

FURTHER RESOURCES

PEOPLE

Begin with experts in your area, such as the county Extension office and the local Soil and Water Conservation District office. They know the local soils and cropping problems. Then try these state and national organizations.

Appropriate Technology Transfer for Rural Areas (ATTRA)

ATTRA is a private, non-profit organization funded by an annual USDA grant. They provide free information on alternative practices and crops, and "sustainable" practices. Visit their web site at www.attra.org or call 1-800-346-9140.

Conservation Technology Information Center (CTIC)

CTIC publishes information for farmers and conservationists interested in crop residue management, conservation tillage, watershed management, water quality, wetlands, nutrient management, and pest management. For a list of publications, call 317-494-9555. Or click on "Farm Resources Management" on their web site at www.ctic.purdue.edu/CTIC.html.

Minnesota Department of Agriculture (MDA)

The MDA offers demonstration grants, loans for adopting sustainable practices, whole farm planning workshops and a variety of field days. Visit their web site at www.mda.state.mn.us, or call 651-296-7673.

Minnesota Institute for Sustainable Agriculture (MISA)

MISA brings together the agricultural and University communities in an effort to develop and promote sustainable agriculture. They can link farmers and researchers and respond to individual requests for information. Visit their web site at: www.misa.umn.edu or call 612-625-8235.

PUBLICATIONS

Agricultural Education Materials Service (AEMS). Iowa State University.

AEMS sells many curriculum materials, including some related to soil. Call 515-294-6924, or visit their web site at: www.ag.iastate.edu/departments/aged/outreach/aemsc.htm

Building Soils for Better Crops. 1993. Fred Magdoff.

University of Nebraska Press. (1-800-755-1105)

A guide to improving soil quality by building organic matter. A second edition is expected soon. If you cannot find the first edition at your library, photocopies may be available by writing to John Nelson, Northeast SARE, Hills Building, University of Vermont, Burlington, VT 05405.

Crop Rotation Series. North Dakota State University Extension Service. Call 701-237-7882, or e-mail slane@ndsuext.nodak.edu

Crop Rotations for Profit in North Dakota, 1996, A-1059
Crop Rotations for Managing Plant Disease, 1993, PP-705

Crop Rotations for Increased Productivity, 1998, EB-48

Earthworm Empire: The Living Soil. 1996. Eldon C. Weber. Kendall/Hunt Publishing Company.

This book is for teachers who want to link agriculture to science, history, language arts, and mathematics. Order from the Soil and Water Conservation Society, 515-289-2331 ext. 19; <http://www.swcs.org/> or call Eldon Weber at 515-294-0893.

A Farmer's Guide to On-Farm Research. 1990. Rhonda Janke, Dick Thompson, Ken McNamara, and Craig Cramer. Rodale Institute.

A practical handbook available for about \$5. Contact Rebecca Haring, 610-683-1439, rharin@rodaleinst.org. Or contact: Thompson On-Farm Research, 2035-190th St., Boone, IA 50036-7423, (515) 432-1560.

The Greenbook. Annual. Energy and Sustainable Agriculture Program (ESAP), Minnesota Department of Agriculture.

This publication describes on-farm trials and demonstrations funded by ESAP and conducted by Minnesota farmers. Further resources are provided. For a free copy, or for information about applying for an ESAP grant, call 651-296-7673.

Managing Cover Crops Profitably, 2nd Ed. 1998.

Sustainable Agriculture Research and Education Program. This is the most comprehensive book on the topic.

Describes characteristics of specific cover crops, and provides the information needed to choose a cover crop for your operation. Available from Sustainable Agriculture Publications, Hills Building, Room 10, University of Vermont, Burlington, VT 05405-0082.

Monitoring Tool Box. 1998. Land Stewardship Project.

This book, along with the video *Close to the Ground*, is for farmers interested in easy techniques for monitoring the impact of management decisions on their land, finances, and family. Order the complete book and video, or individual sections, such as the soil monitoring information. To order, call the Land Stewardship Project at 507-523-3366.

FURTHER RESOURCES

The Nature and Properties of Soils, 11th Ed. 1996. N. C. Brady and R. R. Weil. Prentice Hall, Upper Saddle River, NJ. This, and the earlier editions, are excellent college textbooks explaining how soil works. Look in your local library or order from a bookstore.

Nutrient Cycling Series. University of Minnesota Extension Service. To order copies call 1-800-876-8636 or visit our web site at <http://www.extension.umn.edu>. Many of these can be viewed on-line.

Boron for Minnesota Soils, 1993, FO-0723

Copper for Crop Production, 1996, FS-6790

Magnesium for Crop Production in MN, 1978, FO-0725

Potassium for Crop Production, 1996, FO-6794

Sulfur for Minnesota Soils, 1979, FO-0794

Understanding Nitrogen in Soils, 1989, FO-3770

Understanding Phosphorus in MN Soils, 1979, FO-0792

Zinc for Crop Production, 1997, FO-0720

On-Farm Testing: A Grower's Guide. 1992. Baird Miller, Ed Adams, Paul Peterson, and Russ Karow. Washington State University.

An introductory guide to doing replicated strips. Call the Washington State University Cooperative Extension Bulletin Office, 509-335-2857. Or visit their web site at drylicrops.wsu.edu/crop_management/OFT/oftman.html.

Organic Field Crop Handbook, 1992. Canadian Organic Growers Inc.

Available from Faye Jones, Education Outreach Coordinator, Wisconsin OCIA, N7834 Co. Rd. B, Spring Valley WI 54767.

The Paired Comparison: A Good Design for

Farmer-Managed Trials. 1992. Rick Exner and Richard Thompson.

Contact Rick at dnexner@iastate.edu, or Thompson On-Farm Research, 2035-190th St., Boone, IA 50036-7423, (515) 432-1560.

The Practical Farmer

This is the membership newsletter for Practical Farmers of Iowa. It reports results of replicated experiments run on the farms of PFI members and includes articles on various aspects of farming. Call 515-294-1923.

Soil Quality Test Kit

A collection of tests that can be completed on-farm, including tests for water infiltration, biological activity, nitrates, aggregate stability, and more. Available at the NRCS Soil

Quality Institute web site (www.statlab.iastate.edu/survey/SQI) or from your Soil and Water Conservation District office.

Soil Science Simplified, 3rd Edition. 1997. Milo I. Harpstead, Thomas J. Sauer, and William F. Bennett. Iowa State University Press, Ames, Iowa.

Soils and Landscapes of Minnesota. 1984. University of Minnesota Extension Service FO-2331. To order copies call 1-800-876-8636 or visit our web site at <http://www.extension.umn.edu>.

The Soul of Soil. 3rd Edition. 1995. G. Gershuny and J. Smillie. agAccess.

This book is an overview of how soil works, practical ideas for monitoring soil, and a summary of effects of different management practices. It is aimed at the "organic" farmer, but applicable to other methods. Available from agAccess at 1-800-540-0170.

Start with the Soil. 1993. G. Gershuny. Rodale Press. A guide to organic soil improvement. Available by contacting Rodale at 1-800-914-9363.

Whole Farm Planning: Combining Family, Profit, and Environment. 1998. University of Minnesota Extension Service BU-6985.

To order copies call 1-800-876-8636 or visit our web site at <http://www.extension.umn.edu>.

Maps

Aerial photos

The local Farm Service Agency (look in the phone book under U.S. Government, Agriculture Department.) will provide a photocopy of their most current base maps (usually from about 1991). They may also provide a copy of the slide they take every year for compliance verification.

Soil Surveys

A copy of the county Soil Survey is generally free to county residents. Contact the local Soil and Water Conservation District (look in the phone book under U.S. Government, Agriculture Department, Natural Resources Conservation Service). These maps show the boundaries of different soil types across your farm, descriptions of the soils, and can be copied and used as base maps for planning soil management.