RAISED BED/ CONTAINER GARDENING





Read more about Raised Beds: Benefits and Considerations



Providing Accessibility for Gardeners of all abilities

Gardening has long been identified as being beneficial for human health and well-being. A meta-analysis of completed research on the effects of gardening on health showed that the evidence strongly supported that gardening could improve physical, psychological and social health. This, in turn, may alleviate and prevent various health issues facing today's society. (Soga, 2016) Another meta-analysis of 77 similar research studies concluded that "the benefits of gardens and gardening could be used as a social prescription globally, for people with long-term conditions." (Howarth, 2020)

How does gardening promote health?

There are several ways gardening promotes health, including:

- Enabling gardeners to directly experience nature.
- Encouraging physical exercise, which is strongly recommended for all adults.
- Improving social interaction, especially in community gardens and when sharing gardening information and produce with others.
- Encouraging a better diet with more fresh fruits and vegetables.

Physically healthy people may participate in gardening without much hesitation, but what of those who have physical disabilities and limitations? The CDC reports that 61 million US adults live with a disability that limits their ability to be active. That is 26% or 1 in 4 adults, which increases with age to 2 in 5 adults over the age of 65.

By 2030, the population of people 65 years and over is expected to double, from 35 million in 2000 to 73 million. (Federal Interagency Forum on Aging-Related Statistics, 2020) Social Prescription of Gardening for All – Accessible Gardens

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Source:



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University of Illinois Extension provides equal opportunities in programs and employment.

So how many of these folks with a disability could take advantage of the social prescription for gardening? All of them!

Accessible Gardening has become more and more popular over the years. Gardens may be adapted in many ways, depending on the needs of the gardener. There are many articles describing various adaptations, and more and more community gardens being built or revised to be accessible to all. A good example is the Chicago Botanic Garden's Enabling Garden, which opened in 1999 after 3 years of planning. It demonstrates the use of wide, level paved pathways, and of containers, raised beds and vertical gardens to raise planting areas within easy reach and a collection of tools that enable people with disabilities and others who have difficulty using conventional tools to enjoy gardening.

Raised Garden Beds

Raised garden beds are a must for accessible gardening. It brings the garden up to a comfortable height for the gardener. Some are built to allow for seating while working the garden, others include space for a wheelchair to slide under. There are many building plans available to meet the individual needs of the gardener, and there are pre-made boxes available for purchase. A raised bed is basically a box that sits on the ground that is filled with soil. It is often made of wood, although a variety of material can be used, such as cement blocks, bricks, landscape blocks, stones, galvanized steel, plastic. Almost anything that doesn't leach potentially harmful chemicals into the soil can be used. The height depends on what's comfortable to the gardener, and will they stand or sit? The size depends on how the gardener will access it: no more than 2 feet across when only using one side and no more than 4 feet across when accessing from both sides.

Raised garden beds are also an attractive addition to the garden. They can be different sizes to add interest and can be arranged in a pattern for a more formal look to the garden. They can be painted or made of different materials for visual interest. When painting, especially for vegetable gardens, use a non-toxic water-based paint or 100% natural mineral pigment paints. Be sure to have a place to sit and enjoy the view.



Watch our IL Extension's program to learn how to: Grow Vegetables in Raised Beds or Containers - 2016 Four Seasons Gardening Webinar <u>https://www.youtube.com/watch?v=3KAwWB9DvT8</u>

Pros and Cons of Raised Garden Beds

A raised garden bed is a (mostly) permanent addition to the garden, so it's important to think about the pros and cons before investing in adding this feature.

Pros:

- Raised beds can make gardening easier for people with disabilities, as well as being more comfortable for those without disabilities.
- When the ground is mostly heavy clay soil or is in a low-lying area with poor drainage, raised beds allow for gardens with improved drainage.
- In areas of poor or rocky soil, the raised bed improves soil quality by being filled with good soil and compost, resulting in better yields.
- It's easier to "eyeball" and remove weeds or garden pests with the added height.
- Raised beds tend to warm up earlier in the spring, which allows for earlier planting.
- No worry about foot traffic compacting the soil, making it easier to prepare the soil from year to year.

Cons:

- Costs there is an initial investment to buy, build and fill with soil and compost.
- Needs more frequent watering, as dries out more quickly. Be sure to locate near a water source. May want to add a drip irrigation system.
- Full sun may be harmful because raised beds dry out quickly.
- Permanent location once set up.
- Soil and plants, especially when wet are very heavy. If using a deck or rooftop location, make sure the weight is well supported.
- Deeper beds will need wall supports.
- Raised beds made of pine lumber may have to be replaced every 4-5 years. Cedar or redwood will last 10-20 years.



References

Accessible gardening : NCHPAD - building inclusive communities. National Center on Health, Physical Activity and Disability (NCHPAD). (n.d.). Retrieved March 7, 2022, from https://www.nchpad.org/1496/6450/Accessible~Gardening

Centers for Disease Control and Prevention. (2020, September 16). Disability impacts all of us infographic. Centers for Disease Control and Prevention. Retrieved March 7, 2022, from https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html Environmental Protection Agency. (2011). Elder-Accessible Gardening. EPA. Retrieved March 7, 2022, from https://www.epa.gov/guidance

Federal Interagency Forum on Aging-Related Statistics. (2020). 2020 older Americans. Older Americans 2020: Key Indicators of Well-Being. Retrieved March 7, 2022, from https://stageagingstats.acl.gov/docs/LatestReport/OA20_508_10142020.pdf

Houle, K. (2013). Gardeners Corner Spring 2018: Growing Vegetables in Raised Beds. University of Illinois Extension. Retrieved March 7, 2022, from https://extension.illinois.edu/newsletters/gardeners-corner/gardeners-corner-winter-2021-22

Howarth, M., Brettle, A., Hardman, M., & Maden, M. (2020). What is the evidence for the impact of gardens and gardening on health and well-being: A scoping review and evidence-based logic model to guide healthcare strategy decision making on the use of gardening approaches as a social prescription. BMJ Open, 10(7). https://doi.org/10.1136/bmjopen-2020-036923

Lerner, R. (2017, November 6). Container and raised bed gardening. Indiana Yard and Garden - Purdue Consumer Horticulture. Retrieved March 7, 2022, from https://www.purdue.edu/hla/sites/yardandgarden/extpub/ho-200-w/

Pankau, R. (2020, April 13). Analyzing soils for New Vegetable Gardens. University of Illinois Extension. Retrieved March 7, 2022, from https://extension.illinois.edu/blogs/garden-scoop/2020-04-13-analyzing-soils-new-vegetable-gardens

Raised Beds - Thrive. Thrive, the Society for Horticultural Therapy. (2008). Retrieved March 7, 2022, from https://www.thrive.org.uk/files/images/Shop/Raised-beds.pdf

Raised beds. Raised Beds | Center for Excellence in Disabilities. (2011). Retrieved March 7, 2022, from https://greenthumbs.cedwvu.org/raised-beds/

Raised beds: Benefits and considerations. University of Illinois Extension. (2019, March 15). Retrieved March 7, 2022, from https://extension.illinois.edu/blogs/flowers-fruits-and-frass/2019-03-15-raised-beds-benefits-and-considerations

Soga, M., Gaston, K. J., & Yamaura, Y. (2017). Gardening is beneficial for health: A meta-analysis. Preventive Medicine Reports, 5, 92–99. https://doi.org/10.1016/j.pmedr.2016.11.007 — Written By Matt Jones and last updated by Brandon Hopper, & Agent, W. B. M. J. E. (2021, April 12).

Accessible gardening: Raised beds, containers, and garden tables. NC State Extension News. Retrieved March 7, 2022, from https://extensiongardener.ces.ncsu.edu/2020/08/accessible-gardening-raised-beds-containers-and-garden-tables/