A Minnesota milk house. Location unknown, circa 1940. (MHS photo)

# INTRODUCTION

This study of historic farm resources in Minnesota was conducted in 2003-2005 by the Minnesota Department of Transportation (Mn/DOT) through its consultant Gemini Research.

A separate study of historical archaeological resources on Minnesota farms comprises Volume 4 of this study. The historical archaeological volume was prepared by Michelle Terrell of Two Pines Resource Group, LLC.

Mn/DOT has responsibility under state and federal law to take significant cultural resources – including historic farms – into consideration during project planning, and frequently develops plans for roadway improvements that potentially affect farm properties.

Mn/DOT prepared this historic context study as a way to help streamline the environmental review process that accompanies highway project planning.

The study will help Mn/DOT determine which historic farm resources meet the eligibility criteria of the National Register of Historic Places, a benchmark of significance for federal agencies and their funding recipients. This study will also help Mn/DOT make better-informed decisions as it seeks ways to avoid, reduce, and mitigate potential adverse effects to significant historic properties.

Jackie Sluss and Liz Abel of Mn/DOT's Cultural Resources Unit and Susan Roth and Dennis Gimmestad of the State Historic Preservation Office (SHPO) served as technical advisors for the context study. The project continued work begun several years ago by BRW, Inc., Mississippi Valley Archaeology Center, and Rivercrest Associates, all under contract with Mn/DOT.

This study was conducted by Susan Granger and Scott Kelly of Gemini Research. Special thanks are extended to Les Lindor, agricultural engineer, and Harley Hanke, animal specialist, both retired from the West Central School of Agriculture and Experiment Station in Morris, and to Dr. Gene Anderson, longtime Morris veterinarian. Many thanks also to Chris Butler, Arden Granger, Kay Grossman, John Lauber, Virginia L. Martin, Liz Morrison, Annie Olson, and Tami K. Plank, all researchers and writers who worked on this project.

Storing hay in a dairy barn. Location unknown, ca. 1910. (MHS photo by Harry Darius Ayer)

# OBJECTIVES AND METHODS

## ▪ OBJECTIVES

The principal goal of this study was to produce a tool that would help the Minnesota Department of Transportation (Mn/DOT) to more efficiently assess the significance of historic farm resources in Minnesota. It is Mn/DOT's responsibility under federal and state law to take significant cultural resources into consideration during project planning. Determining which resources are significant is an important step in this environmental review, and this project was designed to help streamline that process. Another important user of this tool is the State Historic Preservation Office (SHPO), which works with Mn/DOT and other public and private parties to help identify Minnesota's significant cultural resources and assist in their preservation. Like Mn/DOT, the SHPO frequently encounters farm resources in its work and needs tools to help understand and evaluate them.

## ▪ PROJECT SCOPE

### GEOGRAPHIC AND TEMPORAL LIMITS

This historic context study included the entire state of Minnesota within its scope.

The beginning date of the study was set at 1820, the year after the first soldiers arrived at Fort Snelling and the likely start of intensive Euro-American agriculture in present-day Minnesota. The ending date was set somewhat arbitrarily at 1960. Using 1960 as an ending date allowed the study to include resources built in the 1950s that are associated with far-reaching, post-World War II changes in farming. This ending date also allowed the study to include resources that will reach 50 years of age during the first few years the study is in use. (One of the requirements of National Register eligibility is that a resource be at least 50 years old.)

### TYPE OF PROPERTIES

The study was designed to focus on the most common kind of Minnesota farm: a farm developed and operated by a small group of people, usually a single family. The project did not study other types of farms such as communal farms or farms operated to serve companies or institutions. While these uncommon farm types are not directly addressed in the study, much of the contextual information contained in this report will also apply to them.

The study focused only on resources located on farms. Agricultural resources located off of farms (e.g., mills and creameries located at rural "crossroads," or grain elevators located in towns) were not included. Rural resources not directly related to farming (e.g., township schools, meeting halls, and rural churches) were also excluded.

This study focused on Euro-American farms. Special farming practices or resources associated with Native American agriculture, for example, were not included.

The bulk of this study focuses on standing structures. Historical archaeological resources are considered separately in Volume 4.

## ■ PREVIOUS RESEARCH

The development of Minnesota's agriculture in all of its economic, technological, and political complexity has been the subject of considerable research and writing. However, there are relatively few sources that specifically focus on cultural resources on Minnesota farms. There have also been many typological studies of farm structures in various parts of the U.S., but few that specifically consider Minnesota resources.

Fairly recent works that discuss historic farm resources in Minnesota include:

Amato, Anthony J., Janet Timmerman, and Joseph A. Amato, ed. *Draining the Great Oasis: An Environmental History of Murray County.* Marshall, MN: Crossings Press, 2001.

Brinkman, Marilyn Salzl. *Bringing Home the Cows: Family Dairy Farming in Stearns County, 1853-1986*. St. Cloud: Stearns County Historical Society, 1988.

Brinkman, Marilyn Salzl, and William Towner Morgan. *Light from the Hearth: Central Minnesota Pioneers and Early Architecture*. St. Cloud: North Star Press, 1982.

Gudmundson, Wayne, with text by Suzanne Winckler. *Testaments in Wood: Finnish Log Structures at Embarrass, Minnesota*. St. Paul: Minnesota Historical Society, 1991.

Hart, John Fraser, and Lisa M. Rainey. "Redundant Farmsteads in Minnesota." *CURA [Center for Urban and Regional Affairs, University of Minnesota] Reporter* 28 (1998): 1-6.

Henning, Barbara J., Dale R. Henning, and Timothy E. Roberts. *Mn/DOT Farmstead Study: The Cutover Region of Northeast Minnesota.* Prepared for Mn/DOT by Rivercrest Assoc., Inc., 1999.

Kooiman, Barbara M, Charles Moffat, Wendy K. Holtz, and Vicki L. Twinde. "Minnesota Statewide Farmstead Study: Focal/Cash Crop Region, Southwestern and Western Minnesota. Draft." Prepared for Mn/DOT by Mississippi Valley Archaeology Center, 2000.

Martens, Steven Cleo. *Ethnic Tradition and Innovation as Influences on a Rural Midwestern Building Vernacular.* Master's Thesis. University of Minnesota, 1988.

Mead and Hunt. "Minnesota's Historic Agricultural Landscapes Phase I Report." 1997.

Mead and Hunt. "Minnesota's Historic Agricultural Landscapes Phase II Report." 1998.

Noble, Allen G., and Hubert G. H. Wilhelm, ed. *Barns of the Midwest.* Athens, OH: Ohio University, 1995.

106 Group Ltd. and SRF Consulting Group. *Preserving Historic Farms in Blue Earth County: A Case Study of the Arnold Family Farm.* Prepared for the Blue Earth County Highway Department, 1996.

Peterson, Fred W. *Building Community, Keeping the Faith: German Catholic Vernacular Architecture in a Rural Minnesota Parish*. St. Paul: Minnesota Historical Society, 1998.

Peterson, Fred W. *Homes in the Heartland: Balloon Frame Farmhouses of the Upper Midwest, 1850-1920*. Lawrence, KS: University of Kansas, 1992.

Peterson, Garneth O., and Bruce R. Penner. "Minnesota Farmstead Study: Southeastern and Central Region." Prepared for Mn/DOT by BRW, Inc., 2000.

Slattery, Christina, Kathryn Franks, and Amy Squitieri. "Nansen Agricultural Historic District." National Register of Historic Places Registration Form. 1999.

Sluss, Jackie, Suzanne Rhees, and Christine Carlson. *Managing a Working Landscape: A Protection Strategy for the Nansen Agricultural Historic District, Goodhue County, Minnesota.* Prepared for the State Historic Preservation Office by BRW, Inc., 1999.

Sluss, Jackie, Suzanne Rhees, and Christine Carlson. *Preserving Minnesota: Inventorying, Managing and Preserving Agricultural Historic Landscapes in Minnesota.* Prepared for the State Historic Preservation Office by BRW, Inc., 1999.

## METHODS

### PERSONNEL AND PROJECT SCHEDULE

The study was conducted by Gemini Research of Morris, Minnesota, with Susan Granger serving as principal investigator and Scott Kelly as investigator. Other researchers and writers were Chris Butler, Arden Granger, Kay Grossman, John Lauber, Virginia L. Martin, Liz Morrison, Annie Olson, and Tami K. Plank.

The project was conducted over a 20-month period from November 2003 through June 2005.

### RESEARCH

This was primarily an endeavor of research and writing, without a field survey component. Gemini Research conducted only limited fieldwork to learn about specific farm resources, to test theories developed during the course of the research, and to help develop and refine evaluative criteria.

Developing comprehensive criteria to help evaluate the National Register eligibility of farm resources would have been greatly helped by a statewide survey of extant farm resources. Unfortunately, such a survey would be costly to conduct and was beyond the reach of this project. Because of this limitation, some of the conclusions reached by this project are provisional and should be modified in the future as new information is learned.

### RESEARCH QUESTIONS

The topic of the history of Minnesota agriculture is daunting in its breadth and complexity. Gemini Research tried to focus its efforts on those aspects of agricultural history that most directly affected the design and construction of the built resources on Minnesota farms. Some emphasis was placed on topics that had not been covered by previous studies.

Some of Gemini's research questions are listed in the original research design that appears as an appendix to this report.

**RESEARCH SOURCES**

Research was conducted using a range of sources. Most are listed in the Bibliography in this report's appendices. Among the most important sources were the following:

**Previous Cultural Resource Studies.** Gemini Research examined previous cultural resource studies prepared in Minnesota and other states. This helped Gemini learn from other authors' approaches and identify parameters and sources of information.

**Specialized Literature.** Gemini examined several types of specialized literature to help understand the physical evolution of farm structures and to identify and understand the factors that influenced the construction of farm resources. These materials included 1) farm periodicals and technical bulletins geared toward farmers (including those issued by the Minnesota Agricultural Experiment Station and the Minnesota Extension Service); 2) technical literature written by and for agricultural engineers; 3) farm building plan books; and 4) advertising from the manufacturers of farm equipment, building materials, and buildings.

**Historic Photographs.** Numerous historic photos at the Minnesota Historical Society were examined.

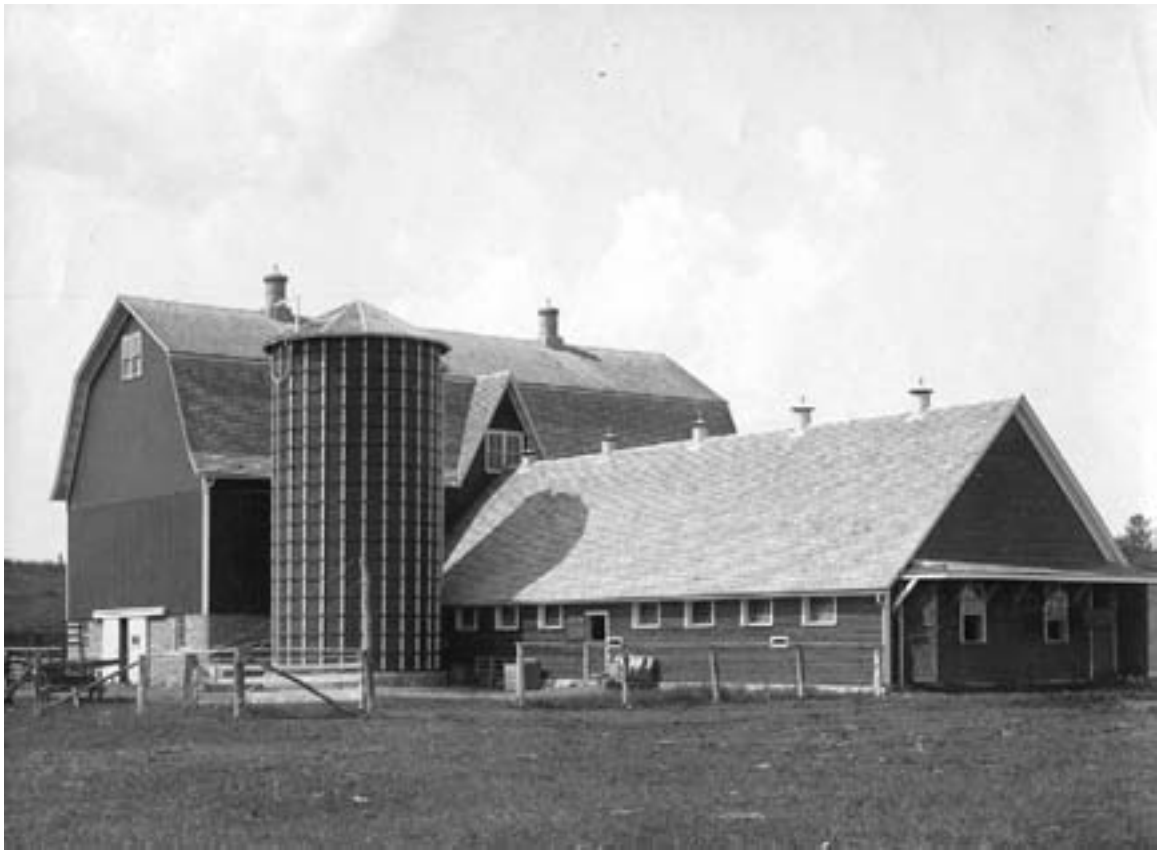
**Nominations for National Register-Listed Properties.** The nomination forms for all Minnesota farm resources currently listed on the National Register of Historic Places were reviewed.

**Inventory Forms for National Register-Eligible Properties.** Gemini reviewed inventory forms for all Minnesota farm resources recently determined eligible for the National Register through the SHPO review and compliance process.

**Expert Interviews.** Gemini consulted with several experts familiar with the development of Minnesota farm resources including agricultural school and experiment station faculty and staff (most retired) in agricultural engineering, animal husbandry, and agronomy.

## ■ RESULTS

This project resulted in the creation of a new statewide historic context entitled "Euro-American Farms in Minnesota, 1820-1960." This four-volume report is the principal final product of the study. The report's organization is based on precedents such as the National Register Multiple Property Documentation Form, and identifies developmental farming periods, individual farm elements or property types, and National Register eligibility requirements.



Schilling Farm, near Northfield, probably Rice County, circa 1910. (MHS photo by Harry Darius Ayer)

Poultry house. Rose Farm, location unknown, 1929. (MHS photo)