Oliver Sacks was a neurologist and author of many books. This is an excerpt from the forthcoming collection of his essays, *Everything in Its Place*. He died in 2015. It appeared in the New York Times in February of 2019. He had great insight into the power of plants to heal and calm our psyches.

As a writer, I find gardens essential to the creative process; as a physician, I take my patients to gardens whenever possible. All of us have had the experience of wandering through a lush garden or a timeless desert, walking by a river or an ocean, or climbing a mountain and finding ourselves simultaneously calmed and reinvigorated, engaged in mind, refreshed in body and spirit. The importance of these physiological states on individual and community health is fundamental and wide-ranging. In 40 years of medical practice, I have found only two types of non-pharmaceutical “therapy” to be vitally important for patients with chronic neurological diseases: music and gardens.

The wonder of gardens was introduced to me very early, before the war, when my mother or Auntie Len would take me to the great botanical garden at Kew. We had common ferns in our garden, but not the gold and silver ferns, the water ferns, the filmy ferns, the tree ferns I first saw at Kew. It was at Kew that I saw the gigantic leaf of the great Amazon water lily, Victoria regia, and like many children of my era, I was sat upon one of these giant lily pads as a baby.
As a student at Oxford, I discovered with delight a very different garden — the Oxford Botanic Garden, one of the first walled gardens established in Europe. It pleased me to think that Boyle, Hooke, Willis and other Oxford figures might have walked and meditated there in the 17th century.

I try to visit botanical gardens wherever I travel, seeing them as reflections of their times and cultures, no less than living museums or libraries of plants. I felt this strongly in the beautiful 17th-century Hortus Botanicus in Amsterdam, coeval with its neighbor, the great Portuguese Synagogue, and liked to imagine how Spinoza might have enjoyed the former after he had been excommunicated by the latter — was his vision of “Deus sive Natura” in part inspired by the Hortus?

The botanical garden in Padua is even older, going right back to the 1540s, and medieval in its design. Here, Europeans got their first look at plants from the Americas and the Orient, plant forms stranger than anything they had ever seen or dreamed of. It was here, too, that Goethe, looking at a palm, conceived his theory of the metamorphoses of plants.
Padua’s botanical garden, in Italy, was founded in 1545 by Francesco Bonafede, professor of botany in the medical school of Padua’s university. Credit David Lees/Corbis, via VCG, via Getty Images

When I travel with fellow swimmers and divers to the Cayman Islands, to Curacao, to Cuba, wherever — I seek out botanical gardens, counterpoints to the exquisite underwater gardens I see when I snorkel or scuba above them.

I have lived in New York City for 50 years, and living here is sometimes made bearable for me only by its gardens. This has been true for my patients, too. When I worked at Beth Abraham, a hospital just across the road from the New York Botanical Garden, I found that there was nothing long-shut-in patients loved more than a visit to the garden — they spoke of the hospital and the garden as two different worlds.
I cannot say exactly how nature exerts its calming and organizing effects on our brains, but I have seen in my patients the restorative and healing powers of nature and gardens, even for those who are deeply disabled neurologically. In many cases, gardens and nature are more powerful than any medication.

My friend Lowell has moderately severe Tourette syndrome. In his usual busy, city environment, he has hundreds of tics and verbal ejaculations each day — grunting, jumping, touching things compulsively. I was therefore amazed one day when we were hiking in a desert to realize that his tics had completely disappeared. The remoteness and uncrowdedness of the scene, combined with some ineffable calming effect of nature, served to defuse his ticcing, to "normalize" his neurological state, at least for a time.

An elderly lady with Parkinson’s disease, whom I met in Guam, often found herself frozen, unable to initiate movement — a common problem for those with parkinsonism. But once we led her out into the garden, where plants and a rock garden provided a varied landscape, she was galvanized by this, and could rapidly, unaided, climb up the rocks and down again.
I have a number of patients with very advanced dementia or Alzheimer’s disease, who may have very little sense of orientation to their surroundings. They have forgotten, or cannot access, how to tie their shoes or handle cooking implements. But put them in front of a flower bed with some seedlings, and they will know exactly what to do — I have never seen such a patient plant something upside down.

My patients often live in nursing homes or chronic-care institutions, so the physical environment of these settings is crucial in promoting their well-being. Some of these institutions have actively used the design and management of their open spaces to promote better health for their patients. For example, Beth Abraham hospital, in the Bronx, is where I saw the severely parkinsonian postencephalitic patients I wrote about in “Awakenings.” In the 1960s, it was a pavilion surrounded by large gardens. As it expanded to a 500-bed institution, it swallowed most of the gardens, but it did retain a central patio full of potted plants that remains very crucial for the patients. There are also raised beds so that blind patients can touch and smell, and wheelchair patients can have direct contact with the plants.

Clearly, nature calls to something very deep in us. Biophilia, the love of nature and living things, is an essential part of the human condition. Hortophilia, the desire to interact with, manage and tend nature, is also deeply instilled in us. The role that nature plays in health and healing becomes even more critical for people working long days in windowless offices, for those living in city neighborhoods without access to green spaces, for children in city schools or for those in institutional settings such as nursing homes. The effects of nature’s qualities on health are not only spiritual and emotional but physical and neurological. I have no doubt that they reflect deep changes in the brain’s physiology, and perhaps even its structure.

Take advantage of our warmer and dryer weather to visit these great local places. Have even more fun by taking a friend with you!

Cleveland Botanical Garden, University Circle - The Botanical Garden features outdoor gardens and its Glasshouse with sun-baked, spiny desert of Madagascar and misty rainforest of Costa Rica ecosystems. Click links to virtual tours. The Holden Arboretum and Cleveland Botanical Garden together make up Holden Forests & Gardens.

Holden Arboretum, 9500 Sperry Rd., Kirtland, OH - Established in 1931 on a 100-acre parcel donated by Roberta Holden Bole, The Holden Arboretum has grown to 3,500 acres, making it one of the country’s largest arboreta. The Holden Arboretum and Cleveland Botanical Garden together make up Holden Forests & Gardens.

Rockefeller Park Greenhouse - The Cleveland City Greenhouse has displays in the greenhouse and outside. The Willott Iris Garden is here. Dorothy Willott is an Emeritus with Honors MGV. It is open to the public, with free admission and parking.

Stan Hywet Hall & Gardens - The Seiberling estate near Akron, Ohio, designed between 1911 and 1915 by renowned American landscape architect Warren Manning. Stan Hywet's grounds represent one of the finest remaining examples of Mr. Manning's private work in the United States. Cooperation between Manning and Tudor manor architect Charles Schneider resulted in a remarkable blending of nature and architecture. See the gardens and conservatory.