Let Them Climb Trees: The Benefits of Nature for Kids

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Think back to your fondest memories of childhood. What comes to mind? I would bet that most of you would talk about that time you made a tree house with your dad, or long summer days playing in the woods, climbing trees, and running through the nearby creek unsupervised for hours on end.

Many children today, however, do not have these experiences. Children today play outside less often and for briefer periods. We are just starting to understand the many effects of this change on our youth's wellbeing. Playtime, especially unstructured, imaginative, exploratory play, is increasingly recognized as an essential component of wholesome child development. It is also recognized that children are also more physically active when they are outside.

Additionally, research has confirmed the restorative effects of even limited contact with nature for both children and adults in attention restoration and managing symptoms of attention deficit disorders (Berman and others 2008). Research is also demonstrating the multiple benefits of exposure to nature in a school environment, such as increased student achievement, motivation, behavior, and understanding of concepts taught.

Some of the **key benefits** of nature exposure include:

Healthier kids. Outdoor activity can improve children's health by helping to prevent and treat obesity and associated health problems, as well as mental health issues. One study at the University of Washington of almost 4,000 children found that children living in greener areas have a lower body mass index and gained weight more slowly over the study period than children with less access to green space.

Additionally, Cornell University environmental psychologists found that a view of nature can help protect children against stress and that nature in or around the home appears to be a significant factor aiding the psychological well-being of children. And a study in Illinois of 400 children diagnosed with ADHD found a link between the children's routine play settings and the severity of their symptoms. Those that play in outdoor settings with lots of green have milder ADHD symptoms than those who play indoors or in built outdoor environments.

Natural settings can also play a significant role in helping traumatized children. Nature can provide a place for children to clear their minds and reflect in solitude after going through an upsetting time in their life.

Increased social interaction. One reason for the emotional benefits of nature may be that green space promotes social interaction and thereby fosters social support. Studies are finding that outdoor kids are better able to relate to other children and adults and have more realistic life expectations. A Swedish study found that children and parents who live in places that allow for outdoor access have twice as many friends as those who have restricted outdoor access due to traffic concerns.

Enhanced creativity. Nature can enhance creativity, problem solving, self-esteem, and self-control. Studies in the U.S., Sweden, Australia, and Canada of children in schoolyards with both green areas and manufactured play areas found that children engaged in more creative forms of play in green areas, such as more fantasy and make-believe play. They are more likely to create their own games in play environments dominated by natural areas rather than solely playground structures.

Parent-child engagement. Nature also provides increased opportunities for parents to fully engage with their children – be it playing together at the beach, walking in the woods, or fishing together. This engagement provides a range of benefits for the wellbeing of children.

Improved school performance. Research has shown that outdoor learning is associated with gains in learning. A landmark study by Lieberman and Hoody (1998) found that outdoor education resulted in better standardized test performance, increased engagement, and reduced classroom management problems. Similarly, we are finding significant gains in middle school students' knowledge of the scientific process through participation in our outdoor science learning program called Kids in the Woods at Westwood Middle School in Gainesville, FL. Through this program all sixth grade students (approximately 350 to 400 students per year) at Westwood participate in outdoor studies on the school campus and in a nearby urban nature park throughout the school year.

Get Involved

Pediatricians and other public health officials, parents, schools, natural resource agencies, and many others can play an important part in encouraging kids to get outdoors. **Pediatricians** can consider "prescribing" outdoor play for physical and mental health benefits. Particular emphasis should be on unstructured, exploratory play. **Parents** (and other extended family members) can have a tremendous effect by making sure that kids get outdoor play time every day. One simple way that **schools** can have a considerable effect is just by making sure kids get enough recess time. They can also encourage outdoor learning opportunities and green the schools- studies have shown the soothing effects of greenery on children in a learning environment - and include the study of local flora and fauna in lessons. **Natural resource agencies** are also promoting more outdoor time for kids through programs such as the US Forest Service's Kids in the Woods program (www.interfacesouth.org/projects/kids-in-the-woods, www.kidsinwoods-interfacesouth.org) and the U.S. Fish and Wildlife's School Backyard program (www.fws.gov/chesapeakebay/schoolyd.htm).

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Annie Hermansen-Báez is the Science Delivery/Kids in the Woods Coordinator for the USDA Forest Service's Urban Forestry South (Southern Research Station and Region 8 Partnership) located in Gainesville, FL. Her work focuses on directing a regionwide science delivery program that develops and delivers information to increase our understanding of the interactions between natural and human systems in urban and urbanizing landscapes, covering topics such as children and nature, human health and nature connection, outdoor learning, wildland-urban interface, and more. She also leads Kids in the Woods and green schools programs at local middle and elementary schools.

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