



## Overview & Goals

- ▶ The 2013-2015 Northeast SARE "Breaking Barriers" Professional Development Project trained 43 agricultural educators to help beginning farmers:
  - Gain practical tractor operation and maintenance skills;
  - Realistically assess their equipment needs;
  - Make informed decisions that improve farmers' efficiency, safety and satisfaction with their businesses.

## Justification

- ▶ Lack of mechanization knowledge can limit farm scale, productivity & business development.
- ▶ Many new farmers come from non-farm backgrounds and have limited experience with tractors and machinery.
- ▶ Unskilled equipment operation can pose serious physical and financial risks.
- ▶ Few organizations in the Northeast offer tractor and equipment education oriented to adults.

# Breaking Barriers: Building Capacity for Tractor & Mechanization Education

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## Impacts

- ▶ **Educators:** 31 Extension, nonprofit and farmer educators increased their ability to train and evaluate new tractor operators.
- ▶ **Farmer Education:** Within two years, 23 educators delivered mechanization and tractor safety, operation and maintenance education and coaching to 463 new farmers and farm employees.
- ▶ **Farmer Knowledge:** All 352 farmers/farm employees who completed follow-up surveys reported increased knowledge of mechanization and safe tractor operation and/or maintenance.
- ▶ **Farmer Skills and Confidence:** 342 farmers and farm employees improved skills; 302 reported increases in confidence related to tractor and machine operation and maintenance.
- ▶ **Farm Practices:** 152 farmers reported using knowledge gained to make decisions about mechanization; 130 reported implementing changes to farm practices.
- ▶ **Organizations:** Five organizations have taken steps to integrate this type of education in their ongoing programs.

Visit the Tractor Resource Hub: [blog.uvm.edu/groundwk](http://blog.uvm.edu/groundwk)

Read the full project final report: Search for ENE13-127 in the SARE Project Database at [sare.org](http://sare.org)

## Methods

- ▶ Online and in-person sessions covering: best practices in adult education and effective mechanization and tractor education.
- ▶ Development of an online **Tractor Resource Hub** offering 24/7 access to print and video resources, including instructional materials, resource lists, decision-support tools, self assessments, curricula, planning templates, and more.
- ▶ Securing additional grants to support delivery of farmer training, including a project specifically targeting young and beginning women farmers.

## Multi-State Reach

- ▶ Extension, nonprofit and farmer educators from MA, ME, NH, NY, PA, RI, and VT participated.

## Cooperators

- ▶ **University of Vermont Extension:** George Cook, Suzy Hodgson, \*Beth Holtzman, Kristen Mullins, Jessica Schmidt.
- ▶ **Penn State University:** William Harshman, Dennis Murphy, Sam Steel

