

Soil Health

Healthy soil is essential for maintaining efficient growth, fertility, and water quality in crop production. SARE has supported advances by producers, researchers, and educators as they examine the on-farm benefits of using cover crops, crop rotation, manure amendments, composting, and more.

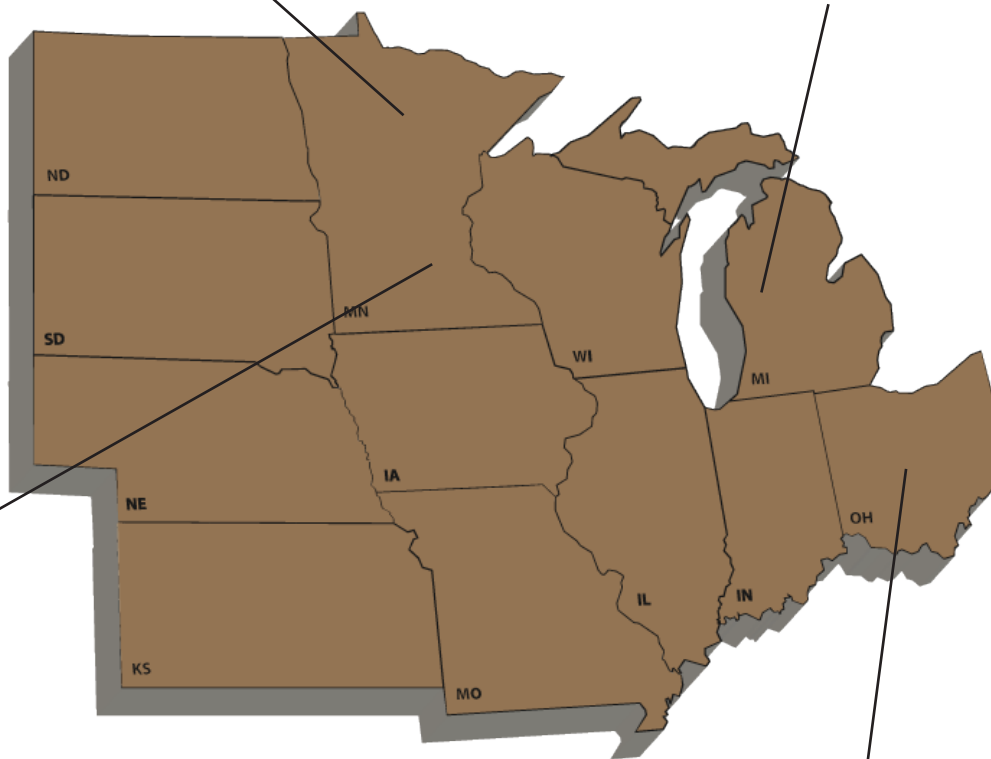
NCR-SARE Project

To view SARE's entire soil health portfolio, or just the North Central Region's projects, visit <https://projects.sare.org>. For selected NCR-SARE soil health grants, see the reverse side of this sheet.

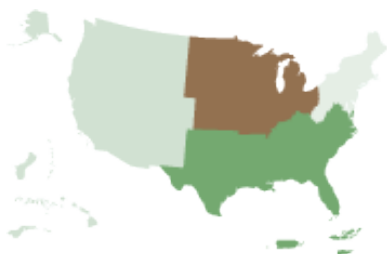
A farmer in Minnesota studied the effects of planting cover crops on soil erosion, drainage, and filtration. The cover crop mixture included annual rye, tillage radish, and winter wheat. Results indicated soil quality was improved by using cover crops. See <https://projects.sare.org> and search for project number FNC16-1063.

Soil fertility is a top-ranked research priority among organic farmers, especially those who specialize in vegetables. A graduate student documented the experimental soil fertility practices of vegetable growers throughout the Midwest. The outreach program associated with this project helped local farmers build soil fertility management plans of their own. See <https://projects.sare.org> and search for project number GNC14-192.

The Sustainable Farming Association's Networking for Soil Health Project worked to build the skills, knowledge, and experience of USDA-NRCS, Soil and Water Conservation Districts and Ag Extension professionals. See <https://projects.sare.org> and search for project number ENC17-158.



Anaerobic soil disinfestation (ASD) is a promising tactic to manage soilborne diseases. Researchers in Ohio worked with area producers to learn more about ASD and integrated soilborne disease management strategies. See <https://projects.sare.org> and search for project number LNC17-393.



SARE's four regional programs and outreach office work to advance – to the whole of American agriculture – innovations that improve profitability, stewardship and quality of life by investing in ground-breaking research and education.

NCR-SARE's Soil Health Portfolio

Selected Grants

FARMER AND RANCHER GRANTS

Soil Remediation Techniques in Urban Agriculture
Casey Sabatka, Dirty Boots Flowers, Illinois, FNC18-1141,
\$14,975

Training and Research on Compost and Compost
Teas to Increase Soil Health and Microbiology on
Southwest Missouri Farms
Ben Tegeler, Ozark Mountain Permaculture, Missouri,
FNC18-1147, \$15,000

Increasing Soil Health and Infiltration with Cover Crops
Vernon Uit De Flesch, Uit de Flesch Farms, Minnesota,
FNC16-1063, \$7,398

Comparing Measurable Indicators of Soil Health under
Two Different Forage Harvesting Methods Four times
During the Growing Season
Benjamin Bartlett, Log Cabin Livestock,
Michigan, FNC14-943, \$6,462

PROFESSIONAL DEVELOPMENT GRANTS

SFA Networking for Soil Health
Theresa Keaveny, Sustainable Farming Association,
Minnesota, ENC17-158, \$75,000

Soil Health Education Resources for Teachers
Natalie Carroll, Purdue University, Indiana, ENC16-152,
\$72,701

RESEARCH AND EDUCATION GRANTS

Optimizing Anaerobic Soil Disinfestation to Manage
Emerging Soilborne Diseases in Tomato Protected
Culture Systems in the North Central Region
Sally Miller, Ohio State University, Ohio, LNC17-393, \$149,349

Effects of Long-Term Integrated Crop and Livestock
Systems on Forage Finishing, Soil Fertility, Nitrogen
Mineralization, Carbon Sequestration, and Profitability
Douglas Landblom, North Dakota State University, North
Dakota, LNC16-381, \$199,998

Does Grazing or Harvesting of Cover Crops Affect
Soils and Crop Production? Assessment in Different
Soil Types and Management Scenarios
Humberto Blanco, University of Nebraska-Lincoln,
Nebraska, LNC15-366, \$199,974

YOUTH EDUCATOR GRANTS

Sustainable Agriculture Internships Including Study of
Compost Nutrient Cycling in Urban Agriculture
Cecelia Watkins, Spark-Y, Minnesota, YENC18-129, \$2,000

Training and Research on Compost and Compost
Teas to Increase Soil Health and Microbiology on
Southwest Missouri Farms
Ben Tegeler, Ozark Mountain Permaculture, Missouri,
FNC18-1147, \$15,000

Manos, Tierra, y Alimento (Hands, Soil, and Food)
Liz Whitehurst, Angelic Organics Learning Center, Illinois,
YENC14-080, \$2,000

GRADUATE STUDENT GRANTS

Optimizing Between-Bed Management Strategies in
Plasticulture Vegetables for Improved Crop Production
and Soil Health
Alyssa Tarrant, Michigan State University, Michigan,
GNC17-251, \$12,000

The Effect of Best Management Practices on Soil
Health in Wisconsin: A Comparison of Soil Biological
Measurements Using Long-Term Trials
Greg Richardson, University of Wisconsin, Wisconsin,
GNC17-249, \$11,906

Interactive Effects of Cover Crops, Soil Health
Practices, and Insect Community Dynamics on Corn
Production
Claire LaCanne, South Dakota State University, South
Dakota, GNC16-227, \$9,998

Linking Soil Testing with Farmer Decision Making – An
Interdisciplinary Approach
Brendan O'Neill, Michigan State University, Michigan
GNC14-192, \$6,853

Updated 2018

For information on many more SARE-funded soil health projects, search
the SARE project database: <https://projects.sare.org>.



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