



## Gardening With Seniors

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**G**ardening is a gratifying activity for seniors. A 1994 survey by the National Endowment for the Arts found that 63% of participants age 65–74 and 53% of those ages 75–96 work with indoor plants or garden for pleasure. Another survey (1999) by the Roper Organization indicates that 33% of people age 60 and older are likely to say gardening is a real hobby or personal interest. This enthusiasm for gardening is an opportunity for families, senior housing developers, and health care administrators to provide the senior population with exercise, spiritual benefits, sensory and visual stimulation, and social activities.

There is a demand for gardens and horticultural therapy programs. Seniors, people aged 65 and older; make up 12.4% of the U.S. population according the 2000 U.S. census. Disability rates among seniors are higher for women (43%) than men (40%). The fastest growing segment of seniors is people age 85 and older (12.2%). The 2000 Census was the first time in census history that the senior population was not the fastest growing segment of the U.S. population as people born during the Depression and World War II began to turn 65. However, seniors are expected to become the fastest growing age group in 2011, as baby boomers (people born 1946–1964) start to reach age 65.

Horticultural Therapy (HT) is the use of plants and growing environments as tools to heal and rehabilitate people with physical, psychological, and developmental disabilities. It is also used to help people recover from injuries or illnesses. It can help meet the needs of seniors who may not be physically able to manage a garden. HT programs in hospitals,

nursing care facilities, and hospices improve the quality of life for residents.

HT is practiced world-wide in health care, rehabilitation, and vocational facilities, as well as in community programs such as senior centers and community gardens.

To meet the need for professional Horticultural Therapists, several universities and institutions offer certificate, associate, and bachelor degree programs in HT. The American Horticultural Therapy Association has a professional registration program offering the following credentials:

HTA, Horticultural Therapist Assistant, HTR, Horticultural Therapist Registered and HTM, Horticultural Therapist Master. The credentials require course work and field experience.

### Benefits of Gardening

Gardening can provide seniors moderate exercise and fresh air, plus the oxygen given off by plants can be stimulating. Planting seeds or transplanting seedlings strengthens fine motor skills. Activities such as digging and raking involve gross motor skills. Gardening provides opportunities to grow fresh fruits, vegetables, and flowers, which can be money-sav-



ing, and often empowering to individuals. The Roper Organization survey shows that 54% of people who garden for the aesthetic pleasure grow flowers and edible plants. Fresh fruits and vegetables are of nutritional value to older adults.

Gardening in advanced ages can also have important spiritual benefits. Drawing parallels between the developmental stages of a plant, from seedling to maturity to senescence, and those of a person can be comforting and therapeutic for seniors and geriatrics. Working with plants brings people closer to the mysteries of growth and development. Such contact with nature can have subtle, yet powerful values.

Sensory stimulation is another important part of the horticulture experience for seniors. As aging often involves loss or reduction in sensory capabilities, it becomes important to stimulate the senses that remain functioning. The myriad of shapes, colors, textures, and fragrances of plants allow for maximum use of visual, tactile, gustatory, and olfactory senses. A garden setting exercises the eyes with spatial relationships. Simple gardening tasks can improve eye-hand coordination. Large flowers in bold red, orange, yellow, and white colors are a pleasure for the visually-impaired.

Working with plants also provides opportunities for mental stimulation for seniors. Plant names may be new and exciting or reminders of past knowledge. Plants and flowers can be links to the past, providing pleasant memories of life experiences. Problem solving skills can be the focus as seniors decide how to plant a dish garden or battle an insect pest. Horticultural activities help build confidence and self-esteem as individuals are encouraged to make decisions, by researching answers in books or via the Internet. Plant related activities offer an important chance to express creativity as seen in the creation of dish gardens, bonsai plantings, nature craft, and flower arranging. Horticulture affords opportunity to channel artistic drives.

Social skills can also be developed and strengthened as seniors partake in gardening activities. In community gardens, residents come together to share land to grow vegetables or flowers. In time seeds, tools, as well as fruits of their labor are shared. Conversations

lead to friendships as social barriers drop. New and greater respect for neighbors of diverse cultures, backgrounds, and lifestyles emerge from the community garden experience.

For seniors who wish to share their knowledge and passion for gardening there are volunteer programs that need their talents. One example is the Master Gardener program, affiliated with each state's land grant university Cooperative Extension. Master Gardeners are trained by University specialists, county agricultural agents, and professional staff on a variety of horticultural topics. In return for the training, volunteers offer services to their communities in areas such as helplines, speakers' bureaus, and beautification projects. To meet the needs of disabled youth, adults, and seniors, some Master Gardener programs offer HT programs at nursing care facilities, senior centers, and nursing or adult day care establishments.

## **Planning Gardens for Seniors**

Keep the present and future physical capabilities of seniors in mind when designing gardens. Ideally gardens should be located close to the home so that rest or other needs are within a short distance. Access to garden tools and water should be easy.

For people who currently, or may in the future, use canes, walkers, or wheel chairs, plan to have wide level paths leading to gardens. The minimum recommended width for walkers or wheelchairs is three feet. A five-foot width allows for making 180 degree turns. When selecting materials to line the path, consider maintenance, traction, costs, and ease of using walkers and wheelchairs. Avoid using woodchips, crushed rocks, cobblestone, and river rock, as those materials make it difficult to maneuver. Suitable materials include fine angular-shaped gravel (¼ inch to dust size), sandstone pavers, or textured/brushed concrete.

Gardens that are planted at ground level are easier to manage if plants are in short rows or small blocks. Raised beds minimize the strain of bending to tend plants in a garden. The height of raised beds can be determined by the needs of the gardener. Raised beds can be six to twelve inches off the ground to

waist or wheelchair height. The maximum recommended length of the bed is 10 feet for ease of maintenance. The width of the bed should be within an arms reach from each accessible side of the bed, no more than twice an arm's reach.

Rot-resistant woods such as cedar, cypress, and redwood are ideal materials to build raised beds. Avoid using wood that has been treated with chemicals, such as railroad ties and pressure treated woods, as some of the chemicals used are toxic to humans and plants.

## Resources for Senior Gardening

Gardening and Horticultural Therapy promote the physical and social well being of seniors. For more information on the benefits of horticulture for seniors and gardening contact:

- Rutgers Master Gardener Program  
Garden and Landscape Publications  
Rutgers Cooperative Research and Extension  
Cook College  
Rutgers, the State University of New Jersey  
88 Lipman Drive  
New Brunswick, NJ 08901-8525  
(732)932-9306  
[www.rcr.rutgers.edu](http://www.rcr.rutgers.edu)
- Cook College Plant Biology & Pathology  
Horticultural Therapy Studies  
Rutgers-Cook College  
Department of Plant Biology  
Foran Hall, Dudley Road  
New Brunswick, NJ 08901  
(732) 932-9711 ext. 240  
[www.aesop.rutgers.edu/~horttherapy/](http://www.aesop.rutgers.edu/~horttherapy/)

- The American Horticultural Therapy Association  
3570 E. 12<sup>th</sup> Ave. , Suite 206  
Denver, CO 80206  
1-800-634-1603  
[www.ahta.org](http://www.ahta.org)
- The National Gardening Association  
1100 Dorset Street  
South Burlington, VT 05403  
(802)863-5251  
[www.garden.org](http://www.garden.org)

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