

Office of Diversity, Equity and Inclusion - equityandinclusion.cfaes-ohio-state.edu

OSU Extension Master Gardener Volunteers <https://mastergardener.osu.edu/>

Ohio AgrAbility www.agrability.osu.edu

Everyone Can Garden! Vegetable Gardening for People with Physical and Other Limitations:

Planting and maintaining your vegetable garden, April 1, 2021

Laura Akgerman

Disability Services Coordinator, Ohio AgrAbility, OSU Extension and CFAES Akgerman.4@osu.edu

Pam Bennett

Associate Professor, State Master Gardener Volunteer Program Director, Interim Chadwick Arboretum Program Director, Horticulture Educator Bennett.27@osu.edu

The Office of Diversity, Equity, and Inclusion aims to create and maintain an accessible, inclusive and supportive community for all who learn, work and teach in the College of Food, Agricultural, and Environmental Sciences (CFAES) and OSU Extension at The Ohio State University.

Ohio AgrAbility's mission is to promote success in agriculture for Ohio's farmers and farm families who are coping with disability or a long-term health condition. Ohio AgrAbility provides education and resources to farmers, agricultural businesses and groups, healthcare, education and disability professionals, and anyone interested in making farming safe and accessible.

The Ohio State University Extension Master Gardener Volunteer (MGV) program provides intensive training in horticulture to interested Ohio residents who then volunteer their time assisting with educational programs and activities for Ohio residents through their local OSU Extension county office.

Equipment and Supply Storage

- Store supplies & equipment in or near the garden
- Adjustable height shelves
- Label everything
- Store supplies & equipment in or near the garden
- Use adjustable height shelves to store items – *have a shelf at same height as your garden cart*
- Keep frequently used items between knee and shoulder height
- Limit overhead storage to lightweight and seldom used items
- Label everything you use in and on the garden (pesticides, chemicals, fertilizers, additives, etc...)

Safe Lifting

- **Wide stance** - feet should be shoulder width apart, head in neutral position over shoulders
- **Keep object close** and in line with your **nose & toes**
- **Bend at your legs, not your back**
- Use stomach muscles and breathe **OUT**
- Use the strongest part of your body – **your legs**



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

Hauling your Equipment & Supplies:

Compare Garden Carts & work seats

All equipment and tools mentioned in this handout are listed on the Gardening Tools Handout at OhioAgrAbility.osu.edu [Click here for the garden tools handout](#)

- Rolling work seat, padded seat and backrest, long handle to move the cart, loops on the backrest hold tools
- Strongway garden cart weighs 95 pounds, has removable front panel, carries up to 400 pounds
- Mac sports Mac wagon Weighs 21 pounds, folds down, carries up to 150 pounds

Protect Your Fingers, Hands and Wrists

- Avoid repetitive use of your fingers
- Keep wrist and hands in **neutral position** instead of twisting, using hand tools properly – to reduce strain
- Use grippy gloves to hold tools without exerting your hands and wrist
- Use tools with "spring action design" to reduce hand strain

Ergonomic tools are designed to keep the body in a neutral position

Ergonomic means that a tool is designed to minimize physical effort and discomfort while maximizing efficiency

- Made with large, soft handles
- Depression or ridge on top of the tool
- Curved to fit the natural contour of the hand
- Wrist in neutral position with thumb on top

Examples (on Garden equipment handout):

Radius garden hand tool set

EasiGrip garden tools, set of 4

Long handled tools

- Reduce bending, allow straighter back and neutral hand and arm position
- Work standing or sitting
- Provide more leverage
- Two handed grip (distributes the workload to larger muscle groups)
- Ergonomic handles can be added for ease of use/comfort
- You can add ergonomic handles to your existing tools

Examples (on Garden equipment handout):

Back saving tool handle attachment \$10

Peta Easi-grip long reach garden tools set of 4, \$190

Planting the garden

- Prep the soil
 - Work in organic matter
- Planting plants
 - No flowers or fruits
 - Cloudy day
 - Proper depth
- Planting seeds
 - Soil temperature
 - Proper depth

Planting

Fertilizing - average garden soil

-Loses per 1000 square foot :

-1-3# of nitrogen

- $\frac{1}{2}$ -1 $\frac{1}{2}$ # of P

-2-4# of K

-Add nutrients per soil test??????

-Or, use a garden purpose garden fertilizer and follow directions!

-Keep everything labeled

Watering to get them established

-2010 dry spring

-How often

Cultural practices

Watering

The watering of a garden requires as much judgement as the seasoning of a soup

-1" of water per week

-Water in the morning

-Keep foliage as dry as possible

Methods

-Sprinkler

-Soaker hoses

-Drip irrigation

-Hand

Ear of corn – 70% water

Potato – 80 percent water

Tomato – 95% water

Tools and techniques

- Soaker hoses
- Irrigation systems (in ground)
- Expandable hoses

Fertilizing

- Timing is important

Methods

- Side dressing
- Broadcasting
- Row or banding
- Liquid
- Beets – time of planting, 3" high
- Carrots – 5-10-10
 - Seeding, 3-4" tall, 6-8" tall
- Eggplant – time of planting, N after fruit set
- Peas – planting and after pods form
- Peppers- planting and after fruits set
- Containers- regular basis according to label
- Never fertilize when soil is dry
- Avoid contact with foliage
- Organic or synthetic
 - Depends upon the individual gardener
- Manures
 - Slower to break down
- Always wear gloves

Cultural Practices

Staking

Protect Your Elbows, Shoulders and Back

Protect elbows and shoulders from damage caused by excessive twisting and reaching

- Minimize working with your hands above your shoulders
- Try to limit lifting, reaching, and pulling
- Long handled tools minimize the need to reach or stoop
- **STRETCH!**

Protect Your Knees and Feet

Avoid working in awkward positions or standing for long periods of time

- Wear comfortable and supportive shoes with a good tread
- Sit down and work – **conserve your energy**
- Kneeling bench

Planting seeds without bending

- DIY PVC pipe garden planter - best in a tilled garden - Standing up and straddling the row, push the pipe down into the soil a little past the desired depth, drop the seed down through the pipe, lift the pipe straight up, which causes the dirt to cover the seed/set. More information at <http://www.agrability.org/toolbox/?solution=947>
- DIY PVC pipe and funnel. Connect a piece of PVC pipe to the base/opening of a funnel with duct tape, - Standing up and straddling the row, push the pipe down into the soil a little past the desired depth, drop the seed down through the pipe, lift the pipe straight up, which causes the dirt to cover the seed/set.
 - A good height for the finished PVC planter or garden funnel would be waist high (if standing), or chest high if seated. Cut the PVC pipe to a length that would be about this height when the pipe is attached to a funnel, or to waist/chest height if just using the pipe. The tapes are made by cutting newspaper into 1-inch-wide strips, brushing them with flour-and-water paste, placing the seeds on them at appropriate intervals, then allowing them to dry. When planting time arrives, the strips are laid in the furrows, covered, and watered just like seeds would typically be planted. More information at <http://www.agrability.org/toolbox/?solution=104>
- Bulb planter
- Stand n' Plant (for seedlings/plants)

Weeding tools

Skidger ergonomic garden weed removal tool **\$40**

Grampa's weeder weed remover **\$29**

Walensee weed puller **\$28**

Resources: <https://agrability.osu.edu/resources/webinars-and-handouts-2020-2021>

- Ohio Department of Agriculture and Ohio State University Extension
- Seed distribution
- u.osu.edu/ohiovictorygardens
- #OhioVictoryGardens