Nature Experiences: Readings and References on Human Benefits

The evidence grows! Plants do much more than beautify our built environments. They contribute to our health, well-being and quality of life! While we may have intuitively known this for some time, recent scientific evidence has confirmed these ideas and expanded our understanding of nature's benefits. People and plants are entwined by threads that reach back to our earliest experiences, as individuals and as a species. Is the need for nature in cities an environmental issue or a public health agenda? These readings help us to recognize the extensive psycho-social benefits that we gain from the human experience of nature.

Readings Overview

Scientists from various fields have helped us to better understand the "human urge to green." Environmental psychology, landscape architecture, horticulture, geography, urban forestry, urban planning - social scientists from each of these disciplines are expanding our understanding of people/plant relationships. Here is a collection of books that present our current knowledge about the human dimensions of urban nature.

Lewis, C.A. 1996. *Green Nature/Human Nature:The Meaning of Plants in our Lives.* Chicago: University of Illinois Press.

Relf, Diane (editor). 1992. *The Role of Horticulture in Human Well-Being and Social Development.* Portland, OR: Timber Press.

Kaplan, S. & R. Kaplan. 1982. *Cognition and Environment: Functioning in an Uncertain World*. New York: Praeger Press.

Kellert, S. R. & E. O. Wilson (editors). 1993. *The Biophilia Hypothesis*. Washington, D. C.: Island Press.

Bradley, G.A. (editor). 1995. *Urban Forest Landscapes: Integrating Multidisciplinary Perspectives.* Seattle: University of Washington Press.

Dwyer, J.F., H.W. Schroeder, P. H. Gobster. 1994. The Deep Significance of Urban Trees and Forests. In R.H. Platt, R.A. Rowntree, P.C. Muick (editors), *The Ecological City: Preserving & Restoring Urban Biodiversity.* Amherst: University of Massachusetts Press.

Schroeder, H.W. 1989. Environment, Behavior, and Design Research on Urban Forests. In E. H. Zube & G.T. Moore (editors), *Advances in Environment, Behavior and Design - Vol. 2.* New York: Plenum Press.

Research - Human Benefits

Our understanding of human response to nature can be thought of in two ways. First, there are many human health and well-being benefits associated with nature contact. These benefits are the result of both active and passive experiences of nature. Gardening and horticulture activities provide exercise and satisfaction. In addition, observing scenes of nature, while outdoors or in buildings, provides a surprising array of benefits. These research reports provide scientific understandings of a wide range of benefits associated with people/plant contact.

Kaplan, R. 1992. Urban Forestry and the Workplace. In P. H. Gobster (editor), *Managing Urban and High-Use Recreation Settings.* USDA Forest Service, General Technical Report NC-163. Chicago, IL: North Central Forest Experiment Station.

Cimprich, B. 1993. Development of an Intervention to Restore Attention in Cancer Patients. *Cancer Nursing*, 16(2): 83-92

Ulrich, R. *et al*. 1991. Stress Recovery During Exposure to Natural and Urban Environments. *Journal of Environmental Psychology,* 11, 201-230.

Taylor, A. F., A. Wiley, F. E. Kuo & W. C. Sullivan. 1998. Growing Up in the Inner City: Green Spaces as Places to Grow. *Environment & Behavior*, 30(1).

Francis, M., P. Lindsey & J. S. Rice (editors). 1995. *The Healing Dimensions of People-Plant Relations: A Research Symposium.* Proceedings of a symposium held at University of CA, Davis.

Research - Cognitive Understanding

In addition to understanding the therapeutic aspects of people/plant dynamics we also have learned about patterns of human response to outdoor environments. People are not passive in outdoor settings; their activities and behavior are based on their understanding and processing of environmen-basedt information. Various methods have been used to evaluate how people perceive and understand a space or place. Cognitive mapping, wayfinding, and environmental behavior are some of the terms used to describe how people encounter, interpret and make sense of landscapes. These readings illustrate how people perceive, respond and act within outdoor settings.

Kaplan, R. & S. Kaplan. 1989. *The Experience of Nature: A Psychological Perspective*. Cambridge: Cambridge University Press.

Lynch, Kevin. 1960. *The Image of the City*. Cambridge, Mass: The M.I.T. Press. - Chapter III. The City Image and Its Elements

Nassauer, J. I. 1995. Messy Ecosystems, Orderly Frames. *Landscape Journal*, 14 (2), 161-170.

Ulrich, R. S. 1986. Human Responses to Vegetation and Landscapes. *Landscape and Urban Planning*, 13, 29-44.

Gimblett, H. R., R. M. Itami & J. E. Fitzgibbon. 1985. Mystery in an Information Processing Model of Landscape Preference. *Landscape Journal*, 4(2), 87-95.

Raffetto, J. 1992. Perceptions of Ecological Restorations in Urban Parks. IN P. H. Gobster (editor), *Managing Urban and High-Use Recreation Settings*. USDA Forest Service, General Technical Report NC-163. Chicago, IL: North Central Forest Experiment Station.

Neely, D. (editor). 1994. Social Aspects of Urban Forestry. Vol. 6 of series. Savoy, Ill: *Journal of Arboriculture*.

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