Tips and tricks to help farmers and gardeners
Karen Funkenbusch and Brenda Schreck
3 Things to Keep in Mind When Choosing Handheld Tools

1. **Neutral**
   Look for handles with a spot for the thumb so the tool can be held in this position while you work.

2. **Handle**
   Diameter should be no bigger than the ring you make with your thumb and pointer.

3. **Tool Shaft**
   Length of shaft should be no longer than the tip of your middle finger to the bottom of your palm.

Try and sit or kneel instead of bending over while you work.

Pivot when working with shovels and other long handled tools instead of twisting at the waist.

Always squat down to lift with your legs.
Choose The Best Tools for the Job

6 GREAT LONG-HANDLED TOOLS

1. **Long-Handled Pruner**: for cutting branches
2. **Round-Headed Shovel**: for digging holes to plant in
3. **Transplant Spade**: for digging holes in tight spaces
4. **Bow Rake**: for leveling materials
5. **Digging Fork**: for turning soil, mixing things into the soil, breaking up clods, etc.
6. **Leaf Rake**: for cleaning up leaves and other light debris.

**Sun Hat**: it is always very important to protect yourself from the damaging sun and excessive heat when working outside on your farm or in your garden.

6 GREAT HAND-HELD TOOLS

1. **Hand- Rake**: for cleaning up and picking up light debris without damaging near plants.
2. **Trowel**: for digging and moving small amounts of dirt.
3. **Hori-Hori**: a sharp blade with a serrated edge that is good for cutting through and roots and dense soil.
4. **Weeder**: a long neck allows a further reach, and the sharp blade helps remove shallow weeds.
5. **Cultivator**: for turning and moving dirt in small areas between and around other plants.
6. **Pruning Shears**: for cutting small branches, thick flowers, dense roots.

*Click here to view the Ergonomic Tool Talk video from Lincoln University Cooperative Extension.*
Work Smarter, Not Harder!
Prevent Pain, Discomfort, and Injuries!

- Protect your hands from painful blisters, cuts, scrapes, and chemicals by wearing a pair of gloves when working in the garden or on the farm.
  - Gloves that fit right can also help make tools easier to use by improving your grip.

- Always try and maintain proper posture when working to reduce stress on your body:
  - Standing: point toes straight ahead, feet hip width apart, with the weight on the balls of your feet, and shoulders back.
  - Lifting from the ground: squat down to the level of what you’re lifting, keep your back straight, hold the object close to your body, and lift with your legs.
    - The same principles apply when lowering heavy objects to the ground, use your legs!
  - Lifting from above: feet shoulder width apart, slightly offset (see picture), and grasp the object and bring it down keeping it close to your body.

- Reduce neck stiffness and pain by avoiding looking above or below you for long periods of time.
  - If possible bring your work as close to eye level as you can.
**Tips to Make Farm and Garden Chores Easier**

**Push Don’t Pull!**
Pushing makes moving heavy objects easier.

**Use your time wisely!**
Take breaks and spread out tiring activities by switching to an easier task for a brief period.

**Take stress off your joints.**
Use a cushion or seat to take stress off your body while bringing your work closer to you.

**Family Time!**
Create memories together & help each other with hard work!

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**Simplify.**
Reduce the amount of work and energy required by trying some of these simple suggestions.

1. **GOT MAIL?**
   - Try putting an old mailbox into the garden to store frequently used tools, and protect them from the elements.

2. **BUCKETS!**
   - Use an old 5-gallon bucket as a storage bench! Put a sealed lid that can keep out the elements, and is a seat when closed.

3. **WAGON**
   - An old wagon with a board attached as a seat makes a portable bench that can be used as storage.
Learn how to modify your own tools

The next page will show you pictures of modified tools that you can make at home, by yourself or with friends or family. Materials for the ideas can be found at your local hardware, building supply, or farm supply store. The ideas shown are meant to be inexpensive ways to make your favorite tools work for you.

Don’t want to make it? Here’s what you can buy online!

**Magic Handle- $25**
Two handles for greater support and stability.

**Seed Planter- $5**
Makes planting easier! This tool allows you to plant the seeds without having to grip or pinch them.
**Built up handle, elongated handle, and strap**

To build up a handle you can use anything that adds cushion and thickness, adheres to the surface of the tool and anything you have around the house.

Material that can be used to build up handles include:
- JB Weld
- Backer Rods
- Rubber Bands
- Repair Wrap Tape
- Weather Wrap

To create a strap you can use anything that is strong enough to hold your hand and can either stretch to fit your hand or is adjustable.

Material that can be used for straps are:
- Straps used to hang cattle wormer and fly spray or any straps like it
- Rubber Bands
- Elastic Bands
- Coil Bracelets/Band

To elongate a handle you can use anything that is strong enough to hold the weight of the tool and strong enough for you to grip.

Material that can be used to elongate the handle include:
- PVC Pipe
- Metal Pipe

**FOR MORE IDEAS ON MODIFICATION**

There are many different ways to modify your favorite tools. For more information or ideas on how to modify these tools you can contact your local occupational therapist, visit Missouri AgrAbility, search online, or visit your local supply store.
High blood pressure, heart attacks, and other heart diseases can lead to serious injuries that can affect your daily activities. If you have a cardiac problem and are having difficulty tending to your garden or working on your farm, implement the following techniques to continue this activity.

1. Take rest breaks as needed and know your limits. Sit down while working if standing is too difficult.

2. Try to work outside during the morning or late afternoon to avoid the hottest parts of the day. Keep drinking water on hand.

3. Ask for help when lifting heavy objects.

4. Use ergonomic tools, energy conservation, and work simplification techniques.
Gardening with Arthritis

Gardening is often used as a treatment for the many Americans with arthritis. This activity is known to maintain range of motion of the hands, wrists, and other joints as well as increase the flexibility of these joints. By following the techniques below you can decrease pain and stiffness while participating in this activity.

- Do light stretching before and after you garden.
- Use raised beds or garden containers.
- Change positions to avoid pain and stiffness.
- Take rest breaks when needed.
- Use energy conservation and work simplification techniques.

Gardening with Lung Problems

Lung disease is one of the most fatal diseases. Complications with breathing can affect the efficiency in which we participate in our daily activities. It is important to consider the following strategies when gardening with a lung problem:

- Avoid bent positions that decrease lung capacity.
- Do not hold your breath while lifting objects.
- Keep gardening tools near your workspace.
- Use energy conservation techniques.

GARDENING WITH BACK PROBLEMS

Many Americans experience back problems such as pain, soreness, tightness, or stress. These problems can cause debilitating pain and affect daily activities. If you would like to garden and you have back problems, follow the tips and techniques listed below.

- Always use proper positioning while gardening including keeping your back straight, squatting to lift heavy objects, and kneeling while working instead of bending over.
- Buy or adapt your garden tools to have long-handles to avoid bending over and improve leverage needed to use the tool.
- Raised beds or hanging baskets can also be used to decrease back pain.
Contact Information

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Resources

www.Agrability.Missouri.edu

www.extension2.missouri.edu/programs/
agrability/show-me-strong-farm-families

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