

Gardening Basics

Accessible Gardens

Adaptive Gardening Techniques

Gardening is a popular outdoor activity. When asked, most gardeners will say it is good for the mind, body, and spirit. Many people think that when they grow older or have mental or physical limitations, they can no longer enjoy gardening activities. Not so! It just takes a little more planning and a few changes to the techniques and tools used.

The most popular approach is a methodology known as “adaptive gardening”. Once you understand a person’s limitations, then these techniques help you re-think how a person gardens and then develop strategies to modify procedures and devices to help ensure their safety. The two main areas for adaptation are garden design: (including location, beds, paths, plants, and containers) and tools.

Adapting garden design

First do some assessments. How much time does the person have to spend gardening? Be aware that due to age and physical limitations, it may take longer to gather tools, water, etc. Can the person get down on the ground and up again without assistance? Do they have enough arm strength to push up, grab hold, or pull themselves up? Can they drag hoses or lift watering cans? Do they need help walking or use a wheelchair or have problems with vision or memory?

Once any limitations are identified, a garden design plan can be put into place to address them. If a person can get up from the ground, then ground-level gardening will be possible, but if not, then raised beds, hanging baskets or container gardening may be the solution. The same would be true for those who have little arm strength. If they will have trouble watering, then consider strategies to reduce that, such as selecting plants that need less water. For those who use a cane or wheelchair, make sure pathways are wide enough, level and barrier-free and allow easy access to the garden area. Raising beds or containers to wheelchair level is the best approach for those seated. Select bright and contrasting colors for plants for those with visual impairment.



Raised Bed by PermaCultured Flickr 2.0 Generic CC BU 2.0

When selecting containers or creating raised beds, your goal is to raise the soil level within easy reach. A height of 24 to 36 inches from the ground is best for seated gardeners. Add organic material to the soil to make it easier to dig. Larger and heavier-sized containers provide stability and support without tipping. Beds should be no more than 3 feet across so plants may be reached while kneeling or 2 feet for seated gardeners. Place hanging baskets at the proper level, depending on whether they will be accessed from a standing or seated position. Vertical gardening is another option by using a trellis or boxes on walls or fences. An A-frame trellis could even be built to allow a wheelchair to freely pass through.

Locate the garden in an area that is easily accessible. If the gardener tires easily, place garden chairs or benches in strategic places. Spread projects out over time. Soaker hoses or automated sprinkler systems help with watering chores and use mulch to control weeds and minimize watering. Install pathways that are firm, level, well-drained, and have good traction. Easy path maintenance is essential. A minimum of 40 inches wide is required for wheelchairs or scooters.



Dan Keck, Horticultural Therapy Garden, Flickr
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A wider space is needed for turning around. Use straight paths and rails for those with visual problems.

For plant selection, use shorter plants (18 – 30 inches) in raised beds and containers so they will be in reach. Plants like tomatoes should be in ground-level beds with cages for easy harvesting. For the visually challenged, besides bright, bold, and fragrant, choose plants with interesting tactile features such as fuzzy leaves, or interesting bark and stems. Install wind chimes or fragrant plants to help the gardener find specific parts of the garden and arrange the plants in groups of 3 to 5 in straight rows for easier location. Planting perennials rather than annuals will reduce the work required for older or physically limited gardeners. To help trigger memories for those with memory impairment, plant favorite herbs, vegetables or fragrant flowers.

Adaptive Tools

Tools are available specifically for physical limitations and make life easier. Some have trigger grip handles and thumb rests for ease of use. Lightweight tools made of plastic, carbon fiber, or aluminum will be the lightest but buying quality always pays off.

Tools should be easy to grip and not require great strength. Long handles are generally preferable to short, thick ones, but shorter handled tools provide more leverage for seated gardeners. Thicker handles help those with arthritic hands. Add foam around the handles to improve grip. A foam kneeling pad will make gardening more comfortable. Try a rolling cart with a padded seat for ease. Transport tools in a garden cart or a wheeled garbage pail. For the memory impaired, paint tools with bright colors to minimize loss, label them with their use, and store them in the same place. Skip sharp tools.

Preparing the body to garden

For older adults and to save wear and tear on the body: before gardening, stretch your back by bending at the waist and for your arms, reach over your head to the extent that is comfortable. When actively working the soil, keep elbows close to the body and be sure to avoid long periods bent over. Avoid reaching and twisting - it is better to move closer to the work area.

For those with back and hip problems: keep your back straight when digging, use long-handled tools, and garden in raised beds or containers. For leg and knee problems, garden from a chair and use a cart to move the tools and materials. For those with heart and lung or stamina issues, warm up with lighter tasks first, work at trunk level rather than reaching or bending, avoid lifting or holding things for long periods, use power equipment instead of manual, and minimize the distance between house, garden, and storage. A pulley system to raise and lower hanging plants is helpful.

For those suffering from dementia: use raised beds for accessibility, select non-toxic plants, create a garden in a circle or figure 8 so there are no confusing dead-ends, and keep the activity light-hearted.

Garden smarter, not harder. Gardening gives your mind a rest from worrying, but pace yourself and delegate difficult tasks. Ask for help when needed. Be organized and vary tasks. Take time to enjoy yourself and “be a kid”, no matter what your age!

Resources

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