Cabin Fever Gardening Symposium March 2024

Garden/Gardener Connection: Balances Strength and Resilience

Cathi Lamoreux, MA, CCCSLP (retired), WSU Extension Master Gardener, Therapeutic Horticulture Specialist

HANDOUT

Definitions:

Biophilia: the biophilia hypothesis proposes that humans have an innate tendency to affiliate toward life and life-like processes as a consequence of evolution, where survival and reproduction were dependent on interactions with the natural environment.

Rewilding: the conservation of cores, corridors, and carnivores to restore sustainable biodiversity and ecosystem health. It aims to mitigate the species extinction crisis and restore healthy and self-regulating ecosystems with near pre-human levels of species diversity.

Researchers referenced in this presentation: Gregory Bratman <u>https://sefs.uw.edu/research/faculty-profile/gregory-bratman/</u>

David Strayer <u>https://psych.utah.edu/news/brain-on-nature.php</u> <u>https://www.ted.com/talks/david_strayer_restore_your_brain_with_nature</u>

Jason K Hawes https://seas.umich.edu/research/phd-profiles/jason-jake-hawes

Matthew White

https://cognitivescience.univie.ac.at/about/pis-scientific-project-staff/mat-white/

References:

Atchley, R, Strayer, D. L., & Atchley, P. (2012). Creativity in the wild: Improving creative reasoning through emersion in natural settings. *PLOS ONE, 7 (12), 1-3 (e51474)*.

Bratman, Gregory, UW College of the Environment <u>https://www.sciencedirect.com/science/article/abs/pii/S0169204615000286?via%3Dihub</u>

Bratman, Gregory, Stanford University

https://www.pnas.org/content/pnas/112/28/8567.full.pdf https://www.pnas.org/doi/pdf/10.1073/pnas.1510459112

Bratman, Gregory N., J. Paul Hamilton, Kevin S. Hahn, Gretchen C Daily, and James J. Gross. (2015). Nature experiences reduces rumination and subgenual prefrontal cortex activation. *PNAS*, *112* (*28*), *pgs*. *8567-8571*.

Hand, Kathryn L., Claire Freeman, Philip J. Seddon, Mariano R. Recio, Aviva Stein, and Yolanda van Heezik. The importance of urban gardens in supporting children's biophilia. PNAS January 10, 2017 114 (2) 274-279; first published December 27, 2016 https://doi.org/10.1073/pnas.1609588114

Hawes, J.K., Goldstein, B.P., Newell, J.P. *et al.* Comparing the carbon footprints of urban and conventional agriculture. *Nat Cities* 1, 164–173 (2024). https://doi.org/10.1038/s44284-023-00023-3

Hunter, M.R., Gillespie B.W., and Chen SY-P, (2019). Urban Nature Experiences Reduce Stress in the Context of Daily Life Based on Salivary Biomarkers. Front. Psychol. 10:722. Doi: 10.3389/fpsyg.2019.00722.

Jiang, X.; Larsen, L.; Sullivan, W. Connections Between Daily Greenness Exposure and Health Outcomes. *Int. J. Environ. Res. Public Health* **2020**, *17*, 3965.

Sharma, M.; Largo-Wight, E.; Kanekar, A.; Kusumoto, H.; Hooper, S.; Nahar, V.K. Using the Multi-Theory Model (MTM) of Health Behavior Change to Explain Intentional Outdoor Nature Contact Behavior among College Students. *Int. J. Environ. Res. Public Health* **2020**, *17*, 6104.

Yale Environment 360 is an online magazine offering opinion, analysis, reporting, and debate on global environmental issues. Multiple studies discussed in article titled, "Ecopsychology: How Immersion in Nature Benefits Your Health". A growing body of research points to the beneficial effects that exposure to the natural world has on health, reducing stress and promoting healing. Now, policymakers, employers, and healthcare providers are increasingly considering the human need for nature in how they plan and operate. Written by Jim Robbins, January 9, 2020.

The Trust for Public Lands, <u>www.tpl.org</u> Diane Regas, President & CEO

Additional References:

Green Cities: Good Health, University of Washington: www.greenhealth.washington.edu

Outside Our Doors: The Benefits of Cities Where People and Nature Thrive. The Nature Conservancy: <u>http://www.washingtonnature.org/cities/outsideourdoors/www.nature-within.info</u>

Park RX America

Additional Websites:

accesstonature.org

www.ahta.org

asla./org/healthbenefitsofnature

birdnote.org

childrenandnature.org

discovertheforest.org

healinglandscapes.org

healthdesign.org

homegrownnationalpark.org

infta.net

natureandforesttherapy.org

naturesacred.org