NATURE HEALS



University of Minnesota EXTENSION

MASTER GARDENER VOLUNTEER PROGRAM

Accessible gardening

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Do you recall times in the garden when, after weeding a row of flowers, you had more energy? Or after a walk outdoors, you felt more peaceful? If so, you experienced the healing benefits of horticulture, and you are one of many who retreat to the garden to relax, renew energy, create a sense of place, and restore self-esteem.

A garden benefits you on many levels. One seemingly magical effect of gardening is stress relief. Emotional benefits of gardening may derive in part from the sense of the natural rhythm of life that plants and gardens impart. It can divert thoughts about yourself and your situation. In the garden, you can create and control your environment. This control is empowering. Gardening stimulates all of the senses, giving great pleasure and satisfaction. You can design a garden to challenge your strength and balance, or promote eye-hand coordination, range-of-motion, and endurance to just about any degree you want. Cognitively, gardening benefits the mind. Designing a garden and learning about plants and specific gardening techniques can be done in a number of simple or complex ways. And with books or classes, you can learn new things year-round.

Besides these benefits, gardening brings you together with other people. Human bonds created between gardeners have the potential to transcend social barriers. Gardens invite socialization. Bringing plants and people together promotes cooperation. The garden neither judges nor discriminates. It's a safe environment where people of all ages, backgrounds, and abilities can come together, connected by the simple fact that we all rely on the earth to survive.



What is an accessible garden?

According to the Merriam Webster dictionary "accessible" means the "capacity to enter or approach, to get at or gain access to something." When thoughtfully planned, an accessible garden eliminates physical and attitudinal barriers to gardening, creating an area where people of all ages and abilities can garden. All you need are a few simple adaptations to the area, methods, and equipment.

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Accessible garden containers

Raised beds are large bottomless boxes that contain soil and permit drainage below. Since they can be expensive to build, raised beds should be used in areas of the garden that require the most frequent attention. For instance, it makes more sense to build a raised bed for vegetables requiring intensive weeding than for a low-maintenance border of shrubs. Build raised beds as large as possible, making sure that you can reach all areas of the bed. The increase in size adds minimal cost to the bed, while adding valuable garden area. Bed width should be a maximum of 5 feet if it is accessible from all sides, or 2.5 feet if used from only one side. If using extended tools, you can add inches to the bed. Seating ledges should be from 8 to 18 inches wide. Use the thinnest construction materials possible without compromising stability, to increase the area available for the gardener. Height of the sides can vary from 18 inches for a child, to 24 inches for someone seated in a chair next to the bed, to 30 inches or higher for the standing gardener who has difficulty bending downward.

Boxes and pots of various sizes provide successful ways to grow vegetables and flowers. Choose a pot that will allow for healthy root development. For instance, bush-type peas, beans, cucumbers, kale, broccoli, and lettuce do well in a box that is 1-by-4 feet and 8 inches deep. For some other plants, such as beets, carrots, onions, lettuce, leeks, turnips, kohlrabi, corn, and zucchini, a box that is 2-by-3 feet and 8 inches deep is more suitable. For herbs and flowering plants and vines, find out whether the plant is deep- or shallow-rooted to determine the proper container size. The more shallow the container, the faster it will dry out.

Hanging baskets can create planting space where none exists. Or, combined with a container garden, they can give you a double-decker growing area. To make watering and viewing easy, buy a ratchet pulley. Or make your own pulley, using steel hooks or rings clamped or mounted to railings or walls. A long metal pole with a curving top hook can be anchored in the ground for a freestanding hanging plant mount. Baskets can be hung high, or if you have limited mobility, hung low enough to see and enjoy their beauty.

Table planters are shallow soil-filled trays supported on legs. About 27 inches of knee clearance is needed to allow chairs to fit underneath. The soil container should be at least 8 to 10 inches deep, making the entire structure about 35 to 37 inches high. The top of the planter should be no higher than your rib cage. Width of the box is the same as that of the raised bed, already described.

Deep boxes, barrels, and tubs can be used to create miniature raised beds for flowers, vegetables, and herbs. Perennials, trees, and shrubs are not recommended for these types of containers because plants cannot survive in them when the temperature is freezing or below freezing. Use these containers for your annual plants only.

Plants to use in accessible garden containers

There are many new varieties of plants that are appropriate for the accessible garden container. Look for plants listed as compacta (e.g. "Pixie" tomatoes). Compact plants will typically be more suitable for container growing smaller and easier to reach if you use a wheelchair. Also look for tall plants or vines that reach a certain height, thus making them good choices for growing on poles, stakes, and trellises. Choose flowers not only according to their light requirements and shape, but also by their colors, textures, and fragrances.

Considerations for creating an accessible garden

Water

Make sure that water is available, close to the garden site, and in a paved area so the ground does not get muddy. Place the spigot at 24 to 36 inches above ground and use hand levers (not round spigot handles) and snap connectors. Soaker hoses and mulch will also reduce watering needs in the garden.

Plant choice

To aid in the harvesting of plants, use contrasting or bright colors. Some plants naturally contrast their ripening fruit against their foliage, such as purple-podded bush beans or golden zucchini. Select plants that are high producers per inch of growing space, with interesting textures and fragrances. Use plants that people want to grow or eat.

Emergencies

Make provisions to summon assistance for potential medical or police emergencies. A wheelchair-accessible parking space near the garden is mandatory for public gardens, both for persons with disabilities and for medical/police access. It is not mandated at private homes.

Paved surfaces

Garden path surfaces must be firm, smooth, level, and provide traction. The grade of the path should be between 5 and 8 percent. Provide direct routes throughout the garden. Use edge guides if you have ambulating and/or visual disabilities. Audible water features and wind chimes also help orient you through the garden. One-way traffic needs a five-foot minimum width to accommodate the turning radius of a wheelchair. Two-way traffic requires a seven-foot minimum width.

Paving material	Comments
Asphalt	Absorbs and radiates heat. Hot in summer, but snow melts off sooner.
Wood decking	Slippery when wet.
Brick	Expensive and must be installed properly.
Decomposed granite	Readily available. Good for people in wheelchairs but not for those on crutches.
Screenings	Large and small limestone pieces (similar to decomposed granite).
Concrete	Expensive; glare can be a problem for elders and people with visual impairments.
Wood chips and turf	Use only for persons without ambulatory equipment.

People/plant facts

By Dianne Relf Virginia Tech University

Research has shown:

- A well-maintained landscape adds 7-14% to the value of a residential property.
- The single largest contributing factor to the selection of a retirement community is the quality of the grounds.
- A view of trees may reduce the recovery time in the hospital after surgery by almost a full day.
- Interior plant landscapes can provide a 7 to 1 return on the annual dollar investment at tourist sites.
- The quality of plant material in a community contributes to the feeling of satisfaction in living in that community.
- Over 88% of Americans feel that trees and flowers in a city are important beyond their beauty and pleasing appearance.
- 40% of Americans find that being around plants makes them feel calm and more relaxed a particularly valuable attribute in cities today.
- Landscape design and proper maintenance play a significant role in perceived and real security related to crime.

Used with permission For more information on horticultural therapy, see Virginia Tech University on the World Wide Web

Resources

Accessible Gardening for People with Physical Disabilities Janeen Adil, 1994 Woodbine House 6510 Bells Mill Road Bethesda, MD 20817

The Enabling Garden Gene Rothert, 1994 Taylor Publishing Company 1550 W. Mockingbird Lane Dallas, TX 75235

The Able Gardener Kathleen Yeomans, 1992 Storey Comm., Inc. Schoolhouse Road Pownal, VT 05261 Horticulture as Therapy Mitchell L. Hewson, 1994 MLH Publishing Co. 150 Delhi St. Ontario N1E 6K9

Able to Garden editor Peter Please 1990, Batsford Ltd. London, England WIHOAH

Growing with Gardening Bibby Moore, 1989 University of N. Carolina Press Chapel Hill, NC 27515-2288 Nature as a Guide Linda Lloyd Nebbe, 1991, Educational Media Corporation, Minneapolis, MN 55421

The American Horticultural Therapy Association 362A Christopher Avenue Gaithersburg, MD 20879-3660, 1-800-634-1603

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