Gardening is a healthy and simple way to enjoy safe and comfortable physical and mental activity. One can engage in gardening and structure it to leisure-time physical activity or focus on equally important fine/gross motor skills, flexibility, balance, and eye/hand coordination. The benefits of gardening are well-documented; formal programs in horticultural therapy use plants and plant-related activities to promote health and wellness for an individual or group. Horticultural therapy has been used to improve mobility, muscle coordination and strength, balance, endurance, socialization, and memory skills. Gardening can become part of a healthy and active lifestyle for people with disability with some simple adaptations to the garden, gardener, and plants.

ADAPTING THE GARDEN

There are many ways to adapt the garden for access starting with appropriate grades and paving, careful selection and placement of planters, and vertical gardening techniques such as hanging baskets and larger raised beds. These are all used to position soil and plants safely and comfortably within reach. A barrier-free or enabling garden can be as simple as an easily accessible window box hung from a balcony railing at waist height or an entire home landscape designed to be accessible and maintained by a person who uses a wheelchair.

GETTING AROUND IN THE GARDEN

Paved areas should be firm, level, drain well, offer good traction, and require little maintenance. All patios, decks, connecting paths, and walkways should meet these criteria.

For wheelchair or scooter users, a minimum of 40 inches wide is necessary. By adding intermingled wider places, one can provide for a typical 5-foot turning radius.

Once the proper platform for the accessible garden is established, gardening spaces can then be added using containers, vertical gardening techniques, and larger raised beds.

Types of paving:

- Compacted crushed stone or gravel when properly installed is firm, level, well-drained, and is among the less expensive options. Stone mixes should contain a blend of sizes ranging from 5/8-inch (angular, not smooth and round) with everything smaller down to coarse sand left in to fill gaps between larger pieces as it is compacted. A mix called ‘screenings’ is a good, inexpensive choice where available.
- The dark color of asphalt reduces glare, but also absorbs heat in full sun which may make the garden unusable at certain times of the day.
- Plain concrete is durable, but not very attractive and produces uncomfortable glare in sunlight, particularly for older gardeners.
- Wood is an attractive option for above-ground decking ramps and even walkways. However, planks are slick when wet, require regular protection from the elements, and are more expensive.
- Brick and other types of paving stones are available in a near-infinite variety of materials, shapes, and colors and offer a beautiful, durable, and low-maintenance choice that compliments many homes and garden styles.
Containers:

- The easiest way to start an accessible or enabling garden is by using containers or planters to raise the soil level within easy reach.
- Larger sizes are also heavier and stable enough for the gardener to safely lean on for support without tipping.

Raised beds:

- Raised beds which have the soil level at 24”- 36” from the ground are ideal for gardeners who work from a seated position.
- For gardeners who wish to work from their wheelchair with their knees under the raised planter, the height of the planter at soil level will need to be about 34”. This allows up to 12” soil depth and leaves 24” beneath the bed for knee space.

Vertical gardening:

- Wall gardens create additional growing space without cluttering paved areas needed for freedom of movement. For vertical gardening consider unused walls, fences, and overhangs.

**ADAPTING THE GARDENER**

Once the physical barriers are eliminated, the second step is to adapt the gardener with specialized tools and techniques. There are many specialized gardening tools, equipment, and techniques available to gardeners to help reduce effort, maximize abilities, and encourage independence while working in the garden. The goal is to protect muscles and joints from fatigue and injury while finding the best match for the garden tasks being done. Examples of adapted equipment are modified handles, clippers with a side strap, long-handled tools, and lightweight portable seats & tools.

**ADAPTING THE PLANTS**

Once the garden is set up for access, the gardener can focus attention on making good plant selections. Bright, bold, and contrasting colors are best in gardens used by those with a visual impairment. In large planters and raised beds, use shorter varieties (18 to 30 inches maximum depending on a sitting or standing gardener) that will not grow out of reach. Taller varieties of tomatoes, for example, should be grown in ground-level beds on stakes or cages that will ultimately present their harvest within reach. Plants should also be included that utilize the sense of touch with fuzzy leaves or interesting bark, stems, and flowers.

**ACCESSIBLE GARDENING RESOURCE LINKS:**

**NCHPAD Home Enabling Garden**
- [http://www.nchpad.org/265/1689/Home~Enabling~Garden~~Part~II](http://www.nchpad.org/265/1689/Home~Enabling~Garden~~Part~II)

**NCHPAD Accessible Garden Virtual Tour**
- [http://greenthumbs.cedwvu.org/](http://greenthumbs.cedwvu.org/)
- [http://greenthumbs.cedwvu.org/factsheets/ToolsandResources.pdf](http://greenthumbs.cedwvu.org/factsheets/ToolsandResources.pdf)

**Accessible gardening for therapeutic horticulture**

**The Universal-Accessible Garden**
- [http://extension.psu.edu/plants/master-gardener/counties/montgomery/the-learning-gardens/the-universal-accessible-garden](http://extension.psu.edu/plants/master-gardener/counties/montgomery/the-learning-gardens/the-universal-accessible-garden)

**Carry on Gardening**