

Whitney

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It is not unusual in Japan to find people worshipping in the forest.”

Japanese design incorporates the idea of a thin line between indoors and outdoors – in the design of gardens and houses where translucent paper screens blur inside and outside.

Yet, modern Japanese culture – with 78 percent of Japanese living in densely populated cities – has never been more divorced from Nature, with 11 million people riding the subway every day in tsukin jigoku or “commuter hell,” pushing towards karoshi or “death from overwork.” To address the fact that 23 percent of companies reported that employees worked 80 hours overtime a month, the government passed a 2014 law compelling employees to take some days off every six months.

By 2050, 75 percent of the world’s projected 9 billion people will live in cities – looking at screens, and experiencing multiple symptoms of technostress – headaches, depression, mental fatigue, eye strain, insomnia, irritability, loss of temper. The World Health Organization cites stress as the health epidemic of the 21st century. How do we manage stress?

In 1982, Japan looked to its natural resources – the forests. Based on the premise that people visiting forests are more likely to protect them, Tomohide Akinyama, Director General of the Agency of Agriculture, Forestry and Fisheries of Japan, invented the term shinrin-yoku, and designated the Akasawa forest in the Nagano Prefecture the first shinrin-yoku forest.

In 2004, Dr. Li founded the Forest Therapy Study Group initiating serious scientific research into forest bathing. In 2005, Li accompanied twelve healthy middle-aged Tokyo businessmen on a three-day medically-monitored forest bathing expedition to Iiyama City. Li and his fellow researchers found that forest

bathing lowers blood pressure and the stress hormone cortisol; suppresses sympathetic “fight or flight” responses while enhancing the parasympathetic “rest and recovery” response.

In 2006, the Japanese government designated Iiyama the first certified forest-therapy location – now one of 62 certified forest-therapy bases in Japan, where between 2.5 million and 5 million people walk forest trails as a way to manage stress and promote health.

What exactly is the power of trees? Trees release phytoncides – to communicate to other trees, and protect against bacteria, insects and fungi. Phytoncides contain terpenes – scents like D-limonene (lemon); Alpha-pinene (piney); Beta-pinene (herbal); Camphene (turpentine) – that possess the medicinal qualities of essential oils. These scents increase cancer-killing cells, reduce stress hormones, help with sleep, mood, blood pressure and heart-rate.

In addition to the scents of the forest, there is medicine in the soil itself – specifically a common harmless bacteria – *Mycobacterium vaccae*. Dr. Mary O’Brien, an oncologist who injected lung cancer patients with the bacterium to boost immunity discovered accidentally that it boosted mood. Dr. Li: “The soil stimulates the immune system, and a boosted immune system makes us feel happy. Every time you dig in your garden or eat a vegetable plucked from the ground, you will be ingesting *M. vaccae* and giving yourself this boost.”

Research studies have since shown that forest walking clears the mind; helps us focus; boosts memory, mood, problem-solving, and creativity; makes us more compassionate, and stimulates involuntary attention or “soft fascination.” Dr. Li: “In nature, our minds are captured effortlessly by clouds and sunsets... the movement of leaves in the breeze... waterfalls and streams... the sound of birds or the whisper of the wind. These soothing sights and sounds...allow our minds

to wander and to reflect, and so restore our capacity to think more clearly.”

The Joy of Forest Bathing explores forest bathing from an American perspective. Choukas-Bradley toured Japan for three weeks, traveling from Tokyo to Kyoto, into the Japanese Alps, and to the subtropical island of Yakushima, experiencing Shinrin-Yoku guided walks throughout the country while participating in health data collection. She also visited Dr. Miyzaki (whose book will be released this week) and his research team at Chiba University where she participated in brain wave research. Her book explores ways to reconnect with wild places, combining four-season forest bathing with mindfulness, exercise and creative activities.

The special relationship of Japanese culture to trees manifests itself in two centuries-old tree pruning arts – Bonsai (miniature trees) and Shin-Boku (Specimen Tree). For a unique experience of Shin-Boku, I urge you to visit the Shin-Boku Nursery in Wentworth, N.H. – the largest Japanese tree garden nursery in North America, and a life-long dream of founder Palmer Koelb. As we strolled his “dry” Japanese gardens, Koelb explained: “Most forests tower over us – Shin-Boku was an attempt to prune trees to human proportion.” Koelb specializes in landscape design with carefully pruned trees selected to thrive in the New England climate, focusing on the zen of the Japanese garden and the forest.

Forests contain 80 percent of the world’s land biodiversity, home to 60,000 different types of trees. Yet each year, 32 million acres of forest are lost – roughly an area the size of England!

On this summer solstice, we need to remind ourselves that the spring solstice March 21 is International Forest Day. We need to keep it every day. Carpe Diem – take a walk with the trees!

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