



## Horticultural Therapy<sup>1</sup>

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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 plants by viewing, planting, growing, and/or caring for them.

Horticulture has been used as therapy for centuries. In 1798, Dr. Benjamin Rush, a signer of the Declaration of Independence, documented that gardening improved the conditions of mentally ill patients. Gardening as a means of physical and occupational rehabilitation was used in U.S. Veterans Administration hospitals for returning World War II veterans. The concept of using nature to improve human health and well-being gained credibility through research in the '70s and '80s. Rachel and Stephen Kaplan found that certain types of landscapes made people feel more comfortable in particular environments (Kaplan and Kaplan 1989). Roger Ulrich's (1984) research demonstrated that patients with views of trees had shorter hospital stays and needed less medication. Subsequent research

published in the *Journal of Therapeutic Horticulture* continues to demonstrate the link between well-being and nature.

The American Horticultural Therapy Association (AHTA) was formed in 1973 to promote and develop the horticultural therapy profession. AHTA provides training and professional registration within the United States. The professional designation of Horticultural Therapist Registered (HTR), which is recognized nationally and internationally, requires a college degree with courses in horticulture, human services, and therapy, in addition to a 480-hour internship supervised by a credentialed horticultural therapist. Degrees in horticultural therapy are offered at Colorado State University, Oregon State University, Rutgers University School of Environmental and Biological Sciences, and Texas A & M University.

Today, horticultural therapy is a worldwide practice now recognized as an effective treatment for clients of all ages and abilities. It is used in rehabilitation and vocational centers, youth outreach programs, nursing homes and other types of senior facilities, hospitals (especially Veterans

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Administration facilities), hospices, homeless shelters, substance abuse centers, prisons, schools, mental health centers, and botanical gardens. Four distinct program types, as defined by AHTA, are used to provide horticultural therapy for special populations 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.

## Benefits of Horticultural Therapy

Empirical research has proven the benefits of horticultural therapy in many areas:

### Physical

- Improves strength, stamina and mobility
- Increases energy and endurance
- Exercises hand-eye coordination

### Social

- Encourages social interaction
- Improves coping skills and motivation
- Helps build good work habits and attitudes

### Psychological

- Reduces anxiety, stress, and tension
- Increases confidence and hopefulness
- Rewards nurturing behavior
- Stimulates senses through observing, touching, tasting, and smelling plants

### Cognitive

- Improves concentration and ability to focus
- Teaches new skills and provides job training
- Improves problem-solving and planning skills
- Exercises the memory and promotes positive thinking

While people can benefit from simply viewing and growing plants, the benefits of people-plant interactions can be focused and enhanced with guidance from a horticultural therapist. Adaptive tools and therapeutic gardens can provide an even greater degree of accessibility and therapeutic benefit.

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