

RESEARCH ON NATURE, CHILDREN, AND PLAY

Compiled by Leon Smith, Planet Earth Playscapes, 2006

- Children with nature nearby their homes are more resistant to stress; have lower incidence of behavioral disorders, anxiety, and depression; and have a higher measure of self-worth. The greater the amount of nature exposure, the greater the benefits (Wells & Evans 2003)
- Spending time in nature has been shown to reduce stress and benefit treatment of numerous health conditions (Kahn, 1999)
- Symptoms of children with Attention Deficit Disorder (ADD) are relieved after contact with nature. The greener the setting, the more the relief. (Taylor et al. 2001).
- Children with views of and contact with nature score higher on tests of concentration and self-discipline. The greener, the better the scores (Wells 2000, Grahn, et al. 1997, Taylor et al. 2002)
- Children who play regularly in natural environments show more advanced motor fitness, including coordination, balance and agility, and they are sick less often (Grahn, et al. 1997, Fjortoft & Sageie 2001).
- When children play in natural environments, their play is more diverse. There is a higher prevalence of imaginative and creative play that fosters language and collaborative skills (Moore & Wong 1997, Taylor, et al. 1998, Fjortoft 2000).
- Exposure to natural environments improves children's cognitive development by increasing their awareness, reasoning and observational skills (Pyle 2002).
- Play in a diverse natural environment reduces or eliminates bullying (Malone & Tranter 2003).
- Nature helps children develop powers of observation and creativity, as well as a sense of peace and being at one with the world (Crain 2001).
- Early experiences with the natural world have been positively linked with the development of imagination and the sense of wonder (Cobb 1977, Louv 1991). Wonder is an important motivator for life long learning (Wilson 1997).
- Children who play in nature have more positive feelings about each other (Moore 1996).
- Natural environments stimulate social interaction between children (Moore 1986, Bixler et al. 2002).
- Play in outdoor environments stimulates all aspects of child development more readily than indoor environments (Moore & Wong 1997).
- An affinity to and love of nature, along with a positive environmental ethic, grow out of regular contact with and play in the natural world during early childhood. (Chawla 1988; Wilson 1993; Sobel 1996, 2002 & 2004; Wilson 1997; Kahn 1999; Kals et al. 1999; Moore & Cosco 2000; Bixler et al. 2002; Kals & Ittner 2003; Schultz et al. 2004).

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