



chicago botanic garden

# Garden for Life

## What is horticultural therapy?

According to the American Horticultural Therapy Association, horticultural therapy is the engagement in horticultural activities facilitated by a trained therapist to achieve specific and documented treatment goals. Horticultural therapy is an active process that occurs in the context of an established treatment plan where the process itself is considered the therapeutic activity, rather than the end product, to optimize the physical, emotional, and social health of its participants. Horticultural therapy programs can be found in a wide variety of healthcare, rehabilitative, and residential settings.

Throughout history, the benefits of engaging with plants and nature have been recognized and prescribed. Today, research increasingly supports the theory that interaction with plants and nature is important, if not critical, to human health and well-being. Horticultural therapy (HT) takes advantage of this special connection between people and plants. HT recognizes the restorative ability of gardening activities and how they integrate physical exercise with knowledge and creativity, and use plants to help people grow healthier physically, mentally, and emotionally.

Horticultural therapy maintains or improves physical health by providing unlimited opportunities for focused rehabilitation and movement. Stamina, balance, and coordination can be improved while building physical strength. Additionally, multiple studies have demonstrated that physiological indicators such as respiration, pulse, blood pressure, and muscle tension respond positively to engagement with plants.

Horticultural therapy elicits positive psychological and emotional responses by relieving stress, providing a nonthreatening atmosphere, alleviating depression, and helping people connect with nature. Research studies confirm these and many other psychosocial benefits when people interact with plants and nature.



**Horticulture therapists are trained to help people grow healthier in body, mind, and spirit through engagement with gardening and nature.**



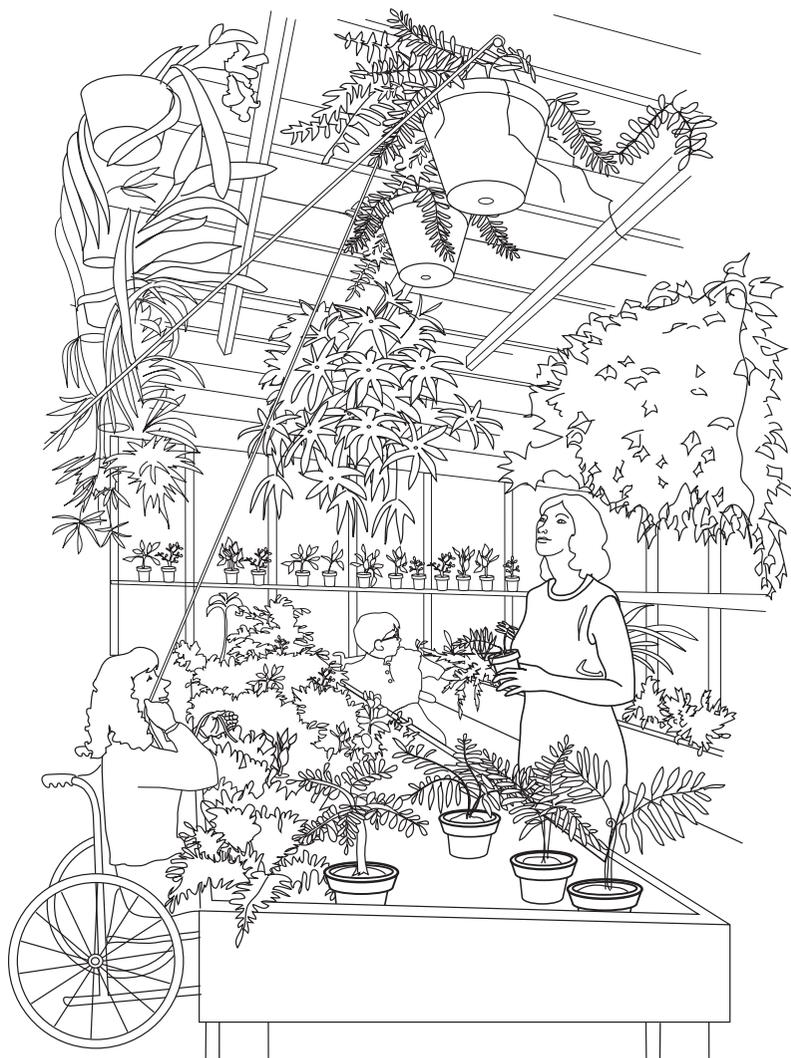
## History of horticultural therapy as a profession

Horticultural therapy has its roots in "moral treatment" first introduced in Europe in the 1700s, which sought to alleviate the symptoms of mental illness by engaging patients in intellectually stimulating and creative activities. Following the humanistic thinking of the day emphasizing that environment could affect health, moral treatment advocates built aesthetically pleasing housing for the patients. Close attention to beauty in architecture and grounds was considered an important part of the treatment. Flower and vegetable gardening were among the daily offerings for patients, along with art classes, science lectures, and music recitals. The success of such treatment in Europe resulted in the building of similar hospitals in the United States.

The therapeutic use of horticulture continued in individual settings and gained wide popularity during World War II. Wounded soldiers, psychologically traumatized by the war experience and demoralized by serious physical disabilities, responded positively to plant and garden activities introduced in Veterans Administration (VA) hospitals by occupational therapists and garden club member volunteers. The use of horticultural therapy continues in many VA hospitals across the United States.

By the early 1950s, horticulturists and therapists in a variety of settings became interested in communicating with each other about their programs and ideas. Rhea McCandlis, horticulturist at the Menninger Clinic in Topeka, Kansas, and Alice Burlingame, occupational therapist at the Clinton Valley Psychiatric Hospital in Pontiac, Michigan, were two leaders in modern-day horticultural therapy. In 1973 there were enough interested health and human service professionals and university educators to support the founding of a national association dedicated to the advancement of horticultural therapy. Today, the organization is known as the American Horticultural Therapy Association.

The Chicago Botanic Garden was an early leader among public institutions supporting the demonstration and practice of horticultural therapy. It continues to be known and respected worldwide for its therapeutic horticulture programs.



**Plants and nature-based programs are used for therapy, leisure, and training at agencies serving people with disabilities and older adults.**



## Horticultural therapy at the Chicago Botanic Garden

Since 1978, the Chicago Botanic Garden has advanced a program of therapeutic horticulture, a process that uses plants and plant-related activities through which participants strive to improve their well-being either actively or passively. Staff horticultural therapists provide consultation and contracted horticultural therapy services to health and human health service agencies throughout the greater Chicago area.

At the Chicago Botanic Garden you can visit the Buehler Enabling Garden, a leading example of universal garden design, tools, equipment, and techniques that engage people of all abilities and ages with direct experiences with nature. Within the 11,000 square feet of the Enabling Garden, a variety of therapeutic gardening programs are offered for groups, families, and individuals. Exhibits, tours, and therapeutic services are conducted by professional staff and specially trained volunteers who assist with garden programs and maintenance.



In the Buehler Enabling Garden, the use of containers and raised beds demonstrates how easy it is to raise garden soil to a manageable height.



A shared interest in gardening can help to keep one socially connected, physically fit, and cognitively sharp.

## Theories supporting horticultural therapy

While most people agree that time spent outdoors or in an environment rich with living plants is pleasant, there is no single theory explaining why this is so. Three different theories form the foundation for HT:

- **The Biophilic Theory developed by E.O. Wilson:** People have an affinity for nature, having lived within the natural world since the beginning of human existence. This affinity is a part of us, even though we have distanced ourselves from nature in modern times.
- **Attention Restoration Theory developed by Kaplan and Kaplan:** Our ability to concentrate is taxed by the effort of focusing on important stimuli and ignoring distractions. Nature provides "soft fascination" and the ability to restore our depleted selves because it gives us the feeling of being away from our demanding world and of being immersed in an environment that is complex yet restful. Natural environments are pleasing to most people and compatible with their need for restoration.
- **Stress Reduction Theory developed by Ulrich:** Being in contact with nature does not require us to process great quantities of information, therefore our nervous system steps down from a high-alert level when we are in nature. It is not just our attention that is taxed in urban environments but also the demands on our nervous system. More demands lead to higher stress.



### Some interesting research findings

- There is a positive link between living with nature nearby and concentration, impulse inhibition, and delay of gratification in girls living in urban environments.
- Simple and brief interactions with nature can produce marked increases in cognitive control.
- Children function better after activities in green settings, and the "greener" a child's play area, the less severe his or her attention deficit symptoms tend to be.
- "Forest bathing" (time spent walking and at leisure in a forest) boosts immune function.

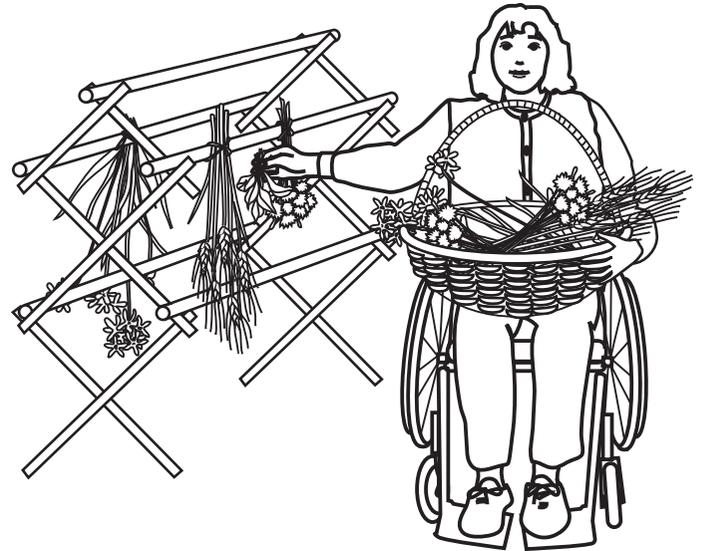
### What does the therapist do?

Horticultural therapists have an understanding of human disabling conditions as well as knowledge of plants and how they can provide therapeutic experiences for people.

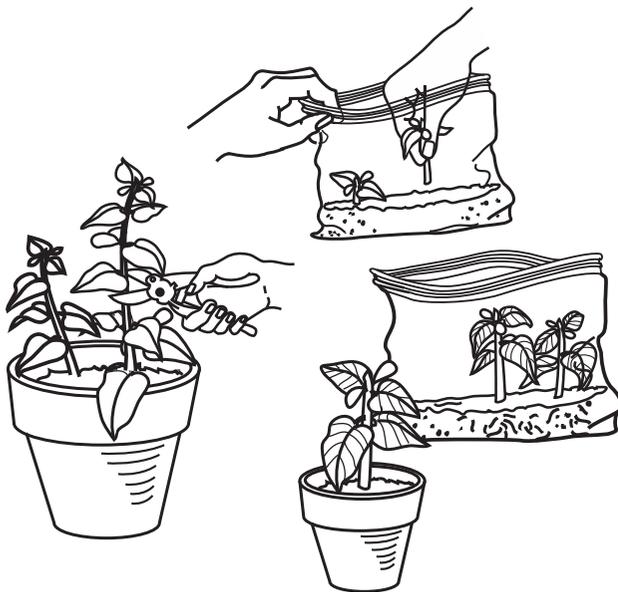
HTs may work independently or as members of a clinical team that includes doctors, psychologists, occupational and physical therapists, and other healthcare professionals. Therapists work with people of all ages and abilities in a variety of locations including hospitals, rehabilitation facilities, senior centers, day programs, vocational workshops, schools, and social programs.

### How to become a horticultural therapist

A horticultural therapist is trained in both horticulture and therapy. The American Horticultural Therapy Association manages professional registration, which allows the designation "HTR." Individuals without this credential may still work in the field, provided they are confident of their knowledge base in relationship to the people they serve.



Drying flowers can provide material for pleasing arrangements during the cold winter months.



Horticultural therapists are skilled at creating environments and experiences that engage people in elements of the natural world.



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## Associations and Organizations

American Horticultural Therapy Association  
8635 W. Sahara Ave. #711

Las Vegas, NV 89117

(702) 886-1546

ahta.org

*Professional registration program, newsletter, annual conference, publication list, regional chapters*

Canadian Horticultural Therapy Association  
chta.ca

Michigan Horticultural Therapy Association  
michiganhta.org

Therapeutic Landscape Network  
healinglandscapes.org

Thrive  
The Geoffrey Udall Centre  
thrive.org.uk

## Periodicals

*Grow Point. Thrive.* The Geoffrey Udall Centre, Beech Hill, Reading, Berkshire, RG7 2AT. thrive.org.uk

*Journal of Therapeutic Horticulture.* American Horticultural Therapy Association. 8635 W. Sahara Ave. #711, Las Vegas, NV 89117. ahta.org

*Ecopsychology.* Editor-in-Chief, Peter H. Kahn, Jr., Ph.D.

## Chicago Botanic Garden Resources

For more information on related topics, see other titles in the Garden for Life series of publications produced by the Chicago Botanic Garden.

Horticultural Therapy Services at the Chicago Botanic Garden are generously supported by an endowment from the Buehler Family Foundation. Additional support is provided by endowments established by the estate of Florence Rantz, the Kenilworth Garden Club, and the Julien H. Collins and Bertha M. Collins Fund.