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PROMOTING POLLINATORS

SUSTAINABLE COMMUNITIES FIELD SCHOOL

ENVIRONMENTAL PSYCHOLOGY

NATURE: LIFE'S BEST MEDICINE

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A STROLL THROUGH A GARDEN OFFERS RESPITE FROM TODAY'S BUSY LIFESTYLES. ONE CAN USE THE TIME AWAY, HOWEVER BRIEF, FOR CONTEMPLATION, AND TO REFRESH AND RESTORE ONESELF. A GARDEN EXPERIENCE IS NOT A CASUAL PLEASANTRY. PEOPLE HAVE LONG RECOGNIZED THE HEALTH-IMPROVING ASPECTS OF GARDENS. SUCH INTUITIONS ARE NOW SUPPORTED BY NEARLY FORTY YEARS OF RESEARCH EVIDENCE[1], SUMMARIZED IN THE **GREEN CITIES: GOOD HEALTH** WEBSITE.

DECLINING MENTAL HEALTH IS A MAJOR PUBLIC HEALTH CONCERN. IT IS ESTIMATED THAT ONE IN FIVE PEOPLE IS AFFLICTED BY A MENTAL HEALTH DISORDER. PEOPLE OF ALL AGES ARE FEELING EFFECTS OF GENERAL STRESS AND ANXIETY, AND DIAGNOSED CONDITIONS, SUCH AS DEPRESSION, ARE ON THE RISE. EXPERIENCES OF NEARBY NATURE CAN HELP.

IMPROVING GENERAL MOOD AND ATTITUDE

Many studies have focused on the connection between green space and physical activity because of concerns about obesity and chronic disease.[2] Better mental health is another reward. A study compared meditative and athletic walking, in both forest and indoor settings. Meditative walking generated more positive psychological effects than athletic walking did in both environments.[3]

Other investigators have found evidence of lower frustration and increased brain activity resembling meditation when moving in green space versus retail and commercial areas having no trees.[4] Also, meditative walking in the forest was the most effective at increasing happiness. Happiness is defined as the presence of a positive emotional mindset. Psychologists know that it broadens how a person thinks about and acts in the daily flow of life's efforts, creating positive intellectual and psychological resources.

Studies have compared being in natural versus built settings, and watching videos.[5] Exposure to real nature was found to increase: connectedness to nature, ability to direct attention, positive emotions, and ability to reflect on life problems.

IMPROVED WORK AND CREATIVITY

When focused on tasks that require concentration (at work or school, for instance), a person must suppress mental distractions and impulses. This can be exhausting. With greater mental fatigue we are unable to work as well, become irritable, and may feel frustrated. Short breaks in nature help to restore the mind, perhaps contributing to improved work performance and satisfaction.[6] Attention Restoration Theory (ART)[7] describes how nature provides restorative experiences.[8]

In a study of creative professionals, nature experiences enhanced creativity by evoking new ways of thinking, promoting curiosity, and encouraging more flexible thinking.[9] A recharge of directed attention may support creativity, as the restored mind is better at analyzing and developing ideas.

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photos, from left to right:
1. Nature spaces offer soft fascination, drawing our attention without effort and providing restorative experiences. photo: Guy Kramer; 2. Walking around trees and in forests provides many health benefits. photo: Kathleen Wolf; 3. Children who are active outdoors show reduced attention deficit symptoms. photo: Guy Kramer; 4. Public gardens feature wonderful amenities, and can improve visitors' mental health and wellness. photo: Kathleen Wolf; 5. A bench with a view of nature is a good place to work out creative solutions. photo: Kathleen Wolf; 6. Public gardens are wonderful places for casual, meditative walks. photo: Guy Kramer

NATURE-BASED THERAPY

In one study children who were active in green outdoor spaces showed reduced Attention Deficit/Hyperactivity Disorder (ADHD) symptoms more than the kids who were involved in either built outdoor activities or indoor activities.[10] Another study found that children with ADHD concentrated better after a walk in the park than after a downtown walk or a neighborhood walk.[11]

Studies of *shinrin-yoku*, or forest bathing, in Japan have shown a remarkable array of benefits from simply walking in forested settings for an extended time. Effects include reduced stress, better mood, better immune function, and reduced diabetes symptoms.[12] Cities in some nations are now promoting forest bathing as therapy.

THE ROLE OF PUBLIC GARDENS

Synergies exist between the psychological benefits of outdoor physical activity, and the general restorative effects of contact with natural environments. Botanical gardens, arboretums, and parks could build on the research evidence to develop new partnerships and programs. For instance, corporations are promoting mindfulness workshops, and gardens could become the settings for corporate or staff retreats. In some cities physicians are doing "parks prescriptions" to promote routine, moderate activity for better patient health; public gardens, arboretums, and parks could be activity locations, hosting "walk with the doc" events. Therapy partnerships, offering facilities and expertise to address the milder mental health challenges of children and adults, could be formed. Special "forest bathing" events could also be offered. Many opportunities exist for evidence-based engagement with visitors and local communities. Public gardens, arboretums, parks, and greenspaces offer a true respite from daily stresses and can refresh and restore our mind, body, and spirit.

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