

## Why Kids Need a Big Dose of Nature

A falloff in visits to the nation's parks offers further evidence of "nature deficit disorder"

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In the oft-quoted "[Birches](#)," Robert Frost muses about a boy who lives too far from town to learn baseball so instead spends time in the woods swinging in the trees. "He always kept his poise / to the top branches, climbing carefully / with the same pains you use to fill a cup / up to the brim, and even above the brim," Frost writes. "Then he flung outward, feet first, with a swish, / kicking his way down through the air to the ground." This sort of unstructured, imaginative play is increasingly lacking in an indoor, scheduled world—to children's great detriment, argues Richard Louv, author of [Last Child in the Woods](#), a book that explores research linking the absence of nature in children's lives to rising rates of obesity, attention disorders, and depression. New evidence of the lack: [a recent study](#) that shows visits to national parks are down by as much as 25 percent since 1987. U.S. News spoke with Louv about the study and the emergence of "nature deficit disorder." Excerpts:



The new study points to about a 1 to 1.3 percent yearly decline in national park visits in America. Why do you think this is happening? I looked at the decline in national park usage in my book, and the most important reason for it is the growing break between the young and nature. Our constant use of television, video games, the Internet, iPods is part of what's driving this. For example, a recent study from the Kaiser Family Foundation found that kids between the ages of 8 and 18 spend an average of 6.5 hours a day with electronic

media. But time and fear are also big factors. Many parents feel that if they don't have their kids in every organized activity, they will fall behind in the race for Harvard. And we are scared to death as parents now of "stranger danger" and letting kids roam free.

Also, there have been some egregious and upsetting crimes in national parks, and the media go back to them again and again. People remember these stories, but they don't remember the millions of park visits when nothing like that happened. In fact, despite the sensationalistic media coverage, the crime rate in national parks has been falling.

You argue that exposure to nature is therapeutic and offers enough protection from certain health problems that its absence ought to be considered a disorder. Is that an exaggeration?

I should be clear that I am in no way intending to make a medical diagnosis. Nature deficit disorder describes the human costs of alienation from nature, including diminished use of the senses, attention difficulties, and higher rates of physical and emotional sickness. Nature deficit can even change human behavior in cities. Long-standing studies show that the absence or inaccessibility of parks and open space is associated with high crime rates, depression, and other urban maladies.

"Nature" means different things to different people. How do you define it?

When I talk about nature, I am not just talking about wilderness. The people who study this actually use the term "nearby nature." Nearby nature can be the clump of trees at the end of the cul-de-sac or the ravine behind the house. Through a biologist's eyes, those places can seem insignificant, but through a child's eyes that ravine can be a whole universe.

For which diseases are the links between nature exposure and good health the strongest?

It's important to acknowledge that some of the studies need more clarification on causality and correlation. However, at the very least, this research is powerfully

suggestive that there is a relationship between nature exposure and reduced symptoms of ADD, that lack of exposure plays a role in childhood obesity, and that time in nature can help quell symptoms of depression.

One study, for example, showed that joggers who exercised outdoors in natural settings felt more restored and less anxious or angry than people who burned the same amount of calories indoors. Studies in hospital settings have showed that patients with windows looking out into trees or other natural scenes had shorter hospitalizations. Certainly, we need more research. But Howard Frumkin, the director of the Centers for Disease Control and Prevention's Environmental Health unit, says that we know enough already to act.

In addition to preventing disease, is there evidence that exposure to nature can actually boost abilities?

Yes, much of the evidence points to benefits. We see increased self-confidence, better body image, and cognitive benefits. Kids who spend more time outdoors tend to do better on testing; they do better on science; they tend to play more cooperatively.

Your parents allowed you to run loose in the woods while you were growing up in Missouri. Should today's parents try to somehow overcome their fears and let their children do the same?

No, I won't say that. This isn't an exercise in nostalgia. I felt that fear as a parent, and my kids didn't run as freely as I did. I do think, though, that we have to be very intentional now about getting our kids outdoors. It's going to be different than when we were kids, and we'll have to do much of it together with them.

We also have to do a much better job of comparing risks. Yes, there are some dangers outdoors, but there is also great danger of raising a future generation of children under virtual house arrest. Yes, Lyme disease can be a problem, but it's also worth pointing out that one of the most dangerous spiders in North American—the brown recluse—likes to live inside in closets.

What would you say to people who say that they live in the city and getting to nature is essentially impossible?

I would tell them that the Sierra Club sponsors an interesting volunteer program in which they put backpacks on the kids and go on a 5-mile hike in their city, in their own neighborhood, and find nature. Anybody can do that with their children. Anywhere you are you can find birds nesting in windowsills or bugs crawling in alleys. Urban birding, windowsill gardening, planting flowers that attract butterflies—there are options for people who live in cities.

Does the increasing interest in global warming and the environment help at all?

If we emphasize environmental destruction at too early an age in the absence of a joyful experience, we are setting up kids to associate nature with the end of things and fear and disaster. That's important, but we also need to emphasize the positive that nature plays simply by being there.

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