I want to address aspects of the importance of children's experiential connection with the natural world and what I believe must occur, from a psychological and policy perspective, to remedy what constitutes a profound threat to our future. For what is being addressed here is not just an amenity benefit for children, an optional opportunity for going outside, enjoying and learning about nature, a means of fostering a conservation ethic or an attitude of good stewardship, or a way to encourage exercise or affirm our nation's natural heritage. Far more, we are actually considering the future of our species.

The pioneering psychiatrist, Harold Searles (1960:27), suggested a half century ago that: “The non-human environment, far from being of little or no account to human personality development, constitutes one of the most basically important ingredients of human psychological existence.” Since then, theory and evidence have emerged to support the notion that humans possess a biological need to affiliate with natural systems and processes, particularly during the important formative childhood years, and this relationship is critical to children’s health, productivity, physical and mental well being (Kellert and Wilson 1993, Kellert 2005, Louv 2008, Children and Nature Network 2009).
Yet, there appears only marginal appreciation of the significance of this human-child relationship. The prevailing paradigm of the modern urban world instead endorses the assumption that the measure of progress and civilization is our distance from and even transcendence of the natural world. We have become increasingly blind to the reality that our species, like all species, evolved in a biological – not an artificial, engineered, or machine dominated – context, and that consequently our physical, emotional and intellectual fitness continues to rely on a vast matrix of connections to natural systems and processes, particularly during childhood. The human mind and body genetically emerged in a biocentric world, and the sparse data available suggests our most cherished capacities – physical health, emotional attachment, self concept, personal identity, critical thinking, problem solving, curiosity, imagination, even culture – depends in myriad irreplaceable ways on our experience of nature, again particularly during the formative years of childhood. Our progress and civilization cannot be measured by the delusional assumption that we somehow escaped our biology and related dependence on nature. Much of what makes us fully and functionally human continues to be contingent on a rich tapestry of experiential ties to the natural world whether we choose to live off the land or become urban investment bankers. Despite our remarkable capacity for learning, individuality, culture and creativity, we remain bound like all creatures by the constraints of our biology. And, like any species, even one uniquely capable of life-long learning, the greatest maturational development of these basic biological dependencies is during the childhood years.

This extraordinary formative influence of nature in children’s health and development underscores this connection is not just a matter of physical fitness and intellectual capacity, but as well emotional capacity, identity, basic values, and even our moral and spiritual condition. The well springs of human motivation, the origins of our fitness and survival, evolutionarily emerged from our inherent inclination to affiliate with the natural world, what colleagues and I have labeled, “biophilia” (Wilson 1984, Kellert and Wilson 1993, Kellert 1997, 2005). A child’s optimal development, the emergence of a secure and positive identity, the ability to think critically and resolve problems, the formation of self-confidence and self-esteem, and even health and maturation rely on beneficial interactions with the natural world.
This relationship to environmental systems and processes must occur at home, at school, through personal experience and place-based learning. Children need to experience nature in direct, indirect, and representational ways as an integral part of their everyday lives. We must, therefore, depart from the notion of nature as a place to visit in a park or a forest, sequestered and apart from a child’s normal existence. We must dispel the notion that formally structured or informally organized programs, whether at school or in the forest, are the only antidotes for the increasing disconnect of children from the natural world. We need to appreciate that children require as well unstructured, unmediated, even risk prone opportunities for free, spontaneous, and frequently unsupervised contact with the natural world in the context of everyday life. We need to recognize that restoring children’s contact with nature is not just about enhanced intellectual understanding and support for conservation, but also about the chance to experience a sense of wonder, joy, exuberance, awe, even fear and trepidation, all and more, the raw stuff of normal and healthy development. We also need to realize that contact with nature is not just about direct physical contact in the outdoors and with living systems, but as well the representational and symbolic expression of the shape and pattern of the natural world revealed in story, picture, myth, legend, and more.

Because children’s experience of nature remains a vital and irreplaceable source of healthy development, nothing less than the future of our species is at stake in maintaining and, when compromised, restoring this relationship. This need is especially pronounced today when various indicators suggest a profound impoverishment in the quality and quantity of children’s experience of natural process and diversity with children revealing as a consequence alarming increases in rates of obesity, chronic illness, attention deficit disorder, and other physical and mental maladies. The crisis of deeply diminished connections between children and the biological basis of our humanity is too great for us to remain passive. The scale and scope of the problem calls for bold steps and a deeper understanding of what is at stake.
  www.childrenandnature.org.

  Cambridge, MA: MIT Press.


  Chapel Hill: Algonquin Press.


  Cambridge, MA: Harvard Univ. Press.

Stephen R. Kellert, Ph.D., is the Tweedy Ordway Professor of Social Ecology at the Yale University School of Forestry and Environmental Studies, Executive Chair of Bio-Logical Capital, a sustainable land investment and management firm, and a founding Partner and now consultant in the company, Environment Capital Partners, a private equity firm that invests in the environmental industry. He is also a member of the Board of Directors of the Children & Nature Network (www.childrenandnature.org). His work focuses on understanding the connection between human and natural systems with a particular interest in the conservation of nature and sustainable design of the human built environment. He is the recipient of numerous awards, and author of numerous books and articles, including the recent 2008 American Publishers Professional and Scholarly Best Book of Year Award in Architecture and Urban Planning for the book Biophilic Design: The Theory, Science, and Practice of Bringing Buildings to Life (co-editors, S. Kellert, J. Heerwagen, M. Mador, John Wiley, 2008).
The mission of the Children & Nature Network (C&NN) is to build a movement to reconnect children and nature. The primary goal of the C&NN is to achieve systemic change so every child, every year, every day, will have the opportunity to directly experience contact with nature. Research indicates that children who explore, learn, and play outside on a regular basis are healthier, happier, smarter, more cooperative, more creative and more fulfilled. Their well-being is enhanced while they develop a sense of place and bond with family, community and their environment. C&NN builds awareness, provides access to state-of-the art resources, supports the grassroots with tools and strategies, develops publications and educational materials, synthesizes the best available research, and encourages collaboration to heal the broken bond between children and nature. Since our founding in 2006, C&NN has fostered grassroots initiatives in more than 50 cities, states and nations. Our geographic reach is international, beginning predominantly in the United States and Canada. No other organization offers such a comprehensive, non-partisan, multi-sector approach to effecting social change to reconnect children and nature.

Children & Nature Network
Board of Directors
Richard Louv, Chairman
Cheryl Charles, Ph.D., President and CEO
Martin LeBlanc, Vice President
Martha Farrell Erickson, Ph.D., Secretary
Brother Yusuf Burgess, Member
Stephen R. Kellert, Ph.D., Member
Amy Pertschuk, Managing Director
Juan Martinez, Natural Leaders Network™ Coordinator
Sara St. Antoine, Senior Writer and Switzer Fellow
Betsy Townsend, Chair, C&NN Grassroots Leadership Team

For additional information, please contact us at:
Children & Nature Network
7 Avenida Vista Grande B-7, #502
Santa Fe, NM 87508

www.childrenandnature.org
info@childrenandnature.org