

## SYNOPSIS

### LAST CHILD IN THE WOODS: SAVING OUR CHILDREN FROM NATURE- DEFICIT DISORDER

By Richard Louv

The premise of this well researched book is that our children and our society are suffering from Nature-Deficit Disorder. This is not a medical diagnosis. Rather, it "describes the human costs of alienation from nature, among them: diminished use of the senses, attention difficulties and higher rates of physical and emotional illnesses. The disorder is detected in individuals, families and communities. Nature deficit can even change human behavior in cities...since long-standing studies show a relationship between the absence, or inaccessibility, of parks and open spaces with high crime rates, depression and other urban maladies".

#### WHAT ARE THE SYMPTOMS OF NATURE-DEFICIT DISORDER IN CHILDREN?

- Childhood Obesity: According to the President's Council on Physical Fitness and Sports, 2/3 of American children cannot pass a basic physical.
- Attention Deficit Disorder and other mental illnesses: 8 million children in the U.S. suffer from mental disorders and ADHD is one of the more prevalent ones. It most often develops before age seven and is usually diagnosed between the ages of eight and ten.
- Reduced development of the eighth intelligence (Nature Intelligence was added by Howard Gardener to his theory of multiple intelligences).
- Physical separation from others (loneliness, reduced "touch")
- "Know It All" state of mind ("what cannot be Googled does not count") with an accompanying loss of a sense of wonder and spiritual connection.

#### WHY ARE TODAY'S CHILDREN REMOVED FROM NATURE?

- Worry about safety in the neighborhood: In many cases this is exaggerated. Most abductions are by people known to the family. Only 200-300 per year are by strangers. The best protection against this is to encourage children to be confident, alert and to have good self esteem. Studies show that experiences in nature increase awareness and improve self-confidence.
- Worry about safety in nature: Lyme disease, West Nile (mosquitoes are indoors, too), and air pollution (indoor pollution is 2-10 times worse than outdoor pollution). In light of the President's Council on Fitness and Sports report, which is the higher risk?
- Lack of time: Children have more "scheduled" time than ever before with organized sports (which, ironically, coincides with the childhood obesity epidemic; interviewed

children do not characterize this activity as "play"), extra-curricular activities, homework and study

- Television viewing and computer usage
- Lack of access to nature
- Design of cities (concrete jungle in the inner city, lack of sidewalks and natural play areas in the suburbs)
- Fear of lawsuits restricts use of and access to many natural areas
- Restrictions by environmentalists (e.g. Building a tree house may damage the tree, climbing the dunes may damage them)
- Our educational system has replaced primary experience (sensory) in nature with the one-way experience of television and other electronic media.
- Even many camps, which historically have had a nature focus, have changed their focus to social programs like race relations or sports.

## SOLUTIONS TO THE PROBLEM

- View nature time as an essential investment in children's health (stress reduction, physical health, deeper sense of spirit, more creativity, sense of play)
- Increase the amount of time spent in nature. Exposure to nature does not have to be a major vacation or field trip. In fact, the best experience is through day-to-day contact.
- Natural tort reform is crucial to increasing access to nature
- Park design: return to nature focus rather than organized sports like soccer
- School reform: A 2002 State Education and Environmental Roundtable report studied 150 schools in sixteen states for ten years. Findings were that "environment based education produces gains in social studies, science, language arts and math; improves standardized test scores and grade-point averages; and develops skills in problem solving, critical thinking and decision making"
  - Shift from the one-way experience of electronic media to experiential contact with nature. This nurtures creativity, stimulates the senses and increases a sense of wonder.
  - Make nature available to children on a regular basis
    - Via the physical design of new schools and retrofit old schools (revamp playgrounds, incorporate "green" building techniques like greenroofs)
    - Coordinate access to natural areas through existing diverse organizations such as nature centers, civic garden centers and bird sanctuaries.
  - Examples are cited of successful programs around the world, including Great Britain, which has a program called Learning through Landscapes in 1/3 of its 30,000 schoolyards and Canada's Learning Grounds)
- City Design: Create natural habitats through land planning and architectural design
  - Preserve islands of wild land
  - Reclaim vacant lots

- Create natural corridors for movement (e.g. bikeways, rails to trails, etc.)
- Green urbanism: incorporate green building techniques including greenroofs. Certain types of greenroofs can support trees and shrubbery to be utilized essentially as park space. The cost of greenroof design can be offset by reduced water run-off, reduced surface temperatures on roof and surrounding areas, reduced dust and air pollution, energy savings, reduced sound transmission, etc.
- Put sidewalks back into the planning of neighborhoods
- Examples of cities working in this direction are cited, such as Chicago (Mayor Daley's goal: Make Chicago the greenest city in the country)

## CONCLUSION

The generation of children born after 1964 is more removed from nature than any generation in history. Multiple studies exist confirming the problems resulting from nature-deficit, as well as the efficacy of solving these problems through increased exposure to a natural environment. Most people intuitively recognize that it is true. Opportunities abound for reversing the trend. First, parents, educators and city planners must recognize the problem. Next, there should be a coordination of efforts in the private and public sectors to implement the solutions presented. Lastly, accessibility to nature should be a part of all long-range planning by schools and cities. This will result not only in healthier children and societies, but will help to assure stewardship of the Earth by future generations.