Imagine a boy who has never crunched leaves underfoot as he winds down a forest trail, or a girl who has never seen tadpoles in a brook. Imagine children who have watched *Nemo* but not seen a living fish flash by in a stream, or have read *Charlotte’s Web* but never seen a real spider’s intricate filaments. Our imaginations don’t have to stretch very far to envision children cut off from nature. In fact, in this internet-ready, asphalt-covered digital age, wild places available to children are shrinking. Increasingly, the wild kingdom children visit beams out at them from the small and big screens. Fewer than one in ten children get any environmental information firsthand, from experiences in wild places; most learn about nature from the media or in school, according to a 1992 national survey (Nabhan & Trimble, 1994). Since then, despite growing alarm over global warming and other threats to nature’s diversity, these trends have accelerated. Recently, journalist Richard Louv underscored them in a book with the provocative title: *Last Child in the Woods* (Louv, 2006).

Why is the nature connection so important for children? After all, a few clicks and a Google search bring all we ever might want to know about exotic and nearby flora and fauna. However, research (Kahn, 1999) documents that direct experiences with wild places are not a luxury or vacation add-on, but a basic human need. The nature connection builds children’s cognitive skills, stretches their imaginations and creativity, and exercises their empathy along with their muscles and bones. Many parents can recollect sharing with their children the breath-catching awe of mountain vistas, ocean surf, or cascading waterfalls, but even watching a backyard cardinal building a nest can inspire a sense of wonder.

Children live and learn best through their senses. Building a fort of sticks in a patch of woods, stomping in the mud around a stream, climbing the low branches of a tree—time in the wild fills a child with the smells, sounds, textures, and shapes of stones, water, plants, earth, birds, and sky. Children learn by doing. Unstructured time in a natural setting invites a child to explore, to play and to create. Beach sand becomes a sand castle, forest underbrush a cave, a fallen log a hiding place. Studies of children in schoolyards show more creative play in natural green spaces and less around manufactured play equipment (Faber Taylor & Kuo, 2006). Nature play, like all active play, may pay another dividend in countering childhood obesity.

Time in the wild can inspire a sense of connection with other living beings and life forms. An influential theory, biophilia, argues that humans have a built-in affinity for other life forms (Wilson, 1984). Nature draws us in, grounds us, and gives us a sense of place. Regular doses of nature also can help reduce stress. Children with emotional problems benefit from a therapeutic milieu that includes caring for small animals (Melson, 2001).

In the spirit of better understanding this nature connection, we have assembled a diverse and thought-provoking group of articles exploring the significance of nature for children. Landscape architects, educators, psychologists, and philosophers have contributed to this issue. Nature is broadly defined as places dominated by non-human biological species, plant and animal, as well as non-artifact natural objects—rocks, water, sand, etc. This expansive view of nature recognizes that many of our experiences of nature occur in places that humans have created (parks), influenced (second growth forest) or to coin a phrase, “touched” (old growth forest affected by human pollution). Few natural places are unaffected by human presence on the planet.

Because the human footprint is so often damaging to ecosystems, we urgently need to understand the developmental processes whereby children develop “green” attitudes and behaviors. Louise Chawla, in “Growing Up Green: Becoming an Agent of Care for the Natural World,” presents a theoretical framework for understanding the developmental paths in childhood and adolescence to lives of active care for the natural world. Elfriede Billmann-Mahecha and Ulrich Gebhard conducted a qualitative study in Germany, “If We Had No Flowers: Children, Nature and Aesthetics.” They analyzed the discussions of children and adolescents about “nature ethics” that weigh the interests of children and adolescents (playing, recreation) against the “interests” of natural objects, such as animals, plants or ecosystems. The researchers show how the aesthetic qualities of nature play a role in how children and adolescents wrestle with the moral claims of nature. In the study by Patsy Eubanks Owens and Innisfree McKinnon, “In Pursuit of Nature: The Role of Nature in Adolescents’ Lives,” teenagers from three California communities produced photographs and completed surveys about the important places in their lives. Nature was widespread in the places that adolescents used and valued for recreation, restoration and socializing. Another study from Germany, by Markus Mueller and colleagues compares adolescents in Germany and in Lithuania.
on measures of emotional affinity for nature and willingness to protect the environment. This study shows how emotional affinity for nature predicts positive attitudes toward environmental protection. Their finding of societal differences points to the need for culturally sensitive research. Finally, Kevin Rathunde, of the University of Utah, examines the construct of “embodied education” and its relation to the positive role of nature in children’s education. He argues that new multi-disciplinary perspectives on embodiment can help explain attraction to natural places, the link between such attraction and learning, and the positive health and psychological benefits of engagement with nature.

How can we reconnect children with nature? Busy parents have little time for excursions in the wild, and may worry about child safety when kids wander away on their own. Yet nature immersion can be as simple as counting insects around the porch light on a summer’s evening, looking at earthworms in the dirt after a rain, or growing a tomato plant on the front stoop. Schools can bring nature into the classroom—plants, terrariums, small animals—and children into nature. Schoolyards can have green spaces, biology can include studying local plants, and field trips can include time in actual fields. Instead of suburban sprawl, housing developments can go green, with kid-friendly protected wild spaces along with bike and walking trails. Vacant lots can be turned into adventure playgrounds, with rocks to climb, hills for sledding, and small streams for splashing. A new movement—green urbanism—integrates nature into even the densest city, through rooftop gardens, pocket parks, and wilderness preservation. Together, parents, educators, city planners and all nature lovers can connect our children with the natural world that is their birthright and heritage.

References


