Horticultural Therapy
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Introduction and History
Horticulture is the art and science of growing plants. Horticultural therapy is the practice of engaging people in plant or gardening activities to improve their bodies, minds, and spirits. Research confirms that healthful benefits accrue when people connect with nature and plants by viewing and/or interacting with them.

Horticulture has been used as therapy for centuries. In 1798, Dr. Benjamin Rush, considered the “father of American psychiatry,” documented that gardening had positive effects on his mentally ill patients. Following World War II, gardening was used as a form of occupational therapy for returning veterans, and garden club volunteers across the United States participated. From a research standpoint, the concept of using nature to improve human health and well-being began to gain credibility in the 1970s. At the University of Michigan, psychology professors Rachel and Stephen Kaplan (1989) found that natural environments had relaxing and restorative benefits for people. Roger Ulrich’s (1984) research demonstrated that patients with views of trees had shorter hospital stays, needed less medication, and had more positive comments written in their records by healthcare staff. Continuing research is pinpointing the beneficial effects of nature and plants on various special populations in diverse settings. The Journal of Therapeutic Horticulture, a peer-reviewed publication of the American Horticultural Therapy Association, has published research and practice papers since 1986. Research taking place at the Therapeutic Horticulture Program at the University of Florida's Wilmot Gardens aims to further our understanding of the positive impacts of people-plant interactions.

The American Horticultural Therapy Association (AHTA) (formerly known as the National Council for Therapy and Rehabilitation through Horticulture) serves to promote and advance horticultural therapy as a therapeutic intervention and rehabilitative approach. AHTA grants the professional designation of Horticultural Therapist Registered (HTR),...
which is recognized both nationally and internationally. It requires a college degree with courses in horticulture, human services, and horticultural therapy, in addition to a 480-hour internship supervised by a registered horticultural therapist. Degrees and certificate programs in horticultural therapy are offered at several colleges and universities and information on them can be found on the AHTA website.

Today, horticultural therapy is a worldwide practice and is recognized as an effective treatment for clients of all ages and abilities. It is used in many diverse settings including hospitals and rehabilitation centers, youth outreach and recovery programs, nursing homes and other senior care facilities, prisons, mental health facilities, schools, and botanical gardens, among many others. Four distinct program models, as defined by AHTA, are used to provide people-plant programming in this vast array of settings.

**Horticultural therapy**—The engagement of a client in horticultural activities facilitated by a trained therapist to achieve specific and documented treatment goals. AHTA believes that 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.

**Therapeutic horticulture**—A process through which participants strive to improve their well-being through active or passive involvement with plants and plant-related activities. In a therapeutic horticulture program, goals are not clinically defined and documented, but the leader has training in the use of horticulture as a medium for human well-being.

**Social or community horticulture**—A leisure or recreational activity related to plants and gardening. A typical community garden or garden club is a good example of a social horticulture setting. No treatment goals are defined, no therapist is present, and the focus is on social interaction and horticulture activities.

**Vocational horticulture**—A vocational horticulture program, which is often a major component of a horticultural therapy program, focuses on providing training that enables individuals to work in the horticulture industry professionally, either independently or semi-independently. These individuals may or may not have some type of disability. Vocational horticultural programs may be found in schools, residential or rehabilitation facilities, and prisons, among other places.

**Figure 2.**
Credits: sorcerer44/iStock/Thinkstock

**Benefits of Horticultural Therapy**
Quantitative and qualitative research has proven the benefits of horticultural therapy in many life areas.

**Cognitive benefits:**
- encourage observation
- increase knowledge
- attain new skills
- increase vocabulary
- stimulate memory
- increase attention span and focus

**Figure 3.**
Thinning lettuce seedlings.
Credits: Elizabeth Diehl, UF/IFAS
Social benefits:

- increase communication skills
- increase interaction within and outside of the group

Emotional benefits:

- increase feelings of self-worth, confidence, and self-esteem
- promote interest and enthusiasm
- promote/satisfy creative drive
- relieve aggression or tension

Physical benefits:

- provide exercise
- increase ADL (activities of daily living) skills
- develop/increase fine and gross motor skills
- increase eye-hand coordination

Physiological benefits:

- lower blood pressure
- lower heart rate
- decrease cortisol level
- relieve stress

While people can benefit from simply viewing and growing plants on their own, a horticultural therapist is trained in creating interventions that focus on an individual's needs and desires such as gaining new (or lost) skills and increasing independence and quality of life. To be effective, a focused horticultural therapy program is based upon knowledge of special populations and diagnoses, therapeutic methods and frameworks, treatment plans, and activity analysis, sensorimotor, cognitive and psychosocial functioning, and, of course, horticulture and its use in a therapeutic environment.

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References and Resources

The American Horticultural Therapy Association (AHTA).
http://www.ahta.org/


