

Enabling Gardens: Raised Bed Farming

Raised bed farming is a method that allows individuals living with disabilities to farm safely and ergonomically. This practice involves growing plants in a box above ground. Raised beds are built from materials that are resistant to rotting such as concrete blocks, bricks, and wood lumber. With raised beds, gardeners can grow in smaller spaces while receiving larger amounts of plant growth. There are many advantages to gardens in raised beds which include:



A longer growing season because soil can heat up faster in late winter and spring.

PC: deep-roots-project.org

- Less weeding and maintenance by topping the bed with mulch or compost.
- The height and frame of raised bed prevents pests like rabbits or groundhogs.
- Beds retain water efficiently with organic or compost soil.
- The packed soil in the bed allows for better drainage.



PC: https://ucanr.edu/

A raised bed enables individuals to garden while seated, taking strain off the back and allowing for plenty of room for a wheelchair to move freely around and/or under each bed. It is important to think about what is most comfortable and safe for the gardener when creating a raised bed. Every garden is designed differently, but it is important to position the raised bed with an easy access pathway. The height and positioning can help to reduce overreaching, preventing repetitive movements that may lead to musculoskeletal aches and pains. Raised bed farming can also reduce kneeling and bending which will help reduce discomfort to joint pain.

Recommendations for Raised Bed Farming

Gardening can be very therapeutic, relieving physical and mental stress, for people of all abilities. An accessible garden can be designed to provide an enjoyable experience for people of disabilities by following these do's and don'ts:

- Install even surfaces for wheelchairs such as concrete, decomposed granite, or compact level dirt. Brick walks are discouraged because they may heave.
- If a grassy area is desired, openwork paving stones, which have holes for the grass to be seeded through, are available.
- A traditional lawn is uneven and not appropriate for person in a wheelchair, impaired walking, or limited mobility.
- All gates or doors must be wide enough (at least 36 inches) for a wheelchair to pass.
- Gates and doors should slide rather than swing and should be light enough to move easily.
- Ramps, along with gates, doorways, walkways, and space between raised beds, should be a minimum of 3 feet wide for single-person and 6 feet for two persons.
- The location of the raised bed should be positioned in a sunny area with some shade and near access to water facilities.

Different Styles of Raised Beds

The shell curve raised bed design shown in the image to the right will make gardening from a wheelchair easy and safe. The underside of the plant bed is molded and curves to comfortably fit an individual sitting in a wheelchair. This allows the individual to tuck their legs under the bed and enabling them to work on the bed without overreaching. Working with a straight sided raised bed can be difficult for a wheelchair user as you need to lean forward and twist slightly. The curve will allow an individual to face forward and reach all parts of the bed.



PC: greencirclegarden.com



A U-shaped bed gives you maximum growing space with allaround access. If the gardener is mobile but unable to kneel or lean easily while standing, it is best to construct a bench seating around the planting bed. Moreover, the American Horticultural Therapy Association found that this functional design of an enclosed barrier is preferred by gardeners with disabilities such as dementia as it makes them feel protected from the outside world.

PC: motherearthnews.com/

A raised bed with tall legs can be reached by wheelchair users and individuals unable to kneel. According to the Americans with Disabilities Act, the raised bed should be 48" by 32" and 24" to 30" high from the ground to the bottom of the bed. These heights will allow wheelchair accessibility for both children and adults.



PC: accessiblegardens.com/

Accessible Garden Tools

Ergonomic garden tools have a design that can reduce back, wrist, and hand stress while gardening. These tools reduce awkward postures which allow individuals living with disabilities to enjoy gardening safely. Ergonomic tools are usually lightweight and have common features such as adjustable extensions and effortless grip handles. The tools shown below are a few of many available products to assist individuals in various gardening tasks.

- <u>Easi-Grip Cultivator</u>: The upright ergonomic handle positions the wrist in a neutral, stress free position. The soft feel handle is non-slip and provides a secure grip even in wet conditions.
- <u>Radius Garden Weeder:</u> The Radius weeder has a lightweight design that is beneficial to individuals that have limited to hand strength, arthritis, or carpal tunnel. The grip provides extra support to reduce hand and wrist stress while gardening.
- <u>Bloem Easy Poor Watering Can:</u> The dual-handle design provides better maneuverability and control. This handle eases stress on your wrists while carrying and watering.
- <u>Kapler Garden Work Seat</u>: The height of seat can be adjusted reducing the need to crouch down or bend over, relieving pressure on the lower back and legs. The shape of seat has an ergonomic design which can fit comfortably to your body and rotate 360 degrees.







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Ability Tools

Ability Tools corrects Californians with disabilities to assistive technology devices, tools and services to make life easier.

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