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LIFE | IDEAS | ESSAY

# To Fight the Winter Blues, Try a Dose of Nature

New studies suggest that even short daily amounts of time outdoors—such as a city stroll—improve our moods and our ability to think



A woman walks through Central Park during a snowstorm, New York City, Jan. 7. PHOTO: STEPHANIE KEITH/REUTERS

## By FLORENCE WILLIAMS

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**Wintertime is** rough on those whom the 19th-century hiker-philosopher John Muir called "tired, nerve-shaken, over-civilized people." But we have an obvious cure for our doldrums: go outside. Though we are months away from the flowers and leafy foliage of spring, a dose of nature can still calm the mind and solidify human bonds. The real question is why we don't partake more often of this easy balm.

To better understand how our everyday routines contribute to our happiness, the British environmental economist George MacKerron launched an iPhone app in 2010 called Mappiness. Within a year, the app was pinging some 20,000 volunteers a few times a day to find out what they were doing, where they were doing it and how they felt about it.

After crunching the data, Dr. MacKerron and Susana Mourato of the London School of Economics and Political Science published their findings in the journal Global Environmental Change in 2013. They found, unsurprisingly, that people are least happy at work or while sick in bed and most happy when they're with friends or lovers.

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But one of the biggest variables for their subjects (who tended to be young, employed and educated) was where they were. They were significantly happier outdoors, especially in natural settings, than they were indoors, even when the researchers tried to control for the effects of being at work.

But there was a catch: Most of the participants didn't behave as if they knew this, because they were rarely outside. They were indoors or in vehicles for 93% of their waking hours.

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The Mappiness study reveals our epidemic dislocation from the outdoors—an indictment not just of the structures and expectations of modern life but of our self-understanding. As the writer Annie Dillard

famously said, how we spend our days is how we spend our lives. Why don't we do more of what makes us happy? Part of the answer is that we're flat-out busy. But even when we have free time, we're not always smart about how we spend it.

In a 2011 study in Psychological Science, two psychology professors at Canadian universities, Trent University's Elizabeth Nisbet and Carleton University's John Zelenski, sent 150 Carleton students either outside to walk on a nearby path along a canal or underground to walk through tunnels connecting buildings on campus. Before they left, the researchers asked them to predict how happy they thought they would feel on their walks. Afterward, the students filled out questionnaires to gauge their well-being. They consistently overestimated how much they would enjoy the tunnels—and underestimated how good they would feel outside.

Social scientists call these bad predictions "forecasting errors." Unfortunately, they play a big role in the way people divvy up their time. As Drs. Nisbet and Zelenski conclude, "People may avoid nearby nature because a chronic disconnection from nature causes them to underestimate its hedonic benefits"—that is, how much it will contribute to their happiness. Dr. Nisbet sees a vicious cycle: Because we don't spend enough time outside to notice that it makes us feel good, we spend even less time outside, replacing it with shopping, social media and so on. We especially "devalue nearby nature," she says, such as small urban parks and tree-lined streets, because we tend to think they aren't impressive enough as destinations.

Scientists are quantifying the effects of even small doses of urban nature not only on our moods and well-being but also on our ability to think—to remember things, plan, create, daydream and focus.

Nature also affects our social skills. In a 2015 study published in the Journal of Personality and Social Psychology, researchers found that after gazing up at tall trees for just one minute, participants in Berkeley, Calif., behaved more

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'Having a little bit of awe every day in your life would make you happier, kinder and more compassionate.'

-Paul Piff, psychologist at the University of California, Irvine

helpfully to others than people who looked at an unremarkable building. The reason? Momentary awe, suggests the University of California, Irvine, psychologist Paul Piff, who co-authored the study. "I think we can say pretty certainly that having a little bit of awe every day in your life would make you happier, kinder and more compassionate," he says.

Even when we don't particularly like being out in nature, such as in icy winter winds, it benefits us, according to the University of Chicago professor Marc Berman and colleagues. For a 2008 study published in the journal Psychological Science, they had 38 research subjects take walks in an arboretum, some during blustery winter weather. The walkers didn't enjoy themselves, but they still performed better on tests measuring short-term memory and attention.

So if nature acts as a sort of combined antidepressant and smart pill, how do we know the right dose? Is there a daily minimum requirement?

The necessary dose varies from person to person, of course, but many experts agree that there seems to be a dose curve for the benefits of nature. In general, the more time you spend in nature, the better you will do on measures of vitality, wellness and restoration. But even micro-shots of nature—a short walk or a look out a window—can boost attention and mood.

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Timothy Beatley, who runs the Biophilic Cities Project at the University of Virginia, promotes what he calls the "nature pyramid"—a way of visualizing the recommended amounts of time in different natural environments. Like the famous food

pyramid, the nature pyramid can help us to apportion the amount of nature we need.

Dr. Beatley argues that while it might be nice to consume the rich goodies at the top (our rare, deep excursions to spectacular wild places), a nearby daily dose ultimately sustains us. That means finding nature where we already are.

To meet such needs, many cities are working to integrate natural elements into everyday life, from New York City's High Line to the bird-filled Cheonggyecheon recreational area in downtown Seoul. Singapore spends 200 million Singapore dollars a year "to develop scenery," according to Yeo Meng Tong, the city-state's director of parks development. Half of Singapore's 276 square miles lie under some sort of green cover, he adds, and that percentage has increased in recent years even as the population has grown. "We try to create more green in every

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inch of space we can find," he says.

Every little bit helps, on every corner, according to Rachel Kaplan, an emeritus psychologist at the University of Michigan. As she puts it, "Nature doesn't have to be pervasive. One tree is an awful lot better than no tree."

Though Dr. Beatley emphasizes the importance in our nature diet of everyday outdoor experiences, he urges people not to forsake the middle and the top of the nature pyramid. Regional and national parks, wild coasts and wilderness areas are the places where we can best reflect and recover from the stress of work and the news. As John Muir once said, "Come to the woods, for here is rest."

-Ms. Williams is the author of "The Nature Fix: Why Nature Makes Us Happier, Healthier, and More Creative," out Feb. 7 from Norton.

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