

Greenery and Quality of Life

E. O. Wilson-Entomologist (1929-)

“Nature holds the key to our aesthetic, intellectual, cognitive and even spiritual satisfaction.”



Two of the main reasons people “love where they live,” according to a recent study by the Knight Foundation, are social offerings like cultural events and outdoor recreation and lots of greenery and aesthetics.¹ People are drawn to gardens, forests, and other natural spots for recreation and vacations. Homes near parks typically have a higher value. The designers and operators of hotels, spas, and golf courses know that beautiful grounds attract customers. It’s obvious that nature matters to people. A well-known nature psychologist explains “Big trees and small trees, glistening water, chirping birds, budding bushes, colorful flowers—these are important ingredients in a good life.”²



Nature’s role in our quality of life is pervasive. Greenery, beauty, health, sense of place, inspiration, impact on mood, creativity, learning, focus...and the list goes on. Some businesses want to locate in communities with lots of greenery because it makes employees happy and helps in recruitment.³

The notion that contact with nature is good for health has been expanding. In 1984, Harvard biologist E.O. Wilson introduced the concept of “biophilia,” the innately emotional affiliation of human beings to other living organisms.⁴ Wilson pointed to the millennia of human and pre-human history, all embedded in natural settings, and suggested that we still carry

¹ John. S and James L. 1993. Knight Foundation and Gallup. Inc. 2011. *Soul of the Community Study*.

² Kaplan, R. Urban Forestry and the Workplace. In: P.H. Gobster (ed.), *Managing Urban and High-Use Recreation Settings*. International Symposium on Society and Natural Resources. USDA Forest Service, St Paul MN.

³ Price WaterhouseCoopers. 2012 “Going green is becoming increasingly attractive as a business strategy.”

⁴ E.O Wilson, 1984. The *Biophilia Hypothesis*. Kellert & Wilson.

affinities and preferences from that past. Building on this theory, others have suggested an affinity for nature that goes beyond living things to include streams, ocean waves and wind.⁵

Being in contact with nature motivates people to exercise and appears to boost the benefits of exercise. Green spaces in close proximity to homes encourage exercise, which can improve mental health.⁶ Exposure to nature not only makes you feel better emotionally, but physically as well, by increasing the production of stress hormones within 3-4 minutes of a person's contact with nature.⁷

Researchers in England found that joggers who exercise in a natural green setting with trees, foliage and landscape views feel more restored and less anxious, angry and depressed than people who burn the same amount of calories in gyms or other built settings. Research is continues on what is being called "green exercise."^{8,9}

In Pennsylvania, 74% of the population participate in some form of outdoor recreation. While hunting and fishing are not growing in popularity, wildlife and bird watching are. So is walking, hiking, and bicycling in natural surroundings.¹⁰ Birds are awe-inspiring, but also are barometers of environmental health. Watching birds in your yard is enjoyable, and it provides a sense of security and accomplishment that you are doing your part to maintain a healthy environment.

For many people, being in nature and interacting with the natural world, brings a sense of peace, tranquility, and a feeling of connectedness - with self, others and a higher power. Nature is also fundamentally linked to our human spirituality. Out in nature, we feel how we are connected to entities beyond ourselves and understand our interdependencies with other living beings. Nature also prompts us to reflect on the ever-changing nature of existence and what might lie beyond it. Nature provides a space in which we can connect spiritually both with ourselves and outside ourselves.^{11 12}

⁵ Heerwagen, J. 2009. Biophilia, health, and well-being. In: Campbell, L., and A. Wiesen (eds.), *Restorative Commons: Creating Health and Well-Being Through Urban Landscapes*. Gen. Tech. Rep. NRS-P-39. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station.

⁶ Bell, S., V. Hamilton, et. al. 2008. *Greenspace and Quality of Life: A Critical Literature Review*. Greenspace Scotland, Edinburgh, 75 pp.

⁷ Bowler, D.E., Buyung-Ali, L.M., Knight, T.M., & Pullin, A.S. (2010). A systematic review of evidence for the added benefits to health of exposure to natural environments. *BMC Public Health*, 10, 456.

⁸ Frumkin, Howard, and Louv, Richard. The Powerful link between land and preserving human health. *Land Trust Alliance Special Anniversary Report*. 2007.

⁹ Pretty, J., R. Hine, and J. Peacock. 2006. Green Exercise: The Benefits of Activities in Green Places. *Biologist* 53, 3: 143-48.

¹⁰ Pennsylvania Department of Conservation and Recreation, 2014. Outdoor Recreation Participation Survey.

¹¹ R.E Chenow, and P.H Gobster. 1990. The nature ecology of aesthetic experience in the landscape. *Landscape Journal*, 9: 1-18.

¹² Marcus, Clare Copper and Marni Barnes. 1999. *Healing gardens: Therapeutic Benefits and Design Recommendations* (9Trans), New York, John Wiley and Sons.

Useable and safely-accessible gardens or green spaces not only foster a sense of community, but also provide psychological benefits.¹³ Studies show that having views of nearby nature and living within green spaces can improve productivity,¹⁴ reduce stress,¹⁵ and improve school performance.¹⁶

Green spaces that provide the shade of a large tree, encourage social contact by serving as informal meeting places and sites for group and shared activities.¹⁷ Green spaces can serve as a sort of nature therapy, as people experiencing difficulties can find empowerment, respite from stress, and personal involvement in environmental stewardship.¹⁸ As a result, the mental health of individuals may also remain positive due to a decreased chance of depression and feelings of isolation and increased self-esteem. Effective social support networks have been found to restore feelings of personal control and self-esteem by buffering the effects of stress and poor health. Greenery seems to make people happy.^{19 20}

The *Soul of the Community* study found that communities which had better social offerings and more greenery had stronger economic growth.²¹ Greenery and recreation makes communities more desirable places to live.

Good stewardship helps people save money on energy, water, lawn care and medical expenses. It can provide a green infrastructure that helps communities save money on stormwater management, flood protection, water supply, pollination and heating bills.²² A family can save

¹³ Maller, C.J., C. Henderson-Wilson, and M. Townsend. 2009. Rediscovering Nature in Everyday Settings: Or How to Create Healthy Environments and Healthy People. *Ecohealth* 6, 4: 553-56.

¹⁴ Krause, N. 1987. Life Stress, Social Support, and Self-Esteem in An Elderly Population. *Psychology and Aging* 2, 4: 349-356.

¹⁵ Kaplan, R. 1993. Urban Forestry and the Workplace. In: P.H. Gobster (ed.), *Managing Urban and High-Use Recreation Settings*. International Symposium on Society and Natural Resources. USDA Forest Service, St. Paul MN, pp. 41-45.

¹⁶ Wells, N.M. 2000. At Home with Nature: Effects of "Greenness" on Children's Cognitive Functioning. *Environment and Behavior* 32, 6: 775-795.

¹⁷ Health Council of the Netherlands. 2004. *Nature and Health: The Influence of Nature on Social, Psychological and Physical Well-Being*. Health Council of the Netherlands and RMNO, The Hague.

¹⁸ Burls, A. 2007. People and Green Spaces: Promoting Public Health and Mental Well-Being Through Ecotherapy. *Journal of Public Mental Health* 6, 3: 24-39.

¹⁹ Krause, N. and B.A. Shaw. 2000. Giving Social Support to Others, Socioeconomic Status, and Changes in Self-Esteem in Late Life. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences* 55, 6: S323.

²⁰ Pretty, J., R. Hine, and J. Peacock. 2006. Green Exercise: The Benefits of Activities in Green Places. *Biologist* 53, 3: 143-48.

²¹ John. S and James L. Knight Foundation and Gallup. Inc. 2011. *Soul of the Community Study*.

²² Lehigh Valley Planning Commission, 2014. *Return on Environment Study*.

thousands of dollars a year, have a healthier place to live and a better quality of life becoming better stewards of the environment.²³

A survey of single family home sales in Athens, Georgia, found that landscaping with trees was associated with an increase in a home's sale's price of 3.5 to 4.5 percent.²⁴ In addition, builders have estimated that homes on wooded lots sell, on average, for 7% more than equivalent homes on open lots.²⁵ The *Lehigh Valley Return on Environment Study* showed that homes located within 1/4 mile of protected open space were, on average, valued at \$16,500 more than those located further away.²⁶

It's quite simple, really. Living in a place with lots of greenery and aesthetics, helps keep us active and engaged with our community and helps maintain our quality of life, health, cost of living, sense of place and local economy.

The following indicators can be used to track greenery and quality of life.

- The percentage of canopy covering the site. 60% canopy cover is the goal.
- The vegetation layers present on the site are in place --canopy, understory, shrubs, grasses and wildflowers. All 5 layers being the goal.
- The percentage of the site cover by native species is over 60%.
- The number of different native plant species present on the property. Having more than 25 species is the goal.
- The beauty and color present in each season (spring, summer, fall and winter).
- Pollinator gardens in place.
- Beautiful plants that create a special "wow" factor.
- Turf grass only used to cover play areas and walking paths.
- Flowers with long bloom times and awesome blossoms.
- Vegetable and cutting gardens.
- Relaxation gardens.
- Water features.

²³ John Rogers. 2011. *Designing With Natives*.

²⁴ I.M Anderson, and H.K Gordell. 1988. Influence of trees on residential property values in Athens, Georgia. A survey based on actual sales prices. *Landscape and Urban Planning*. 15: 153-164.

²⁵ A.F Selia, and I. M. Anderson. 1984. Estimating the preconstruction cost in Metropolitan Atlanta. Georgia Forestry Research Paper, no. 48.

²⁶ Lehigh Valley Planning Commission, 2014. *Return on Environment Study*. Allentown, Pennsylvania.