

Urban Forestry/Urban Greening Research

# Green Cities: Good Health



UNIVERSITY of WASHINGTON

summaries of scientific research about human health and well-being and urban nature experiences

## Mental Health & Function

### How the Experience of Nature Aids the Brain

Encounters with nearby nature help alleviate mental fatigue by relaxing and restoring the mind. Within built environments, parks and green spaces are settings for cognitive respite, as they encourage social interaction and de-stressing through exercise or conversation, and provide calming settings. Having quality landscaping and vegetation in and around the places where people work and study is a good investment. Both visual access and being within green space helps to restore the mind's ability to focus. This can improve job and school performance, and help alleviate mental stress and illness.

### Research Highlights:

- The experience of nature helps to restore the mind from the mental fatigue of work or studies, contributing to improved work performance and satisfaction. (Kaplan, 1995, *Journal of Environmental Psychology*; Lohr et al., 1996, *Journal of Environmental Horticulture*)
- Urban nature, when provided as parks and walkways and incorporated into building design, provides calming and inspiring environments and encourages learning, inquisitiveness, and alertness. (Heerwagen & Orians, 1993, in *The Biophilia Hypothesis*; Kaplan & Kaplan, 1989, *The Experience of Nature*)
- Green spaces provide necessary places and opportunities for physical activity. Exercise improves cognitive function, learning, and memory. (Colcombe & Kramer, 2003, *Psychological Science*; Pretty et al., 2006, *Biologist*)
- Outdoor activities can help alleviate symptoms of Alzheimers, dementia, stress, and depression, and improve cognitive function in those recently diagnosed with breast cancer. (Mooney & Nicell, 1992, *Healthcare Management Forum*; Chalfont & Rodiek, 2005, *Alzheimer's Care Today*; Cimprich et al., 2005, *Psycho-Oncology*)
- Contact with nature helps children to develop cognitive, emotional, and behavioral connections to nearby social and biophysical environments and is important for encouraging imagination and creativity, cognitive and intellectual development, and social relationships. (Kahn & Kellert, 2002, *Children and Nature*)
- Symptoms of ADD in children can be reduced through activity in green settings, thus "green time" can act as an effective supplement to traditional medicinal and behavioral treatments.<sup>22,23,24</sup> (Taylor et al., 2001, *Environment and Behavior*; Taylor & Kuo, 2009, *Journal of Attention Disorders*)

### More information at: [www.greenhealth.washington.edu](http://www.greenhealth.washington.edu)

Additional social science about nearby nature and its affects on mental capacities can be found at the Green Cities: Good Health web site (including research sources & citations).

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