |
| Olivia Saunders    | UNH/Facilitator                                |
| Steve Schuch       | Night Heron Music                              |
| Don Shumway        | Crotched Mountain Rehab                        |
| Judy Silverberg    | NH Fish and Game Department/Recorder           |
| Ruth Smith         | Kearsarge Indian Museum                        |
| David Sobel        | Antioch New England                            |
| Judy Stokes        | NH Fish and Game Department/Recorder           |
| Wally Strauch      | Caring Community Network of the Twin Rivers    |
| John Taylor        | Upper Valley Trail Alliance                    |
| Lionel Tracey      | NH Department of Education                     |
| Paula Tracy        | Manchester Union Leader                        |
| Judy Tumosa        | Bath Conservation Commission                   |
| Sandi Van Scoyoc   | Healthy NH Foundation                          |
| Philip Vaughan     | NH Public Television                           |
| Karen Voci         | Harvard Pilgrim Health Care Foundation         |
| Erin Walsh         | NH Project Learning Tree                       |
| Marilyn Wyzga      | NH Fish and Game Department/Recorder           |