# AGRICULTURAL EQUIPMENT: ACCESS & MODIFICATIONS

## Improve independence and safety when accessing agricultural equipment

One of the most common reasons farmers contact AgrAbility PA is because of difficulty accessing a tractor, combine, skid steer, or piece of equipment on the farm. Arthritis, spinal cord injuries, amputations, back or joint injuries and pain, and general symptoms of aging and loss of strength can impact the ability of a farmer to safely access their equipment.

Several modification options – steps, handrails, and lifts – are available for most agricultural equipment to improve access and safety.

Before deciding how to modify your equipment, it is important to determine what equipment to modify. Some equipment may not be a good choice for modifications. Modifying an antique tractor or a skid steer that is regularly in the shop for repairs might not be the best option. Consider the following:

- 1.) Ease of operation
- 2.) Frequency and Type of Use
- 3.) Age and Condition of Equipment
- 4.) Current Safety Features.

Equipment in good, safe working order is an ideal candidate for modifications and improvements.

It is also important to utilize safe practices.



Photo: Abbie Spackman / AgrAbility PA / Penn State

## Practice safety when accessing equipment:

- Use safe and appropriate modifications on equipment.
- Slow down and think about the task you are performing.
- Maintain three points of contact when getting on or off equipment – two hands/one foot or two feet/one hand.
- Have an emergency plan in place. Know in advance how you will quickly exit a piece of equipment in an emergency.



#### **Steps**

Ergonomic steps, sometimes called safety steps, are often a great improvement over the original steps. They typically include 3 to 4 wide steps with good tread and correct spacing. For tractors that already have ergonomic steps, an extra step can often be added to decrease the height of the first step.



## Handrails

Handrails mounted on the steps, door, or fender can add a stable hand hold to aid in accessing equipment. When adding handrails, be sure they are correctly and securely mounted. Individuals who find themselves gripping the steering wheel when accessing equipment should consider adding handrails. Some step packages come as a kit with appropriate handrails.

Contact AgrAbility PA for additional information or to inguire about an on-site farm assessment suited to your specific equipment access needs. Staff can discuss which modification best fits your functional capabilities, cost effective options, how each option might affect others that use the equipment, and can connect you with vendors and resources.



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## Lifts

If you are pulling yourself on and off equipment primarily using upper body strength, consider a lift to prevent secondary injury. Individuals with spinal cord injuries or progressive illnesses may consider mechanical lifts that can be mounted to a piece of equipment or an independent lift that can safely raise and lower an individual using a seat or platform. Many individuals transfer directly from a wheelchair or mobility aid onto the lift. Some lift options require only one transfer. A wide range of lift options are available.



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AgrAbility for Pennsylvanians Project is supported under USDA/NIFA Special Projects 2017-41590-27105 in collaboration with Penn State Extension. Penn State College of Agricultural Sciences research and extension programs are funded in part by Pennsylvania counties, the Commonwealth of Pennsylvania, and USDA. Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability, or protected veteran status. UCP Central PA assures equal opportunities for all individuals regardless of age, sex, race, color, religious creed, ancestry, national origin, disability, handicap, sexual preference, life style, political belief, union membership, limited English proficiency, and any other class of individuals protected from discrimination under state or federal law.

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