

Arthritis in Agriculture

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It can be a struggle to farm with arthritis. Some tasks can be modified to ease the difficulty by requiring less energy or causing less stress on the joints.

Options include using a different tool or piece of equipment for specific tasks, planning ahead to increase the efficiency of processes, or having a family member or employee perform the tasks that are difficult to perform.

Other considerations include:

- Organize the day by ranking the day's tasks in order of importance.
- Whenever possible, sit while working to take the weight off the joints. In the barn or shop, keep a chair, stool, or bench nearby so you can rest from time to time. When in the field or the yard, sit on the bed of a truck or wagon to rest.
- Alternate difficult jobs with easier ones. For example, if replacing fence posts, plan to do that in the morning when you have the most strength and energy; then work on easier projects in the afternoon. Alternating heavy and light tasks will extend your energy over a longer period.
- Combine similar tasks. For example, if several items need to be repaired, try to do all the repairs in the same block of time.
- Complete all the work in one area before moving to another. For instance, finish all the barn chores before beginning chores in another area.



Techniques to create an accessible, comfortable workplace include:

- Use as many labor-saving devices and easy-to-grip tools as possible.
- Install switches and electrical outlets so they are easy to reach.
- Arrange tools so they are easy to reach and store.
- Gather needed supplies and materials before you start working.
- Transport items by a cart rather than carrying them.
- Raise or lower the worktable or bench to reduce the need to bend or reach.
- Using built-up handles on tools can be beneficial for individuals with decreased grip strength, hand pain, or numbness while gripping objects. Inexpensive ways to build up handles include:
 - Wrap a washcloth around the handle, and secure it with tape.
 - Wrap a self-adhesive ACE bandage around the handle for the desired thickness.
 - Wrap craft foam or foam pipe insulation around the handle, and secure it with tape.
 - Wrap pieces of rubber hose around the handle, and secure them with tape.

Farming Made Easier

Key Extension

One problem faced by people with arthritis is difficulty gripping small objects. A simple key extension, made by bolting a strip of PVC to the key, makes the key easier to grip and operate.

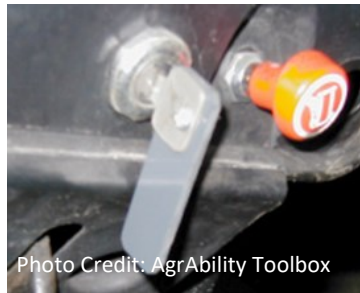


Photo Credit: AgrAbility Toolbox

Easi Grip Garden Tools

Workers with one arm or arthritis can securely grip and control their Easi Grip Garden Tools without bending the wrist. After a stroke, amputation, arthritis or other arm limitation it is nearly impossible to use standard garden hand tools. Garden trowels, hoes and most other small tools have straight handles forcing the wrist to twist forward while gripping the tool. When the wrist is twisted forward in this way, the grip strength of a hand is reduced by approximately 50%. Hand tools are difficult to use with impaired grip strength or limited range of motion. The Easi Grip Garden Tools solve these problems because they allow the worker to grip the handle without twisting the wrist, providing maximum grip strength. The arm cuff connects to the forearm to provide control of the tool similar to using two hands.

ProHandle

The ProHandle is an ergonomically designed auxiliary handle that is "added on" to any stick tool such as a shovel, rake, or mop. The design encourages one to work with a more erect, less stressful posture, reducing strain and injury to lower back muscles and joints.



Photo Credit: ProHandle

Simply Dump It Pivoting Wheelbarrow Handle

This wheelbarrow's revolutionary pivot-point design allows a well-controlled operation and helps to prevent the user from losing control of the wheelbarrow.

It helps to reduce weight-loading and rotation in the wrists and reduces torque in the elbows and lower back.



Photo Credit: Simply Dump It



Fork with Arm Support Cuff

Photo Credit: Easi Grip Garden Tools

Additional assistive technology resources can be found at: <http://www.agrability.org/toolbox/>

References

- Farming with Arthritis, 2011 Ohio State University, reviewed by Karen Mancl, PhD.
Arthritis and Agriculture, 2004 Arthritis Foundation, Indiana Chapter and Purdue University.
Eustice, Carol, & Eustice, Richard. (2008). Guide to Arthritis Pain.
Coping with Arthritis, 2010 Arthritis Foundation, reviewed by Brunilda Nazario, MD.