

# CHILDREN AND NATURE

## EXPOSURE TO NATURE IS CRITICAL

Children who don't connect with nature before the age of 12 will have a more difficult time doing so as adults. Knowledge of, and a feeling of being connected to nature, is necessary in order to have a willingness to protect wildlife and the environment.

## COGNITIVE FUNCTIONING

- Outdoor time improves critical thinking and decision-making skills by observing and interacting with nature.
- Children who spend time learning in natural environments have better academic performances, especially in science.
- Spending time outdoors can reduce the likelihood of nearsightedness.
- Learning outdoors gives children direct exposure to many subjects, allowing them to become more engaged which develops concentration and other transferable skills.
- Naturalized school grounds can boost academic performance (an elementary school in Los Angeles improved students science performances six fold when concrete school grounds were replaced with native flora that attracted native wildlife).

## EMOTIONAL AND BEHAVIORAL WELLBEING

- Exposure to nature can prevent ADHD and improve symptoms in those diagnosed.
- Improves sense of self-esteem (at one Scottish school naturalizing the playground resulted in a 94% reduction in incidents of bullying in just two years).

## NATURE DEFICIT DISORDER

Internationally acclaimed journalist, Richard Louv, first proposed a connection between child well-being and nature in his book Last Child in the Woods.

Nature Deficit Disorder is a systemic problem in modern society. People, and children in particular, are becoming increasingly alienated from nature, resulting in higher rates of physical and mental issues and illness.

Children spend 90% of their time indoors (53% screen time vs. 0.5% outdoor time). TV, video games, computers and phones are estimated to consume over 7 hours of attention.

Today, children spend an average of 7 minutes a day outside as opposed to previous generations 2-3 hours.

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- Negative feelings, including anger and fatigue, are reduced as a result of spending time in nature.
- Decreases children's anxiety and improves their ability to learn new tasks.

## PHYSICAL WELL-BEING

- Outdoor physical activity can relieve stress, improve immune function and assist recovery from illness.
- Promotes exercise and healthy lifestyle, and lowers risks of obesity and Type 2 diabetes.
- Walking barefoot enables healthy development of growing feet. A bare foot is better for sensing changes in the ground, and walking without shoes can help a child develop balance and posture.
- The last 50 years has seen a 400% increase in allergies, hay fever and asthma. Exposure to dirt, mud and germs builds a healthier immune system, and decreases the likelihood of asthma, allergies and sickness. Children growing up on farms, around animals or who garden are less likely to develop such health concerns.

## DEVELOPMENT OF POSITIVE CHARACTERISTICS

- Improved self-esteem, independence, interpersonal skills, self-control, sense of belonging, and creativity (mud play can be art!).
- Increases ability to connect with other children. Outdoor play helps children learn to share and cooperate with others, resolve conflicts, and learn how to be both a leader and a follower.
- Time spent in nature can help bring families closer, as they focus on each other and their surroundings instead of multiple distractions at home.
- Outdoor play helps children face challenges, take appropriate risks, and solve problems – important skills to develop early in brain development.

## FOSTERING CONNECTION

Start simple. Go for a walk in a natural area. Help children observe and marvel at smells, sights and textures.



Bring a magnifying glass or binoculars to observe nature, and a camera or notebook to record interesting things.

