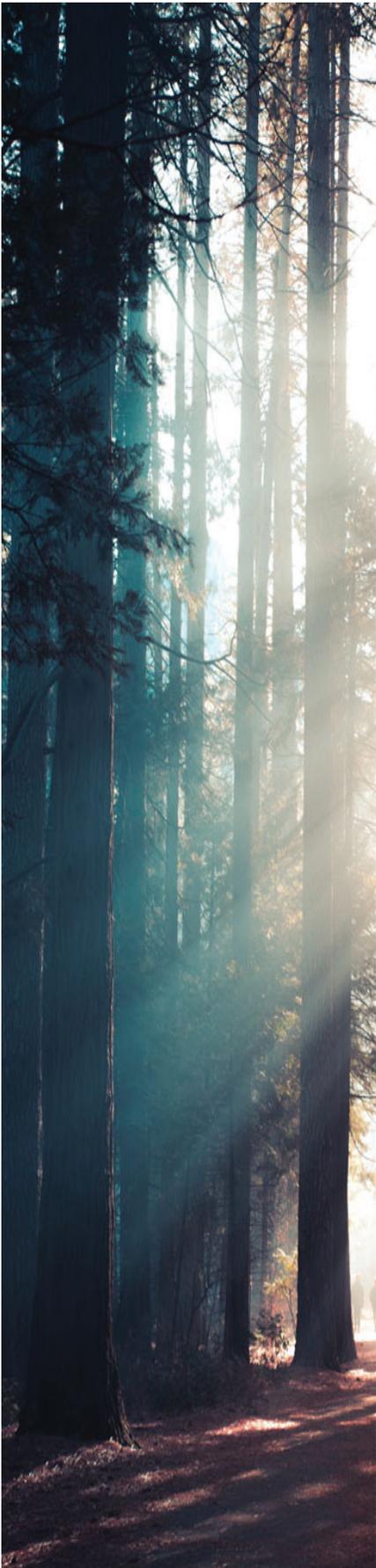


NATURALIST'S CORNER



THE SCIENCE OF A WALK IN THE WOODS

Members of The Naturalists' Club certainly enjoy being outdoors and learning about the natural world! It is an important part of who we are and what makes us feel good. I had always taken this for granted as a given until I read *The Nature Fix, Why Nature Makes us Happier, Healthier and More Creative*, by Florence Williams. She presents scientific findings that help to explain the specific impacts of nature on our physiology and psychology, revealing that time in nature is not a luxury, but a human need.

You know the benefits of a walk in the woods because you return feeling good. We use the word *recreation* because, yes, we are *re-created*, with a sense of calm. But did you know that a study comparing people taking a walk in the city with the same people walking the same distance in woods found the woods walkers — far more so than those walking in the city — to have reduced blood pressure, heart rate, and cortisol levels? As Naturalists' Club members, we'd of course prefer the woods walk . . . but it's surely nice to understand the details of how being in nature benefits our physiology.

Why, exactly, does time in nature have such substantial health benefits? The answer, it seems, lies in the history of our species. We humans have lived in nature for most of our history. Those early humans who were most attuned to the clues of nature were the ones who survived and passed on their traits. Edward O. Wilson has written about biophilia, which he defines as the love of other living things and nature. This inheritance from our ancestors would explain why a cottage on a sea coast or a home with a mountain vista is so prized by our fellow man and therefore assigned a higher real estate value. Such locations place us closer to the natural world, and our ancestors who preferred such places would have had the survival benefit of seeing approaching predators. How often do we in New England take a long hike to a place where the view is the destination?

Turns out, a good view is not just nice — it may be essential to our health. One study compared hospital beds with a window view to those with a hallway view. Surgery patients facing nature healed, on average, one day earlier and needed less pain medication than did those facing the interior of the hospital building. A similar pattern holds in residential settings: urban dwellers in neighborhoods with a higher density of trees had a lower incidence of heart and metabolic disease than did those with little access to parks and green space. Even the age-adjusted mortality rate is lower for city residents who live near urban parks with trees.

Views help even more than your health. Workers have been found to have increased productivity if their workspace offers a view of nature. Academic performance increases if there is a connection to nature, even just a window offering recurring glimpses of green space. Our creative brain needs that connection to work effectively. Subjects in rooms with potted plants have been found to be more generous to others. The author suggests we should line the halls of Congress with ficus trees!

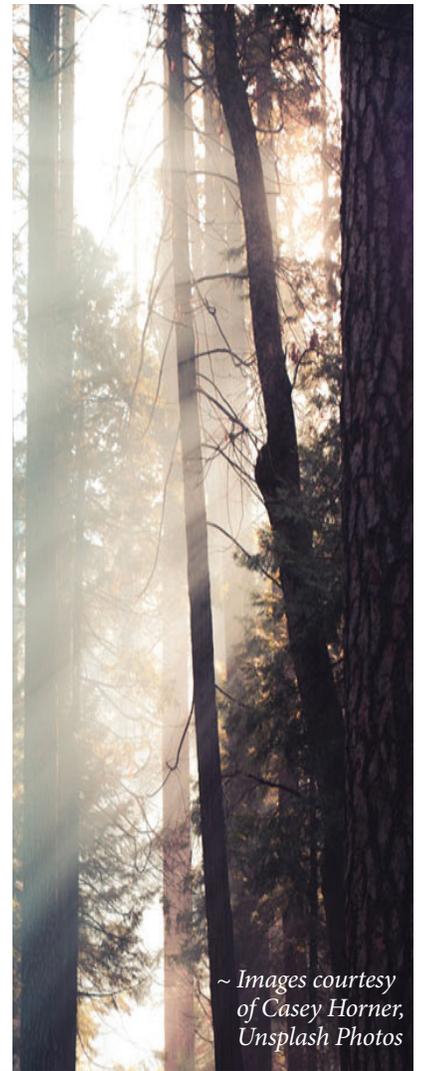
We experience the natural world not just through our eyes, but through all our senses. In Japan, where the population density is high and wilderness area is low, “forest bathing” is popular as a sort of spa treatment. People visit small areas of green space to walk and breathe in the scents of the forest. Trees emit a chemical that reduces their parasite load; that same chemical reduces stress in humans, and lowers blood pressure.

Have you ever inhaled that good fresh odor after a rain? You are smelling geosmin, which is produced by bacteria in the soil, those same *Streptomyces* that supply us with antibiotics. Geosmin, taken in through our nostrils, reduces stress, also leading to decreased blood pressure. Geosmin is also antiviral and limits the growth of cancer cells. In South Korea, where forested areas are limited, there is great emphasis on forest walks as opportunities for healing. So, next time you are on a Naturalists’ Club hike, stop to take a deep breath and know it is not your imagination — there are specific biological explanations for why being in nature feels so good!

So how essential is that walk in the woods? It has been shown that taking a walk every day is a leading preventative measure of cognitive decline in older people. Children have fewer problems with attention deficit disorder when they are immersed in a natural setting. In contrast to Japan and Korea, unfortunately, institutions in our fast-paced society here in the United States have limited outdoor time rather than embracing it. School recess time has been curtailed and children are spending more time with video games and TV than playing outside.

Next time you go on a walk in the woods with the Naturalists’ Club, be aware that the good feeling you get can be explained by specific biological processes . . . and that you’ll get to enjoy genuine, specific benefits for your physical and mental health.

~ Sonya Vickers



~ Images courtesy
of Casey Horner,
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