

IUFRO Task Force 2007-2011 Forests and Human Health



Photo: Metla/Ahto Rummukainen

METLA

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Forests and Human Health, (ForHealth)



Forest visits reduce stress

Studies from different parts of the world show that natural environments improve human mood, concentration and performance. Lower levels of blood pressure, heart rate, skin conductivity and muscle tension have been observed in natural environments compared to urban settings. Activities in green settings have reduced the symptoms of Attention-Deficit/Hyperactivity Disorder (AD/HD) in North American children. Forest visits can also strengthen the human immune system and decrease cortisol (stress hormone) levels.

Forest as a source of food, bioactive compounds and drugs

Large share of the currently approved drugs is originated from nature. Many tree species are a rich source of bioactive medicinal compounds, and are also a source of functional food. For example, taxol, now known as paclitaxel, isolated from the bark of *Taxus baccata*, is used as drug for breast and ovarian cancer. Bark and knots of conifers contain large variety of antioxidant and anti-inflammatory compounds. Caries-inhibiting xylitol is produced from birch trees.

In developing countries, medicinal plants derived from forests and woodlands are often the most important source of medication. In addition, forest food (e.g. fruits, nuts, wild leaves, palms, wild roots and tubers, mushrooms, insects) provides a safety net in case of food shortage and helps combating malnutrition and diseases of the most vulnerable populations.

Forest ecosystem alterations may increase spread of diseases

Malaria, Lyme disease, and hantavirus pulmonary syndrome are examples of forest-related infectious diseases. Ecosystem alterations affect the emergence of several diseases by changing the habitats of vectors and hosts. Especially in tropical areas forest modifications, human migrations and lack of both health care and knowledge of vector-borne diseases may create conditions that favour pathogens.

Background of ForHealth

Forests provide enormous possibilities to improve human health conditions. Health promoting qualities of forests can be fully utilized – and health related risks minimized – only by strengthening the co-operation between health and environmental researchers and practitioners. In order to facilitate the achievement of these goals IUFRO¹ has launched a Task Force on Forests and Human Health, ForHealth.

Objectives of ForHealth

- ◆ to facilitate the dialogue between health and forestry professionals
- ◆ to strengthen the forestry perspective in international initiatives on health, biodiversity and climate change
- ◆ to promote the implementation of health benefits of forests into practice, and to promote the management of the health risks connected with forests

Priorities of ForHealth

Maximizing health benefits

- ◆ mental and physical health benefits of forests (e.g. stress reduction and rehabilitation)
- ◆ forest-derived pharmaceuticals and nutraceuticals
- ◆ forest food and medicinal plants
- ◆ improving living environments

Managing health risks

- ◆ emerging infectious diseases
- ◆ hazards

Activities of ForHealth

The activities of the ForHealth Task Force include seminars and workshops; producing a state-of-art report, newsletters and other publications; delivering information and improving networking through web-portal (www.forhealth.fi); and enhancing the set-up of research projects.

Seminars and workshops

- ◆ Kick-off meeting, 15 Aug, 2007, Saariselkä, Finland
- ◆ Seminar on Forests and Human Health, 30 April, 2008, Marrakesh, Morocco
- ◆ Information event "Forests – promoting or harming human health?" at European Forest Week, 20-24 Oct, 2008, Rome, Italy
- ◆ Technical session/side event at XIII World Forestry Congress, 18-25 Oct, 2009, Buenos Aires, Argentina

Publications

- ◆ Colfer, C. (ed). 2008. Human Health and Forests: A Global Overview of Issues, Practice and Policy. Earthscan.

International cooperation partners

- ◆ COHAB Initiative (Co-Operation On Health And Biodiversity)
- ◆ CIFOR Forests and Health Initiative
- ◆ COST Action E39: Forests, Trees and Human Health and Wellbeing
- ◆ Japanese Society of Forest Medicine

More information:

www.forhealth.fi,

www.iufro.org/science/task-forces/forests-trees-humans/

¹ IUFRO (International Union of Forest Research Organizations) is a non-profit, non-governmental international network of forest scientists.