



# Opening Doors to Happier, Healthier Lives

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*Report and Recommendations from the  
New Hampshire Children  
in Nature Coalition*



The New Hampshire Children in Nature Coalition is a diverse group of organizations, businesses and individuals from around the state, working together to get children, youth and families outside.

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# Contents

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- Executive Summary.....5
- The New Hampshire Children in Nature Coalition .....7
  - Mission
- New Hampshire’s Children are Losing Their Connection to Nature .....9
  - What is Nature Deficit Disorder?
  - What are the Causes?
  - What are the Trends in New Hampshire?
  - What is the Impact on Our Children?
  - The Importance of Data, and the Need for More
- Call to Action.....15
- The Benefits for Our Children .....17
- A Children-in-Nature Movement in New Hampshire .....19
- NH Children in Nature Coalition Goals, Objectives and Recommended Activities .....21
  - Goal 1: More children, youth and families participate in outdoor learning experiences in and out of school time.
  - Goal 2: More children, youth, and families get outside on a regular basis.
  - Goal 3: Every child has an opportunity to experience nature in a direct and tangible way in their local community.
  - Goal 4: Children have more time for free play in the outdoors.
  - Goal 5: More people demonstrate appreciation and caring for nature and the outdoors through their involvement in activities and/or organizations.
  - Goal 6: New Hampshire children and youth will improve their health, fitness and well being.
  - Goal 7: Children and youth increase their understanding of the natural world.
- Getting Kids Outdoors: Profiles of Success .....24
  - Eco Art A-la-Carte
  - Harris Center for Conservation Education
  - Camp Mayhew and NH Catholic Charities
  - Upper Valley Trails Alliance
  - Wells Memorial School
  - Squam Lakes Natural Science Center Programs
  - UNH Cooperative Extension
  - Great Bay Discovery Center
  - Caring Communities Network of the Twin Rivers
  - Indian River School
  - Appalachian Mountain Club
- Appendices .....28
  - Sources for More Information
  - A History of the NH Children in Nature Coalition
  - NH Children in Nature Coalition Staff and Partners
  - References



## Executive Summary: Opening Doors to Happier, Healthier Lives

As mounting evidence details a growing – and disturbing – disconnect between children and nature, it is time for New Hampshire to embrace a comprehensive statewide effort to promote happier, healthier lifestyles in ways that honor our state’s tradition of celebrating and cherishing its diverse and rich natural resources.

It may be hard to believe, but just a generation ago one of the most dreaded punishments a kid could face was having to stay inside on a nice day while his or her friends played outdoors.

How times have changed.

Today, American children from 8 to 18 average 54 hours a week with electronic entertainment, including television, computers, and video gaming devices, according to the Kaiser Family Foundation. Among the consequences are increasing obesity rates and sedentary lifestyles, deepening misconceptions about the natural world, and less emphasis on unstructured time outdoors. The price of continuing these trends is serious, not only for children and their families, but for our communities, our schools, our culture, our economy, and the identity of the Granite State.

In New Hampshire, 71 percent of children ages 6 to 17 and 53 percent of high school students do not get enough physical activity, according to the state Department of Health and Human Services. And it’s no coincidence that 32 percent of children ages 6 to 12 are overweight or obese. Combined, excess weight and lack of physical activity are risk factors for asthma, diabetes, hypertension, and other chronic illnesses that burden the state’s health care system and lead to lost productivity.

Nationally, the amount of outside space where children are allowed to roam free around their homes is one-ninth what it was in 1970. Likewise, research shows that children’s free time is more often spent in highly structured (and often costly) activities.

Yet, research shows that the benefits of embracing an active, outdoor lifestyle are many, and that children who spend time outdoors are healthier and more creative, have better concentration, and even get better grades.

For these reasons and others, the New Hampshire Children in Nature Coalition was created to promote and support reconnecting children, youth, and families with nature. Spending time in nature:

- Is fun and safe.
- Reduces stress.
- Makes children more focused.
- Enhances children’s emotional and social development.



PHOTO COURTESY PRESCOTT FARM

*Research shows that children who spend time outdoors are healthier and more creative, have better concentration, and even get better grades.*



PHOTO BY JESS GERRIOR

*New Hampshire is well positioned to lead the nation in promoting a healthy, active lifestyle that takes advantage of all the natural beauty, outdoor opportunities, and facilities our state offers.*

- Improves school performance and cognitive ability.
- Enhances creativity, problem solving ability, self-esteem and self-control.
- Reduces obesity and improves health and well-being.
- Gives kids a reason to care about and protect their environment.
- Can promote healthy lifelong lifestyles, and open career opportunities.

Of course, the benefits do not end with childhood, nor are they limited to human health and education. Entire communities, cultural organizations and businesses benefit when New Hampshire embraces values that promote and sustain our rich and diverse natural resources and traditions.

The good news is that this can be done easily in New Hampshire, and at little cost. In fact, New Hampshire is well positioned to lead the nation in promoting a healthy, active lifestyle that takes advantage of all the natural beauty, outdoor opportunities, and facilities our state offers – attributes that already help make tourism one of the state’s most important economic engines.

Organizations from many fields – health, education, community planning, government, recreation, arts, culture, and social service – are urged to join a growing collaborative to support these seven goals:

1. Increase participation in outdoor learning experiences for children and families.
2. Urge more children and families to get outside on a regular basis.
3. Ensure that every child has the opportunity to experience nature in his or her local community.
4. Provide children with more time for free play outdoors.
5. Increase appreciation and care of the outdoors through organized activities and groups.
6. Improve the health, fitness, and well-being of New Hampshire children.
7. Deepen the understanding of the natural world among children and youth.

There are many organizations that already promote these ideals throughout New Hampshire, and several are profiled in this report. Their work demonstrates what active, engaged citizens can do to promote the benefits of children and families deepening their connections to nature.

With this report, we hope to build on this foundation, and to provide a forum for developing a broader statewide collaboration among our coalition partners, stakeholders, supporters, and others – for the good of New Hampshire’s children, and the nature of New Hampshire.

## The New Hampshire Children in Nature Coalition

The New Hampshire Children in Nature Coalition is a partnership of organizations and individuals working collaboratively to advance the New Hampshire effort to reconnect children and nature. Stakeholders from multiple sectors – health, education, environment, recreation, arts, and civic organizations – have already launched and structured a children-in-nature movement, and are finding creative ways to combine resources of time, money, and talent in order to address a number of challenges identified by the coalition. These challenges include:

- Disconnection from nature, and loss of knowledge about the values of being outdoors;
- Sedentary lifestyles, leading to obesity and other health issues;
- Fears and misconceptions about what’s healthy, safe, and right for children; and
- Lack of awareness that there an easy, no-cost solution to these problems.

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 well-being it brings to people, and the long-term benefits for our society and the Earth. Since 2007, the coalition has created an Organizational Development and Statewide Program Coordination Work Plan, organized New Hampshire’s Leave No Child Inside (LNCI) Summit and LNCI Public Forum, coordinated the statewide Get Out and Play! Weekend, and the annual New Hampshire Children in Nature Conference. More about the coalition can be found at [www.NHChildreninNature.org](http://www.NHChildreninNature.org).

### Mission

The mission of the NH Children in Nature Coalition is to foster experiences in nature that improve physical and emotional health and well-being, increase understanding of and care for the natural world, and promote stronger connections to community and landscape; and to provide a forum for continued collaboration by coalition participants and others.



NHFG STAFF PHOTO

*Stakeholders from multiple sectors – health, education, environment, recreation, arts, and civic organizations – have already launched and structured a children-in-nature movement*



## New Hampshire's Children are Losing Their Connection to Nature

Direct experience in nature is critical. A growing body of research shows how outdoor play supports children's development of full use of the senses, protects psychological well-being, soothes the symptoms of attention deficit disorders, and reduces obesity, stress, and anxiety. Dr. Stephen Kellert of Yale University states in his book, *Building for Life: Designing and Understanding the Human-Nature Connection*: "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."<sup>1</sup> A 2005 report by Drs. Hillary Burdette and Robert Whitaker demonstrates why "play, and particularly active, unstructured, outdoor play, needs to be restored in children's lives."<sup>2</sup> The message is that 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 outdoors.

Direct experience in nature is diminishing. Despite the benefits of outdoor play on children's development, 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 children's "free" time is now largely structured.<sup>3</sup> By moving indoors, children are deprived of a full connection to the world. The phenomenon of disappearing nature in children's lives is a growing concern across the nation, and is especially tragic in New Hampshire, a state with a rich cultural history tied to the outdoors. In New Hampshire, where more than 32 percent of children aged 6-12 are overweight or obese<sup>4</sup> and more than 9 percent of those aged 4-17 have at some point been diagnosed with ADHD<sup>5</sup>, the need for a nature-based culture shift is clear.

### What is Nature Deficit Disorder?

Coined by Richard Louv in 2005, "nature deficit disorder" describes a detrimental condition in which exposure to experiences with the natural world lags behind children's need. Less time for unstructured play in the outdoors leads to "diminished use of the senses, attention difficulties, and higher rates of physical and emotional illness."<sup>6</sup> Though not a clinically defined disorder, many professionals in pediatric medicine, public health, education, recreation, and other fields now recognize nature deficit as a legitimate and worrisome phenomenon. As Louv describes, the term nature deficit disorder offers "a way to think about the problem and the possibilities - for children, and for the rest of us as well."<sup>7</sup> The publication of his award-winning, New York Times best-selling book, *Last Child in the Woods: Saving our Children from Nature-Deficit Disorder*, was groundbreaking and sparked a national movement to reintroduce children to the benefits of the outdoors. Based on research and interviews with specialists across disciplines (education, psychology, etc.) Louv documents the

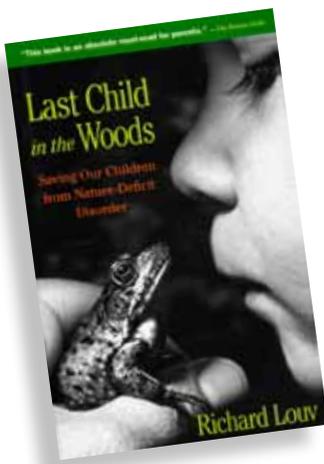


PHOTO BY JESS GERRIOR

*"Play in nature... appears to be an especially important time for developing the capacities for creativity, problem-solving, and emotional and intellectual development."*

detrimental impacts of decreased time spent outdoors among youth and adults.

Meaningful contact with the flora, fauna, and natural features of our surroundings has all but disappeared in many aspects of our modern world, and the loss of this contact “has far outpaced the evolution of our cognitive, psychological, and physiological hard-wiring.”<sup>8</sup> A 2004 study of over 800 American mothers by Dr. Rhonda Clements showed that children spend less time playing outdoors than their parents did. They participate more in indoor than outdoor play activities, and when they do play outdoors, they engage in fewer street games and more organized sports.<sup>9</sup> A 2005 study by Dr. Lia Karsten comparing children’s use of space in this decade with the 1950s and 1960s found that the earlier generation had more freedom to move about on their own, more time and space to explore, played with a greater diversity of other children, and used urban public spaces more. Children growing up today spend less time playing outdoors, are more restricted in geographical range, have a smaller and less diverse cohort of playmates, and are more constrained by their parents.<sup>10</sup>



*Last Child in the Woods: Saving our Children from Nature-Deficit Disorder, sparked a national movement to reintroduce children to the benefits of the outdoors.*

## What are the Causes?

Complex and interrelated factors contribute to the erosion of children’s natural relationship with the outdoors. Richard Louv illustrates and provides evidence for many of these causes in *Last Child in the Woods*. The NH Children in Nature Coalition, along with its partner organizations, has identified several common themes in the factors that deprive children of contact with nature:

### ■ Fear of real and perceived dangers.

Well-meaning but frightened or uninformed parents, school systems and media are keeping children out of the fields and the woods. The 2004 Clements study (mentioned previously) found that while parents recognized the benefits of outdoor play, the fear of injury, crime, and other dangers prevented their children from playing outdoors. NH Children in Nature Coalition members have identified a number of other fears reported by parents and schools, including stranger abductions, vector-borne diseases such as West Nile virus and eastern equine encephalitis, bears, snakes, and other elements. While these risks are valid to a certain extent, the level of actual danger is generally far less than the media would have adults believe.

### ■ Changes in educational climate.

Loss of recess time is cited by teachers and counselors as a major obstacle to children’s free play during the school day. Researchers at Edinboro University of Pennsylvania, suggest that “recess time is often cut because of academic pressures or as punishment for bad behavior.”<sup>11</sup> They point to a 2009 study in the journal *Pediatrics* finding that among 11,000 children nationwide, 30% of third graders had fewer than 15 minutes of recess a day,<sup>12</sup> and 21% of children did not have any recess on a randomly selected day.<sup>13</sup> The problem of disappearing recess time in schools is exacerbated by the demands of standardized testing required under the No Child Left Behind Act (NCLB). A 2008 article in the *International Journal of Behavioral Nutrition and Physical Activity* showed that allocating time to physical activity in school, however, does not negatively impact academic achievement, and in fact there is a positive correlation between physical activity in school and children’s concentration, memory, behavior, and physical fitness.<sup>14</sup> An

article in the journal *Pediatrics* found that teachers' rating of third graders' classroom behavior was better when children had some time for recess.<sup>15</sup>

■ **Access to natural areas.**

Barriers to children's engagement in free outdoor play include loss of open or "green" spaces, lack of access to transportation, school and neighborhood structures that are not conducive to walking or outdoor play, and restrictions by neighborhood associations, planned developments, and insurance companies over apparent concerns about liability. A national 2008 survey of 40,000 participants conducted by the Outdoor Foundation, in cooperation with partner organizations, revealed an 11% drop in participation in outdoor activities among 6- to 17-year-olds compared with the previous year, with participation rates declining with age. "Fun" was the motivation most cited by youth for engaging in the outdoors, while "lack of interest" was the primary reason for not participating.<sup>16</sup> Researchers found in 2003 that while 71% of adults walked or biked to school as children, only 22% of children walk or bike today, and the primary reason is that schools are too far away to do so.

■ **Modern trends in how time is spent.**

Among the considerations cited by NH Children in Nature Coalition partner organizations are modern family lifestyles and demands of single-parent families, the pervasive nature of technology in children's lives, emphasis on indoor-oriented after-school activities, and even sociocultural attitudes that favor indoor and technology-centered activities over nature and the outdoors. Today, American children from 8 to 18 average 54 hours a week with electronic entertainment, including television, computers, and video gaming devices, according to the Kaiser Family Foundation. A study published in *Science* describes how children ages 4-11 who were shown flashcards depicting Pokemon characters or native plant and animals species were better able to identify the characters. The author discusses possible implications for children's lack of knowledge of common wildlife types and the importance of reconnecting children with local nature.<sup>17</sup>

The national Children & Nature Network maintains a growing library of research from throughout the US and beyond on various factors that limit children's experience in the outdoors, as well as studies that offer insight into successful efforts to address these factors.<sup>18</sup>

## What are the Trends in New Hampshire?

NH Children in Nature Coalition partners have identified a number of alarming trends that a children-in-nature movement would address. Most recently, the November 2010 publication of the *NH Obesity Data Book* by the NH Department of Health and Human Services' Obesity Prevention Program reveals that 71% of children ages 6-17 years old, and 53% of high school students, do not get enough physical activity. Nearly 13% of low-income children ages 2-5 and 25% of high school students watch excessive amounts of television, another risk factor for obesity. This data comes from a variety of sources including the Behavioral Risk Factor Surveillance System, the National Survey of Children's Health, Pediatric Nutrition Surveillance System, the New Hampshire Head Start Survey, and the New Hampshire Third Grade Survey.<sup>19</sup>



*Only 22% of children walk or bike to school today.*

*Nearly 13% of low-income children ages 2-5 and 25% of high school students watch excessive amounts of television, another risk factor for obesity.*



*"The nostalgic observation that children 'no longer play' should be taken seriously because the consequences for child well-being extend beyond the problem of obesity."*

Obesity rates among New Hampshire children are too high. Led by the Foundation for Healthy Communities, HEAL NH (Healthy Eating Active Living) has published the following information on obesity rates among NH children:

- Low income children, 2-5 years old: 15.5%
- Third grade students enrolled in public schools: 18.0%
- High school students: 11.7%

HEAL NH is a “collaborative effort of philanthropic organizations, state agencies, and community partnerships within New Hampshire concerned about the rising obesity epidemic and its consequences.” Hospitalizations for heart attack and other health outcomes is available from the Environmental Health Data Integration Network, a project of the New Hampshire Public Environmental Health Tracking Program.<sup>20</sup>

Overweight, obesity, and lack of physical activity are some of the risk factors identified by New Hampshire’s Behavioral Risk Factor Surveillance System. In 2009, 36.5% of New Hampshire’s population was overweight (not obese), and 26.3% were obese. Only 53.4% of people engaged in physical activity that meets recommendations; 37.4% had inadequate physical activity, and 9.2% got no physical activity at all.<sup>21</sup> Overweight and lack of physical activity are risk factors for asthma, diabetes, hypertension, and other chronic illnesses that burden our health care system.

Television and computer use indicate significant time spent indoors. The 2009 Youth Risk Behavior Survey administered by the NH Department of Education found that statewide, 23% of high school students watched three or more hours per day of TV on an average school day. Additionally, 23.9% of students used a computer for non-school related activities for three or more hours per day. Only 45.3% of students got the recommended minimum of 60 total minutes of physical activity per day (on 5 of the last 7 days).<sup>22</sup>

### What is the Impact on Our Children?

Children have a developmental imperative at every age to engage in physical activity, exploration, and creative, unstructured play, and therefore they are especially impacted by the loss of such experiences in their lives. A growing body of research points to the necessity of direct experiences in nature for children’s proper physical, psychological, emotional, and social development, mobility, and quality of life.

#### ■ Physical and emotional health and well-being.

The link between physical activity and health is well-established. Childhood obesity has risen dramatically in recent years alongside the decrease in physical activity. However, childhood obesity is only part of the problem. Doctors Hillary Burdette and Robert Whitaker state that “the nostalgic observation that children ‘no longer play’ should be taken seriously because the consequences for child well-being extend beyond the problem of obesity.” As Dr. Stephen Kellert of Yale University states in his well-researched book, *Building for Life: Designing and Understanding the Human-Nature Connection*, “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.”<sup>23</sup> As Richard Louv states, “Time in nature is not leisure time; it’s an essential investment in our children’s health.”<sup>24</sup>

■ **Understanding and care for the natural world.**

The 2010 New Hampshire Environmental Literacy Plan - Teacher Survey reveals room for improvement in students’ grasp of environmental concepts and skills. While 15% of teachers responded that their students understand to “a great extent” the ways the world’s environmental, social, economic, cultural, and political systems are linked, 39% responded that their students understand “a little” or “not at all.” Teachers responded that 15% of students are able to plan, engage in, and evaluate the results of responsible citizen action on an environmental issue to “a great extent”; 53% do so “a little” or “not at all.” When asked to identify barriers to their ability to teach environmental content, teachers cited lack of administrative support, curriculum restrictions, and other obstacles, but the most often cited reason (64%) was lack of time.<sup>25</sup>

■ **Connections to community and landscape.**

As Richard Louv describes, nature deficit disorder can be detected in individuals, families, and communities. Nature deficit can even change human behavior in cities, which could ultimately affect their design, since long-standing studies show a relationship between the absence, or inaccessibility, of parks and open space with high crime rates, depression, and other urban maladies.<sup>26</sup> According to the 2009 NH Youth Risk Behavior Survey, 36.4% of students performed organized community service, such as picking up litter or building homes for the poor, one or more times in the past 30 days. 38.4% participated in clubs or organizations outside of school such as 4-H, Boys & Girls Clubs, etc. 41.5% of students strongly agreed that they feel they matter to people in their community. One potential area of research that the NH Children in Nature Coalition and its partners would support addressing is the link between outdoor involvement and young people’s beliefs and attitudes about their role in their communities.



*The NH Children in Nature Coalition and its partners support addressing the link between outdoor involvement and young people’s beliefs and attitudes about their role in their communities.*

## The Importance of Data, and the Need for More

Establishing baseline data is necessary for the movement to measure its success. The NH Children in Nature Coalition has identified a number of goals for a statewide children-in-nature movement. We have defined what success looks like; in order to know the extent to which we are reaching it, we need data to establish a basis for comparison. Data is necessary for agencies and organizations to establish and effectively implement interventions and programs, measure their success, and ensure continued progress. This effort to gather data requires time and funding, but enables stakeholders to improve delivery and outcomes for programs across a wide variety of sectors. Program administrators, educators, physicians, and other professionals dedicated to children’s health and well-being can apply the lessons learned from such studies to enhance the effectiveness of their efforts. By working together, this process will strengthen New Hampshire’s children-in-nature movement, and ultimately benefit New Hampshire’s children, their families, schools, and communities.

More research is needed. There is a need to identify and understand the

complex factors that hinder children's participation in outdoor activities. There is also a need to measure the effects of outdoor experiences on learning, physical, mental, and emotional development, attitudes of environmental and community stewardship, and other outcomes. New Hampshire's children stand to benefit from research that asks:

- How does the design of neighborhoods and towns affect how children engage outdoors?
- What practices (in community planning, science education, recreation, health, etc.) are best for encouraging children's participation in the outdoors?
- How are educational outcomes (in the form of test scores, grades, behaviors, etc.) affected by outdoor experiences?
- How can community gardens enhance instruction in math, science, social studies, the arts, and literature?
- To what extent do children who engage with their families in outdoor activities develop attitudes of environmental stewardship?
- How do children from across the socioeconomic spectrum benefit from time spent in the outdoors?
- What is the role of daily recess in shaping children's school experience?
- What impact does time spent outdoors have on behavioral disorders such as ADD/ADHD, or disciplinary issues such as bullying?

*NH Children in Nature Coalition partners have been working to increase understanding of the barriers to free, outdoor play and encourage cooperative efforts to remove them.*

“Yes, we need more research, but we know enough to act.” This statement by Howard Frumkin of the Centers for Disease Control, was quoted by Richard Louv in a press release preceding his keynote address to the American Academy of Pediatrics in September 2010.<sup>27</sup> Research about the impact of experience in nature will help New Hampshire improve future practices and policies to encourage children's experience with nature, but there is also much that can be done right now to curb these negative trends.

The NH Children in Nature Coalition seeks to address New Hampshire's unique challenges in engaging children in the outdoors. Studies from such varied fields as children's health, psychology, education, environmental conservation, and other fields can be helpful in understanding potential barriers and creating sustainable solutions. For example, Burdette and Whitaker point out that one reason to use the word “play” is that “parents may view the term more positively. Adults thinking of exercise... can evoke in some parents the upsetting memories of failed efforts at weight loss or maintenance... These memories contrast greatly with joyous recollections of unstructured childhood play.”<sup>28</sup> NH Children in Nature Coalition partners have been working to increase understanding of many other barriers to free, outdoor play and encourage cooperative efforts to remove them.

With an ever-increasing population and its children's health and diversity of natural resources at risk, much is at stake. The “NH Children in Nature Coalition Goals, Objectives and Recommended Activities” section of this document offers recommendations for how a statewide children-in-nature movement, including roles for coalition partners, will improve all these aspects of children's lives.

## Call to Action

It's time to get off the couch. Clearly, research from a number of fields on the nature-childhood connection shows a broad range of benefits for New Hampshire's children, families, schools, and communities. Inertia – allowing current trends to continue unabated – not only jeopardizes children's physical, mental, and emotional health, it threatens New Hampshire's economy, natural resources, education and health care systems, cultural climate, and identity among states as a great place to live.

This crisis presents an opportunity for New Hampshire organizations, state agencies, and professional communities to collaborate. By creatively pooling its current resources and talent, New Hampshire has the power to shift trends and emerge as a leader in the effort to reconnect children with nature.

Parents and teachers support children in nature. The 2010 New Hampshire Environmental Literacy Plan - Teacher Survey shows that lack of parent support and discomfort teaching outdoors are the least cited reasons for not using outdoor classrooms (0.7% and 4.4%, respectively). Transportation (48.9%), lack of funding (44.5%), time out the classroom (34.3%), and lack of staff (19.7%) were the most significant barriers. When asked why they do not use schoolyard habitats, the responses are similar: of 97 responses, 0 teachers cited lack of parent support and only 1 cited discomfort teaching outdoors. The most common barriers are curriculum restrictions, lack of schoolyard habitat, time out of the classroom, and school grounds safety issues.<sup>29</sup> All of these could be addressed by a statewide set of children-in-nature policies and other supports of money, time, and commitment.

Work has already begun. The American Academy of Pediatrics issued a policy statement in 2009 highlighting how the built environment of a community affects children's opportunities for physical activity. It states that "neighborhoods and communities can provide opportunities for recreational physical activity with parks and open spaces, and policies must support this capacity." It further describes how "by working with community partners, pediatricians can participate in establishing communities designed for activity and health."<sup>30</sup> The National Environmental Education Foundation's Children and Nature Initiative "educates pediatric health care providers about prescribing outdoor activities to children. The program also connects health care providers with local nature sites, so that they can refer families to safe and easily accessible outdoor areas."<sup>31</sup>

The emphasis is on partnership. In the words of Burdette and Whitaker, "fostering outdoor play will also require broader environmental and policy changes that cannot be implemented by individual pediatricians or parents



*By creatively pooling its current resources and talent, New Hampshire has the power to shift trends and emerge as a leader in the effort to reconnect children with nature.*

acting alone.”<sup>32</sup> The Maryland Partnership for Children in Nature describes in its April 2009 Report and Recommendations to Governor Martin O’Malley how the Partnership was “charged with developing and implementing an environmental literacy plan as well as a plan to provide youth with structured and unstructured opportunities for play, outdoor recreation, learning and scientific study.” Maryland is one of a growing number of states that is developing partnerships to ensure that “young people have the opportunity to connect with nature and grow to become informed and responsible stewards of our environment.”<sup>33</sup>

The 2010 NH Children in Nature Conference emphasized how various sectors can work together to create a cohesive, effective children-in-nature movement in New Hampshire. As keynote speaker Dr. Tory Rogers attested, attempts that do not work are: disjointed efforts across a community, inconsistent or conflicting messages, blaming (kids, parents, teachers, etc.), or targeting specific segments of a population. Instead, the keys to our success will be:

- focus on prevention, as opposed to treatment,
- communities coming together,
- environmental changes (such as “walkable communities”) that encourage health, and
- policy changes to support environmental changes.

## The Benefits for Our Children

Children who spend time outdoors are healthier, happier, more creative, have better concentration and even get better grades. Research demonstrates that spending time in nature:

- Is fun and safe;
- Reduces stress;
- Makes children more focused;
- Enhances children's emotional and social development;
- Improves school performance, and cognitive ability;
- Enhances creativity, problem solving ability, self-esteem and self control;
- Reduces obesity and improves health and well-being;
- Gives kids a reason to care about and conserve their environment; and
- Can promote healthy lifelong lifestyles, and open career opportunities.

Research validates the benefits of outdoor play for children as it relates to the coalition's mission:

### ■ Physical and emotional health and well-being.

A 2004 study by Drs. Frances Kuo and Andrea Faber Taylor compared the therapeutic effects of “green” or natural outdoor settings with those of built outdoor and indoor settings on managing symptoms of attention-deficit/hyperactivity disorder (ADHD). It concluded that natural settings reduced ADHD symptoms in children “across a wide range of individual, residential, and case characteristics,” and suggested that “such natural treatments promise to supplement current approaches to managing ADHD, with the advantages of being widely accessible, inexpensive, non-stigmatizing, and free of side effects.”<sup>34</sup> A 2008 report by researchers at the University of Michigan examined the “restorative value of nature” in improving cognitive functioning. The scientists stated that “to consider the availability of nature as merely an amenity fails to recognize the vital importance of nature in effective cognitive functioning.”<sup>35</sup>

### ■ Understanding and care for the natural world.

A report by the State Education and Environment Roundtable (SEER), representing agencies in thirteen states, supports the positive benefits of environment-based study on school achievement, particularly in the sciences. The report, *Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning*, found that: “Evidence gathered from this study of 40 schools, indicates that students learn more effectively within an environment-based context than within a traditional educational



*Spending time in nature has wide-ranging benefits for kids of all ages.*

*People who participated in “wild” nature experiences (hiking, camping, playing in the woods) as children were more likely to practice environmentally positive behaviors and attitudes.*

framework.” In addition to the SEER report, The American Institutes for Research, in a study commissioned by the California Department of Education in 2005, measured a 27% increase in mastery of science concepts among at-risk youth, 56% of whom reported never having spent time in a natural setting, following week-long residential outdoor education programs.<sup>36</sup> The same study showed at-risk youth in outdoor programs also gained enhanced cooperation and conflict resolution skills, positive environmental behavior, problem-solving, motivation to learn, and classroom behavior.

■ **Connections to community and landscape.**

Two studies on naturalized school grounds (2000 and 2006) document how children who play in ecologically diverse or “green” school environments benefit from increased involvement by adults and nearby community members. The studies, conducted by Evergreen (a Canadian organization dedicated to creating and sustaining dynamic outdoor spaces) demonstrate that not only are children more physically active, they demonstrate decreased absenteeism, greater creativity, and civility toward one another; and that teachers benefit from increased enthusiasm for teaching and fewer discipline problems.<sup>37</sup> The Trust for Public Land, a premier conservation organization, published a report in 2005 documenting how parks add not just health but social and economic value to communities. *The Benefits of Parks: Why America Needs More City Parks and Open Space* cites increased property values, pollution abatement, crime reduction, and strengthened communities among the benefits, and demonstrates how safe places for children to play contribute to everyone’s health and well-being.<sup>38</sup>

The benefits do not end with childhood. Research published in 2006 in *Children, Youth and Environments* links childhood nature experiences and adult environmental attitudes and behaviors. People who participated in “wild” nature experiences (hiking, camping, playing in the woods) as children were more likely to practice environmentally positive behaviors and attitudes. Childhood participation in “domesticated” nature experiences (planting seeds, picking flowers) also influenced behaviors and attitudes to a significant, albeit lesser, extent.<sup>39</sup>

## A Children-in-Nature Movement in New Hampshire

A number of New Hampshire agencies and organizations are studying, developing, or implementing policies related to children and nature. Together, these efforts indicate an urgent need for leaders and stakeholders to work collaboratively toward a comprehensive children-in-nature movement for the state. Not only is there widespread interest and support for such a movement, there is a well of resources in the form of knowledge, skills, and organizational capacity to be tapped. Some current studies and projects that should be involved in building the collaborative children-in-nature movement include:

- NH Environmental Literacy Plan (NH Environmental Educators, NH Children in Nature Coalition and Partners)
- 2009 Youth Risk Behavior Survey (NH Dept. of Education)
- Wildlife Action Plan (NH Fish and Game Dept. and Partners)
- Safe Routes to School (NH Dept. of Transportation and Partners)
- NH Commission on Prevention of Childhood Obesity (Foundation for Healthy Communities, NH Dept. of Health & Human Services and Partners)
- Vision 2020 (Cheshire Medical Center, Dartmouth-Hitchcock, Keene)
- HEAL NH – Healthy Eating Active Living (Foundation for Healthy Communities)

It is critical in developing a children-in-nature movement for New Hampshire to be aware of the diverse needs of its communities. For example, youth populations in Manchester’s urban areas face very different barriers to outdoor play than youth in the rural Great North Woods. Our immigrant and refugee families deal with barriers of culture and language that are different from families native to New Hampshire. Low-income households may be limited by access to transportation to natural areas, whereas higher-income households may lack experience or knowledge in the value of free outdoor play. Children with physical or mental disabilities have specific needs with regard to outdoor play that are different from children without such disabilities. By connecting partners and stakeholders with specific regional or population focus, New Hampshire’s children-in-nature movement can be sensitive to everyone’s needs and inclusive of all perspectives.



*It is critical in developing a children-in-nature movement for New Hampshire to be aware of the diverse needs of its communities.*



## NH Children in Nature Coalition Goals, Objectives and Recommended Activities

The following NH Children in Nature Coalition Goals, Objectives and Recommended Activities offer opportunities for organizations and professionals from many fields – health, education, community planning, government, recreation, the arts, and others – to collaborate and propel New Hampshire’s children-in-nature movement forward.

### Goal 1: More children, youth and families participate in outdoor learning experiences in and out of school time.

OBJECTIVES: The NH Children in Nature Coalition supports:

- Increasing the number of children, youth and families participating in outdoor learning experiences.
- Increasing the amount of time children, youth and families spend in outdoor learning experiences.
- Increasing the number of opportunities for outdoor learning experiences.
- Expanding programming by providers of outdoor learning experiences.
- Increasing participation in existing programs.

ACTIVITIES: Educate formal educators, early childhood educators, after-school providers, youth-serving agencies and organizations, and others about the importance of children spending time outdoors.

### Goal 2: More children, youth, and families get outside on a regular basis.

OBJECTIVES: The NH Children in Nature Coalition supports:

- Increasing the number of children, youth and families who spend time outside biweekly.
- Children, youth and families spending one hour or more outdoors daily.

ACTIVITIES: Encourage informal outdoor activities (frequenting parks and trails, camping, backyard recreation, swimming, fishing, etc.) and organized public events (National Wildlife Association’s Green Hour, Great Park Pursuit, garden education programs, etc.) through partnerships with schools, health practitioners, volunteer groups, community organizations, and media.



PHOTO BY ALAN BRIERE

*The NH Children in Nature Coalition encourages families to participate in informal outdoor activities like fishing.*



PHOTO BY ALLISON KEATING

*The benefits of outdoor free play are innumerable, including health, fitness and well being.*

### Goal 3: Every child has an opportunity to experience nature in a direct and tangible way in their local community.

OBJECTIVES: The NH Children in Nature Coalition supports:

- Increasing the number of available outdoor spaces.
- Increasing access to outdoor spaces.
- Communities inventorying their outdoor spaces and promoting their positive use by children, youth and families.

ACTIVITIES: Create ways for communities to increase the availability and accessibility of open, “green” spaces by partnering with developers and architects, real estate agents, town governments, conservation associations, and community groups. Provide incentives for communities to develop and protect natural spaces for children to enjoy.

### Goal 4: Children have more time for free play in the outdoors.

OBJECTIVES: The NH Children in Nature Coalition supports:

- All children in grades K-8 having a minimum of one half-hour of outdoor recess per day.
- All families setting aside at least one weekday free from structured activities after school hours.
- After-school programs increasing the amount of time allotted for child-selected outdoor activities.

ACTIVITIES: Work with local school boards, afterschool programs, child care centers, and other organizations to develop policies that encourage and support children’s free play in the outdoors. Build educators’ and providers’ capacity to get kids outdoors.

### Goal 5: More people demonstrate appreciation and caring for nature and the outdoors through their involvement in activities and/or organizations.

OBJECTIVES: The NH Children in Nature Coalition supports:

- Organizations involved in caring for nature and the outdoors increasing their membership, volunteerism, and donors.
- Youth choosing more outdoor-oriented service projects.

ACTIVITIES: Establish a forum for children, youth, families, and volunteers to organize and act on outdoor stewardship/volunteer opportunities. Coordinate with towns, schools, and organizations to create incentives for “green” service projects.

## Goal 6: New Hampshire children and youth will improve their health, fitness and well being.

OBJECTIVES: The NH Children in Nature Coalition supports:

- Decreasing the number of children who are obese or overweight.
- Decreasing the number of youth diagnosed for depression and ADD/ADHD.
- Tying pro-social behaviors to positive outdoor experiences.  
Decreasing reports of vandalism to parks and outdoor spaces.

ACTIVITIES: Encourage nature play and support information campaigns that connect families with the outdoors. Develop and actively support policies and legislation that reduce barriers to active, outdoor experiences. Work with pediatricians, parents, and providers to increase understanding of the importance of outdoor, multi-sensory activities for physical and mental health.



PHOTO BY MARILYN WYZGA

## Goal 7: Children and youth increase their understanding of the natural world.

OBJECTIVES: The NH Children in Nature Coalition supports:

- Students increasing their assessment scores on life science standardized tests.
- Increasing to 10% the number of students who have the skills (map reading, preparedness, safety skills) to craft their own direct outdoor experiences by the age of 18.
- Enabling students to identify a minimum of 10 native plants and animals by the age of 18.
- Increasing to 30% the number of children and youth who have direct personal experience with natural features (including school program experiences such as field trips), especially those in their local area.
- Increasing to 50% the number of schools that have a plan which includes outdoor learning experiences in their curriculum.
- Increasing by 10% the New Hampshire Legislature's dedication of funds to natural resources and environmental agencies and land conservation agencies such as LCHIP for environmental and land projects.

ACTIVITIES: Develop ways for teacher education programs, school districts, youth serving agencies, and professional associations to increase training for educators in life sciences, natural history, and place-based education. Expand funding opportunities for agencies and organizations that provide such training and work with NH Environmental Educators (NHEE), New England Environmental Education Alliance (NEEEA), and/or the North American Association for Environmental Education (NAAEE) to strengthen existing programming statewide.

*Direct learning in the school grounds increases skills and understanding.*

## Getting Kids Outdoors: Profiles of Success

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These are some examples of great work happening to connect children, youth and families with nature. See the NH Children in Nature Coalition website ([NHChildrenInNature.org](http://NHChildrenInNature.org)) and Facebook page for more.



### Eco Art A-la-Carte – Moultonborough

**Outdoor experiences can creatively address children’s learning needs across the curriculum.** Cynthia Robinson’s program, Eco Art A-la-Carte, works with children to strengthen relationships with the natural world through artistic projects. As an art teacher at Madison Elementary School, she connects students’ art curriculum units with New Hampshire’s natural environment. She also incorporates environmental themes in her work at preschool and after school programs, and at the independent Community School in South Tamworth, where environmental stewardship is a strong focus. Cynthia’s experience illustrates that many children who struggle to stay attentive in classroom settings excel when lessons are taken outdoors.



### Harris Center for Conservation Education – Hancock

**Outdoor learning can enhance standards-based teaching.** At the Harris Center for Conservation Education in Hancock, NH, Outdoor Educator Susie Spikol paired eighth graders needing to learn science and field study skills with a landowner wanting to know more about his conserved property. The students learned to conduct a natural resources inventory, using the same sophisticated equipment as professionals. The students also recorded their observations in journals. The work is embedded in educational standards, and establishes relationships between classroom concepts and experience, schools and landowners, and students with their local environment. Susie cites this project as an example of how environmental education can benefit schools, communities, and natural places.



### Camp Mayhew and NH Catholic Charities – Manchester and Bristol

**Natural settings make a difference in the lives of young people in at-risk situations.** Cathy Chesley, Director of Immigration and Refugee Services at New Hampshire Catholic Charities, works with at-risk youth. She recalls one boy who was about to enter the juvenile detention system but instead was referred to Camp Mayhew on Newfound Lake. Camp Mayhew involves ten- and eleven-year-old boys from low-income, single-parent families in outdoor experiences to help them develop teamwork, confidence, and life skills. In his first year, the young man found that he loved rowing races and the challenge of

stacking wood, and rose to a leadership role among his cabin mates in that task. He continued to develop his outdoor and personal skills in his second year and earned a leadership award. Such outdoor challenges bring out leadership qualities and encourage returning campers to become mentors and advocates for younger boys.

## Upper Valley Trails Alliance – Upper Valley

**Connecting people with the outdoors means connecting them with information.** The Upper Valley Trails Alliance recognized that lack of information about trails in the region was a barrier to their use and enjoyment. Since 1999, this organization has worked to connect children, families, and towns with the outdoors by serving as a clearinghouse for information about trails. UVTA's Trail Finder is an online trails database that provides detailed maps, directions to trailheads, connections between trails, linked photos and descriptions. By providing information about 65 trail systems and over 100 individual trails in the area, UVTA increases access to public trails, enabling families and communities to explore natural areas they may not have otherwise. Trail Finder connects trail leaders with UVTA's Passport to Winter Fun and other educational programs, and is strengthened by partnerships with Healthy Eating Active Living (HEAL) and other organizations within and beyond the region.



## Wells Memorial School – Harrisville

**Supporting teachers' professional development is key to successfully integrating nature-based learning.** There is tremendous pressure on school administrators and teachers to ensure their schools meet Annual Yearly Progress, and it can be challenging to know just how to integrate outdoor lessons while meeting this requirement. The School Board, Superintendent, and Principal at Wells Memorial School in Harrisville created an effective model for integrating nature-based learning by allocating resources in the school budget for professional development, and planning time for it during the school year. In the first two years, environmental education staff from the Harris Center for Conservation Education worked closely with teachers at Wells Memorial, guiding them in planning, carrying out, and observing lessons, and then implementing them with students. Harrisville's New England Common Assessments Program (NECAP) scores have climbed since entering in partnership with the Harris Center, and school board chair, Jack Calhoun, attributes their success to creative professional partnerships.



## Squam Lakes Natural Science Center – Holderness

**Outdoor program directors recognize the need for research to identify key factors that influence understanding of the natural world.** Squam Lakes Natural Science Center in Holderness, NH, recently opened a nature preschool, the Blue Heron School, which combines a child-focused Montessori approach with daily outdoor experiences in a stimulating learning atmosphere. The preschool's experience, combined with feedback from the center's other education outreach programs to public and private schools, is helping staff measure the effectiveness of its programming. Squam Lakes Natural Science Center has seen attendance in school programs drop in recent years, for reasons



such as cost, increased emphasis on standardized testing, fears of mosquito-borne disease such as EEE, and others. Despite challenges, the Science Center has built one of New England's most successful environmental education programs and received national accreditation by the Association of Zoos and Aquariums in 2006.



## UNH Cooperative Extension – statewide

**Partnership is the challenge and the opportunity.** Michele Gagne, Training and Planning Coordinator with UNH Cooperative Extension facilitated the beginning stages of strategic planning for the NH Children in Nature Coalition. She highlights some of the Extension's work in various areas (gardening education, 4-H Youth Development, GPS workshops with youth, the NH Coverts Program, etc.) as examples of how partnerships can create greater opportunities for youth in the outdoors. Recently, Cooperative Extension worked with the NH Office of Energy and Planning and the Department of Resources and Economic Development to develop the 2008-2013 Statewide Comprehensive Outdoor Recreation Plan. Each organization in partnership can more effectively meet its goals by working collaboratively.



## Great Bay Discovery Center – Stratham

**Children in the outdoors build community through service learning.** When youth who have participated in nature education programs give back, the circle of environmental citizenship and experience is made. Beth Heckman, Assistant Education Coordinator at Great Bay Discovery Center, remembers a young man who attended the "Once Upon an Estuary" programs there at the age of seven or eight and continued in the Bayventure and other programs through age eleven. After that summer, Eric joined other activities, but a few years later, called the Center to ask if he could complete his Eagle Scout service project there. Eric expressed that he had been given many learning opportunities there, and wanted to give something back. Remembering how he had enjoyed his Winter Overnight experience, he decided to renovate the Center's Native American wigwam, a highlight for 2,000 children who attend the Center's fall programs.



## Caring Communities Network of the Twin Rivers – Franklin

**Community partnerships benefit everyone, sometimes in unexpected ways.** Fifteen years ago, health practitioners recognized that the number of people in the Twin Rivers area of Franklin, Tilton, and Northfield with chronic illnesses related to diet and exercise (diabetes, hypertension, and obesity) was higher than the state average. Alarmed by the trend, the Caring Communities Network of the Twin Rivers (CCNTR) began looking for lasting solutions. A CCNTR committee developed a plan to expand usage of the Winnepesaukee River Trail, once used for rail travel, to include a recreational trail system. Together with the Winnepesaukee River Trails Association, CCNTR coordinated construction of a trail system along the old railroad right-of-way. When Casey Family Services of NH approached CCNTR asking how to increase youth involvement in the outdoors, CCNTR found a place for them in volunteer

interpretive trail walks. To give back, the youth volunteered to help with trail maintenance, learning new leadership and practical skills in the process. The relationship among the groups has continued to develop and expand to include Winnisquam Regional High School, Tilton School, the Town of Northfield, and community members.

## Indian River School – Canaan

**Children-in-nature provides opportunities for partnership across the age span.** For the last twelve years, the Indian River School in Canaan has partnered with the Tucker Foundation of Dartmouth College to provide learning experiences that benefit students and communities. The program, Outdoor Leadership Everyday, matches college students with junior high school students in mentor-based learning that helps develop leadership and outdoor skills. Each week, Dartmouth students pick up seventh and eighth grade students and together engage in hiking, sledding, ice skating, cross-country skiing, and camping. With input from the junior high, Dartmouth student leaders create activities, meeting to discuss ideas and develop their skills. According to Barbara Mason of Indian River School, the program focused on at-risk youth in its earlier days, but now runs five sessions weekly, has piloted a summer program, and has moved into Mascoma High School as well. Fifty students are currently involved, many of whom had never before taken part in such outdoor activities despite their close proximity to the woods.



## Appalachian Mountain Club – Coos County

**Environmentally focused place-based education can improve school culture, improve teacher engagement and increase academic achievement.** As part of its successful A Mountain Classroom program, the Appalachian Mountain Club's educational initiative in Coos County builds collaborations between local educators and youth service providers and AMC's education staff to provide engaging K-12 academic and leadership development experiences using outdoor learning environments. Students study geology while exploring their regional land forms; they learn map skills, geography and water ecology using their local watershed as a unifying theme and experience the natural beauty of the region on team building hikes. An important goal this place-based learning initiative is to connect North Country youth to their unique natural surroundings. That connection not only enhances participants' academic and personal potential, but increases their likelihood of remaining in the region as adults.



## Appendices

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### Sources for more information

**NH Children in Nature Coalition** – Opening doors to happier, healthier lives.  
*[nbchildreninnature.org](http://nbchildreninnature.org)*

**Children and Nature Network** – Building a movement to reconnect children and nature.  
*[childrenandnature.org](http://childrenandnature.org)*

**Nature Rocks** – Empowering Families to Enjoy Nature  
*[naturerocks.org](http://naturerocks.org)*

**Last Child in the Woods: Saving Our Children from Nature Deficit Disorder** by Richard Louv  
*[richardlouv.com](http://richardlouv.com)*

**Richard Louv on “Nature Deficit Disorder”** – New Hampshire Public Radio, 2007  
*[nhpr.org/node/13933](http://nhpr.org/node/13933)*

**Leave No Child Inside** – Orion Magazine, March/April 2007  
*[orionmagazine.org/index.php/articles/article/240](http://orionmagazine.org/index.php/articles/article/240)*

**National Wildlife Federation’s Be Out There Campaign.**  
*[nwf.org/Get-Outside/Be-Out-There.aspx](http://nwf.org/Get-Outside/Be-Out-There.aspx)*

**Connecting Today’s Kids with Nature: A Policy Action Plan** - NWF, 2008  
*[tinyurl.com/nwf-action-plan](http://tinyurl.com/nwf-action-plan)*

**State Education & Environment Roundtable** – Using the Environment as an Integrating Context for improving student learning.  
*[seer.org](http://seer.org)*

**IPA USA**, US Affiliate of the International Play Association.  
*[ipausa.org](http://ipausa.org)*

## A History of the NH Children in Nature Coalition

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 compelling 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.

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, the Appalachian Mountain Club, and the Caring Community Network of the Twin Rivers.

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 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. Dr. Cheryl Charles, President of the national Children and Nature Network, delivered the keynote address.

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 800 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. Approximately 200 people have joined the listserv to learn more about the coalition and information and programs related to children and nature in New Hampshire.



NHFG STAFF PHOTO

*The coalition's "Leave No Child Inside" Forum in Concord brought out more than 800 interested professionals, parents and caregivers.*

As the need for organizing coalition efforts and structures emerged, the Organizational Development Committee was formed. The group set up coalition structures and operating procedures, including designing the procedures for writing and receiving potential grant monies, using designated fiscal agents for each project. In 2011, the group became officially registered with the State of New Hampshire as a “nonprofit coalition.”



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 developed the coalition’s strategic plan. The Messaging, Audience and Communications Committee meets regularly to develop and implement plans for communications and outreach; among other accomplishments, they have created a logo and website for the coalition, and partnered with WMUR-TV on a PSA campaign. In addition, the ad hoc Environmental Literacy Plan Committee is working with the NH Environmental Educators to connect nature experiences with New Hampshire science curricula by developing a comprehensive, statewide environmental literacy plan in conjunction with federal No Child Left Inside legislation, and the ad hoc Natural Leaders Committee has devised a program for high school students to promote youth environmental leadership. A conference committee organizes and hosts an annual conference, providing a forum for sharing expertise and opportunities to connect people with nature and drawing hundreds of participants from around the state.

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

## NH Children in Nature Coalition

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. The NH Children in Nature Communications Plan outlines steps in creating those tools and facilitating needed connections.

### Staff

Marilyn Wyzga, Convener, NH Children in Nature Coalition; Wildlife Educator, NH Fish and Game Department

### Partners

The NH Children in Nature Coalition is a true collaborative of diverse education, recreation, conservation, health, arts, and social service organizations. The following organizations, groups and businesses have been actively engaged in the work of the coalition. Those marked with an (\*) have served on the Collaborative Leadership Team:

- Antioch University New England \*
- Appalachian Mountain Club \*
- Caring Community Network of the Twin Rivers \*
- Crotched Mountain Foundation \*
- Dartmouth Hitchcock Medical Center Child Care Center \*
- EcoArt a la Carte\*
- Foundation for Healthy Communities
- Harris Center for Conservation Education \*
- Healthy Eating Active Living New Hampshire \*
- Natural Playgrounds Company \*
- New Hampshire Catholic Charities \*
- New Hampshire Department of Environmental Services
- New Hampshire Department of Health and Human Services
- New Hampshire Department of Resources and Economic Development, Division of Parks and Recreation \*
- New Hampshire Department of Transportation \*
- New Hampshire Environmental Educators \*



New Hampshire Fish and Game Department \*  
New Hampshire Recreation and Parks Association \*  
New Hampshire Sierra Club \*  
New Hampshire State Council on the Arts \*  
Peter Woodbury School  
Squam Lakes Natural Science Center \*  
Student Conservation Association \*  
The Nature Conservancy  
UNH Cooperative Extension \*  
Upper Valley Trails Alliance

### **Acknowledgements**

The NH Children in Nature Coalition wishes to acknowledge those leaders who have helped launch and sustain New Hampshire's children-in-nature movement. The synergistic effect of stakeholders working together greatly enhances the work at hand. The coalition invites organizations and individuals interested in helping to join at any time. More information may be found at [www.NHChildreninNature.org](http://www.NHChildreninNature.org).

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