

Assistive Technology for Farmers and Ranchers with Arthritis

"I was surprised that simple modifications combined with small changes in daily routines and habits could result in so much improvement in comfort for me while I am operating these tractors."

William Wetherell

Assistive Technology (AT) is a phrase commonly used to refer to any item, equipment or device that helps a person overcome the effects of a disability. It can be any high-tech or low-tech device, customized or not. It can be specially designed for a particular disability or "off-the-shelf." Assistive technologies can be used by farmers and ranchers with arthritis to help reduce joint stress, pain, and fatigue.

The following principles can be used to help guide farmers and ranchers when selecting adapted devices or assistive technologies as well as evaluating those currently used to prevent secondary injury and disability.

Use Wheels

- To reduce friction, lessening the resistance between surfaces
- To avoid lifting and carrying

Simple Solution: Use a cart or attach a carrier with wheels to items to avoid unnecessary the strain of carrying.

Use Extended Handles

- Products with long handles or long attachments let you use less force to manipulate objects. These products help to conserve energy.

Simple Solution: A piece of wood, metal, foam, or firm plastic can be attached to many types of objects to increase the length of the handle.

Use lightweight objects

- To reduce joint stress, pain, and fatigue

Simple Solution: A small garden shovel is easy to carry and clean.

Use large handles

- To help maintain a secure hold when hands are weak
- To help hold an object if fingers do not fully close
- To lessen tension required to maintain your hold on objects

Simple Solution: Purchase hand tools made with bulky soft handles about one inch in diameter or pipe insulation tubing with an opening from 3/8 to 3/4 inch in diameter offers an easy and inexpensive way to build up your tool handles.