

Solutions for Living:

Tools for the Enabled Garden

Gardening is one of America's favorite leisure outdoor activities. According to the National Gardening Association, more than 91 million U.S. households (28 million of whose members are over age 55) participate in some type of lawn or garden activity. Most gardeners, novice and experienced, agree gardening is good for the body, mind, and soul. Bodies are strengthened through gardening. Minds are refreshed through gardening's therapeutic benefit of connecting with nature. Spirits are renewed through the quiet sanctuary of the garden.

But, for those who experience the effects of arthritis, aging, or other physical limitations, gardening can become challenging and sometimes frustrating. Identifying each gardener's individual needs, adapting his or her garden and gardening practices, and utilizing the wide variety of excellent tools and techniques available will ensure that the capabilities of every gardener are maximized.

Purpose of this document

This document shows examples of gardening tools and solutions that, regardless of limitation or chronic condition, allow almost everyone to enjoy the benefits of gardening. The document is arranged into the following categories:

- Solutions for garden containers
- Solutions for cultivating
- Solutions for seeding, planting, and watering
- Solutions for transporting and storing
- Solutions for comfort and safety

This bulletin includes only some of the many excellent tools and solutions available.

In addition, it will not cover topics such as the "jobs" of gardening (digging, weeding,

planting, or pruning), gardeners with special needs, or garden designs etc. Some helpful online resources that cover these topics and more include:

- Gardening for Life: A Guide to Garden Adaptations (Washington State Master Gardeners)
 http://cru.cabe.wsu.edu/CEPublications
 - http://cru.cahe.wsu.edu/CEPublications/misc0545/misc0545.pdf
- Gardens for Every Body (University of Missouri AgrAbility) http://agrability.missouri.edu/gardenweb
- Accessible Gardens for Persons with Disabilities
 - http://www.extension.org/pages/61523/accessible-gardens-for-persons-with-disabilities

Overcoming limitations when gardening

Limitations can make gardening more difficult and less enjoyable. Following are a few techniques that can help enhance the gardening experience despite limitations:

Know your limits. Be aware of just how much physical activity you can manage.

Be kind to your body. Gentle stretches loosen joints and prevent injury.

Use joint-friendly tools. Long-handled tools allow gardeners to stand, not stoop, and easy-to-grip hand tools reduce wrist and hand strain. Use a kneeling pad or even a scooter wagon to sit on while weeding.

Practice correct posture. Let your larger/ stronger joints do the work when possible. Keep items close to your body as you carry them. Stand or sit up straight when working and change positions often.

Think "inside" the box. Instead of a traditional garden, try a flower box or raised garden to eliminate stooping.

Take frequent breaks. When gardening, pain can build if joints are not rested. Frequent breaks allow one to appreciate the garden, plan tasks, and get more done before fatigue sets in.

Finally, and with caveats

As with any type of physical activity, gardeners should consult their healthcare provider regarding their specific conditions. Not all the examples in this bulletin are appropriate for all gardeners. Strength, stamina, type of limitation plus financial cost of some items may impact the utility of certain tools. In addition,

some solutions to be used as intended may require a companion gardener. However, by working in moderation and utilizing some of the tools and solutions listed in this bulletin, gardening can continue to be enjoyed for many years.

Due to the dynamic nature of the World Wide Web, Internet sources may sometimes be difficult to find. Addresses change and pages can disappear over time. If you find problems with any of the listed websites in the publication, please contact Wyoming AgrAbility. Contact information is on the back cover of this publication.



Solutions for garden containers

The world of gardening is ever-changing. Creativity and innovative ideas for planting have given horticulture a new meaning, and new designs for the typical garden bed have increased accessibility for all. Tending to plants no longer means constant kneeling, bending, and strain on the body. After reading over these ideas for container gardening, maybe you will opt to think outside the garden plot!



Tiered boxes and planters

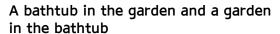
Tiered planters and boxes provide unique space-saving designs that create gardens within a garden using easy-to-build containers. This design provides better access for a seated gardener.

Photo: keeping it real @ Flickr



Vertical gardens

A good way to utilize space when gardening is to go up - as in, vertical gardening! This type of planting makes use of all kinds of areas including walls, fencing, and trellises. Reduces the strain of bending.



Old tubs provide a fun twist to garden décor. A tub holds ample room for a variety of flowers or vegetables and is a unique idea for a raised garden bed. Don't plug the drain hole.

Hanging basket with pulley

Great for accessing hanging plants for watering, this pulley system eliminates the hassle of trying to reach planters. Holds up to 25 pounds.



Recycled garden pots

Almost anything that can hold soil can serve as a garden container as long as drainage is considered. Let your imagination be your quide.









Mobile garden containers

Bring the garden to the gardener. Mobile gardens come in a variety of forms. Wheelbarrows, grocery carts, wagons, and planters with wheels can be transformed into personal garden spots. Remember to drain the container.



Elevated beds

Elevated beds increase accessibility and make gardening convenient while sitting or standing. Elevated beds, with or without casters, allow for versatility in garden location. Beds should be at least 8 inches deep.



Beds built to maximize gardening for everyone Minimize bending and stoop-

ing with a raised garden bed.



Wheelchair gardening

Or, accommodate mobility needs with an elevated bed built for wheel chair accessibility. The open space under elevated beds keeps soil cooler which may reduce length of the growing season.



Sensory gardens

Sensory gardens incorporate fragrant flowers, vibrant colors, unique textures, and nature sounds such as flowing water, so that all may enjoy the beauty gardens provide. Some sensory gardens require regular maintenance.

Solutions for cultivating

If you've ever twisted and stretched while kneeling in the garden, you know gardening can be physically challenging. Fortunately, there are many ergonomic and adaptive tools to help gardeners with limitations. However, just because a tool says it is "ergonomic" does not mean it is ergonomic for you. Try out the tool; it must fit your needs and your body.

The Wright Stuff, Inc.



Ergonomic garden tools (Radius)

These tools are made with large, textured, no slip handles that allows for a better grip.



Long-handled tools

A long handle acts as a lever, transferring your energy to the tool and multiplying the effect so you can garden with less effort. Not as practical for gardeners in wheelchairs.



Long-handled tools are designed to provide additional reaching capability for gardeners who may need to sit on a chair or stool due to arthritis or other limitations.



Photo: southpawenterprises.com

Pistol grip tools

These grips are designed to use less energy and to help keep the wrist and forearm in proper alignment.

Cordless garden tools (Black & Decker)

> Battery-powered tools help reduce muscle strain and allow greater freedom of movement with no cord limitation; batteries add weight.



Garden tool wrap

Adding bright, garden tool wrap or duct tape to hand tools provides a better grip and helps gardeners with aging eyes find misplaced tools in the garden bed.



Light weight aluminum garden tools

Strong alloy allows gardeners to perform heavier pruning or shearing without the weight of wooden handles. They do require strength to work properly.



Telescoping tools

Adjustable handle lengths minimize back and knee strain and allow gardeners to remain standing.









Back-saving tools (Hound Dog) A variety of tools with different features will handle most lawn or garden chores without bending or stooping. Gardeners can weed, aerate, trim, edge, till, and cultivate. They require upper body strength, however.



Specialty tools

Garden tool manufacturers are continually developing innovative devices such as a Garden Rocker Seat, ToolStep, and Gator Grabber to help gardeners with limitations continue to do what they love. Check cost and feasibility of tools for your gardening situation

Solutions for seeding, planting, and watering

Gardening is a fulfilling activity. Sometimes though, the task of planting and watering seeds and bulbs can be difficult. Fortunately, there are solutions for seeding, planting, and watering, many of which help accommodate physical limitations. The following ideas minimize fatigue and strain so you can continue doing what you enjoy.



Vibrating hand seed sower (Seedmaster)

Makes seeding faster and easier. Thumb pressure on the rotating wheel activates vibration to create a steady flow of seeds into the soil.



Seed tape

Plant straight rows of seeds with ease while making the most of the space in any type of garden. Unroll the strips of biodegradable paper and cover with soil. Germination may be longer.



Roto planter (Yard Butler)

Auger-type tools prevent muscle strain and fatigue by doing the digging for you. Capable of creating deep planting holes using a cordless drill. Still need to plant, though, and can "polish" sides of the hole preventing roots from spreading.



Bulb planter (HoundDog)

Bulb planters lessen the effort of planting by easing the pain of bending and kneeling. The tool digs holes and expels soil with a squeeze of the handle trigger. Requires hand strength.

Ti g c p n g a ii o t

turret wand
(Orbit)
Watering
wands make
it easy to water hanging
plants and
hard-to-reach
areas. Most
have variable spray

patterns and

levers to ease

muscle strain.

flow control

Front trigger

Faucet extender

These add watering options for the
gardener. The faucet extender can be
placed anywhere to
make far-reaching
garden beds easily
accessible for watering. Be careful not to
overload and break
the shaft.

Photo: gemplers.com



Easy-pour watering can (Fiskars)

With a dual-handle design and adjustable spout, this watering can minimizes hand and wrist strain. Remember, though, water is heavy so fill accordingly.



Hose carts

Hose carts are easy to maneuver and make transporting garden hose hassle-free. This cart can hold up to 300 feet of hose and includes a basket for storing gardening tools. Requires arm and body strength to use wind-up mechanism and move the cart.



Retractable hose reel (Frontgate)

Automatic retractable reels eliminate the hassle of gathering up hoses and makes for convenient storing. This swivel model is designed to be wall-mounted.



Automated watering systems

Automated systems can alleviate many watering hassles. While they can be costly, they can save time, money, and physical strain thanks to the convenience of programmable watering.

Solutions for transporting and storing

Almost every garden job involves moving things, whether it's carrying tools, moving plants and bags of compost, or taking weeds or cuttings to the compost pile. Carrying and storing can be a challenge but here are some ways to make gardening easier.



Photo: sears.com

Bucket tool organizer

Perfect for keeping tools organized and easily accessible. With the hook and loop fastener strap, it fits any 5-gallon bucket and makes carrying tools easier as long as it is not overloaded.



Photo: Miller Manufacturing

Muck bucket cart (Little Giant)

Carts help with common tasks in the yard and garden. A retaining ring eases loading and unloading, keeping objects secure when up. Objects slide off easily when ring is down. Good for transporting soil, compost, and pots.



Golf bag for gardening?

A spare golf bag can carry unwieldy rakes, shovels, and hoes from the garage to your own fairway (a.k.a. backyard!).

Photo: gardeners.com



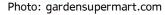
Fold-it aluminum garden cart

Use it to haul wood, soil, mulch, leaves, and flowers. Folds in seconds to a compact size requiring less than 2 square feet of floor space.



Garden gopher workstation

This cart carries, stores, and transports any sized garden tool. It also allows the gardener to transport heavy plants, pots, fertilizer, and bags of mulch with less effort.



Kneeler tool pouch

Keep your essential tools nearby when you garden by stowing them in this tool pouch, attached to a Garden Kneeler. (See following section for more on the Garden Kneeler).



A mailbox in the garden?

Here's a great tip we've heard--use an old mailbox to store everyday garden tools right at the garden site!



Furniture as potting benches

Convert a buffet table, desk, cupboard or other furniture into a work and storage bench for plants and tools





Patio storage bench

This type of bench not only provides a storage place for garden tools and supplies, it creates an extra spot for gardeners to take a load off as well!



Wheelchair accessible storage shed

If building a garden storage shed, consider ample space for access as well as work space for gardeners using wheelchairs.



Garden tool organizer

There are many products that can help organize garden tools and seeds--in a storage shed, a garage, or even attached to the inside of the door.

Solutions for comfort and safety

Gardening is an enjoyable pastime and excellent form of exercise for mobility, flexibility, and use of motor skills while helping to improve strength and endurance. For comfort and safety remember to avoid over-exertion, drink plenty of water, dress for safety and sun protection, and most importantly, know your limits and take breaks when tiring.



T-grip and D-grip

These grips adjust for any long handle garden tool. For example, they allow the gardener to drag a hoe through the soil instead of hacking to ease pain to wrists and forearms.



Rose garden gloves

Gardening gloves protect hands against cuts, thorns, soil, potting mix, insect bites, and skin irritants.



Garden tool sharpener

Keeping tools sharp reduces fatigue and allows for easier gardening.



Stretch knee pads

Your knees will thank you with these comfortable, durable, and flexible pads. They fit over long pants and stay in place.





Helpful Hand brace

The Helpful Hand holds different kinds of special tools, including hand garden tools, and takes stress off wrists, thumbs, or hands.



Battery-operated portable timer

For those with limited stamina, pace oneself to prevent over-exertion or muscle fatigue.

Garden access and paving

A flat surface and paving are important considerations for access and safety to and around the garden for gardeners with reduced mobility.



Folding garden kneeling stool

For gardeners who need help getting up, reversible kneelers are useful. They are padded for kneeling, and the arms can be used for lowering to kneel or rising to a standing position.





Keep these close by to call for help in case of an accident, overexertion, or



Resting benches

Place a bench close to the garden area to allow gardeners to catch their breath and to "stop and smell the flowers."





Sun protection

Stay protected when working in the sun.

The University of Wyoming is an affirmative action/equal opportunity institution.
This material is based upon work supported by the National Institute for Food and Agriculture,
U.S. Department of Agriculture, under Agreement No.2010-41590-20741

Senior editor: Steven L. Miller, College of Agriculture and Natural Resources, Office of Communications and Technology. Graphic designer: Bernadette van der Vliet, College of Agriculture and Natural Resources, Office of Communication and Technology. Peer review provided by Karen Panter, Chris Hil-

Disclaimer: The University of Wyoming, Wyoming AgrAbility and its project partners, and the United States Department of Agriculture do not endorse or recommend any of the products or websites described at the exclusion of other suitable products or websites. The categorization of these products is based on the opinions of the authors only. The authors' opinions of the safety and effectiveness of the products are based on the representations of the companies that produce them and assumes that all directions as to their use have been followed.

gert, and Donna Cuin of UW Extension.



Wyoming AgrAbility provides education, networking and information, and assistance to ranchers, farmers, agricultural workers and their families focused on promoting independence for those with disability resulting from injury, illness, aging, or other causes.

Authorized by the 1990 Farm Bill, the U.S. Department of Agriculture initiated funding for state-level programs to provide help on accommodating disability in agriculture. Twenty-two states are operating through this funding and make up the national effort known as the National AgrAbility Project.

As one of those states, Wyoming has created a partnership of the University of Wyoming through UW Extension, Wyoming Institute for Disabilities, and non-profit disability service providers Wyoming Independent Living Rehabilitation and Wyoming Services for Independent Living. This partnership offers comprehensive assistance to individuals and their families. Building on the strength of nationwide informational resources, along with a statewide network of agricultural, rural health, safety, and social agencies, Wyoming AgrAbility offers individual services for increasing self-sufficiency and independence.

For more information about Wyoming AgrAbility or to request an on-site ranch or farm assessment,

call (866) 395-4986 or email AgrAbility@uwyo.edu www.uwyo.edu/agrability







