



Published
by the Minnesota
Historical Society
for local and county
historical societies
and heritage
preservation
commissions

THE MINNESOTA HISTORY Interpreter

December 1998 Vol. XXVI, No. 12

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History of Meatpacking in Albert Lea: New Exhibit by Bev Jackson Executive Director, Freeborn County Historical Society

For more than a century, the meatpacking industry has been an important part of the economy of Albert Lea and the surrounding farm community. The newest permanent exhibit at the Freeborn County Historical Society (FCHS) tells the story of this business from its beginning in 1877 to the present.

Before this exhibit, there were very few items in the museum's collection relating to meatpacking. A plea was made to area residents for anything they might have that could be included in this display, and the response was overwhelming. Meat hooks and knives, salesmen's gimmicks, photographs, promotional advertising, personal stories, employee newsletters and a medicine cabinet from the nurse's office were among the items donated to the museum.

Bev Jackson, FCHS executive director, designed the exhibit around several themes. Stepping into the largest display area, the visitor is surrounded by product containers, laboratory equipment, demonstration boards, processing tools, early office equipment, employee identification and union information, and promotional items.



Courtesy Freeborn County Historical Society

During World War II, many women replaced the men who had worked on the line at Wilson & Company. Elma Wangen is shown measuring hog intestines in preparation for use as sausage casings. This photograph is included in the interpretive notebook in the FCHS meatpacking exhibit.

Grants Deadlines, Winter Cycle State Grants-in-Aid Program

All organizations considering applying for grant funds are encouraged to contact the Minnesota Historical Society's (MHS) Grants Office for assistance while planning their projects and during the pre-application process.

Pre-applications are *required* for some categories (refer to the MHS *Grants Manual* for details) and *strongly recommended* for all projects.

Applications must be received in the Grants Office no later than 4:30 p.m. on the due date. The deadlines for the winter grant cycle are:

- Grant pre-application deadline: Feb. 4, 1999
- Grant application deadline: March 4, 1999
- Grants Review Committee meets: April 15, 1999

For further information or a copy of the current grants manual, e-mail Peggy Tolbert, MHS Grants Assistant, at peggy.tolbert@mnhs.org, or call her at 651/296-5434.

NOTE: Information related to MHS grants programs is now available on the Society's web site, www.mnhs.org.

Another case describes the earliest, turn-of-the-century meat processing businesses, and the third case shows protective clothing worn by present day employees. The displays tell of the Brundin brothers and their butcher shop on Broadway in 1877; the 70-year history of Wilson & Company; and later, when a variety of owners, both local and nationwide, maintained the industry as an integral part of the local business community.

Continued on page 2



Bemidji's Great Northern Depot: Future Home of the Beltrami County Historical Society

Five years ago, the Beltrami County Historical Society (BCHS) left its home in the Bemidji Waterfront area for the Beltrami County Fairgrounds and began to work on plans for a new and permanent

site. The Great Northern Depot in downtown Bemidji was selected. After considerable renovation work has been done, it will house BCHS and a new museum.



Courtesy Beltrami County Historical Society

The City of Bemidji now owns the depot, and will work with the county, BCHS and the Minnesota Historical Society. On completion of the project, the building will be leased to BCHS. The cost of the renovation is estimated at \$1.4 million. To help pay for it, the City of Bemidji received an appropriation of \$650,000 from the Minnesota State Legislature, which will be matched by Bemidji, Beltrami County and a \$100,000 commitment from BCHS.

As of mid-November, BCHS members' donations and pledges had exceeded \$14,000, and pledges and cash from businesses, organizations and foundations, contingent on county funding, total \$70,000. Renovation work is tentatively scheduled to begin in the spring of 1999.

For further information, contact the BCHS at 218/751-7824, or by e-mail at bchsm@bjj.net.

The Great Northern Depot was listed on the National Register of Historic Places in 1988 for its distinctive design and its significance in two historic contexts: the development of agriculture and railroad construction, and the timber industry in northern Minnesota from the 1870s to the 1920s. This is the Depot in September, 1998.

Meatpacking History Exhibit in Freeborn County

Continued from page 1

Otto Becker, the volunteer chairman of the FCHS Buildings and Grounds Committee, built a large U-shaped display case that allows the visitor to be nearly surrounded by Wilson & Company artifacts. Linda Evenson, FCHS librarian, and volunteer Georges Denzene used newspaper articles and other archival information as resources for the interpretive notebook that accompanies the exhibit. This notebook includes photographs taken of the earliest stock yards, various processing methods, and the large complex of buildings as it changed and was updated in the 120-year history of meatpacking in Albert Lea.

The notebook also includes selections from an *Albert Lea Tribune* cartoon series, "Hi-Lites and Shadows," researched and drawn by Irv Sorenson, which tells of unusual happenings at the plant. He

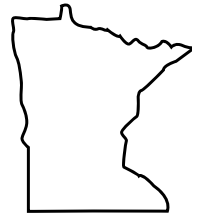
writes of the controversial sewer opening into Albert Lea Lake, the largest pig butchered, the first attempt at interstate meat delivery, and even the cutting of 15,000 tons of ice from Fountain Lake for use in refrigerated railroad cars.

Meatpacking in Freeborn County is a story of high-paying factory jobs, an easily accessible market for locally grown livestock, of strikes that made the national news, and of the impact of a major industry on the local economy during good times and bad. The addition of this exhibit filled a significant void in the museum collection and in the story of Freeborn County. A grand opening is planned for sometime in early 1999.

For further information, contact Bev Jackson at FCHS, 507/373-8003.

TECH TALK

This issue: Firearms • Part II



Conservation Treatments of Firearms by Paul Storch

Introduction

Once a condition survey of the firearms collection has been completed, following the suggestions in Part I, the treatment of objects that have been identified in the highest priority category for stabilization can begin. The following article describes the tools and techniques for proper disassembly and outlines procedures for cleaning and stabilization.



Cautions

Let me emphasize that this article is a general guide, not a substitute for the actual advice of a qualified professional conservator. I would also like to emphasize that older historic firearm types, such as matchlocks and wheel locks, should not be disassembled; many of these firearms do not have easily removable screws and pins. Note, too, that the procedures described in this article should not be used with highly ornamented firearms or those with stocks of exotic materials such as ivory and horn.

Extreme care and caution must be applied in the storage and handling of the solvents and chemicals recommended for the cleaning process. To accommodate the longest barrels, the fume hood should be at least 48 inches wide. If a fume hood is not available, an exhaust fan should be used as a minimal precaution. If engineering controls are non-existent or inadequate, then respirators must be provided and used according to the updated federal Occupational Safety and Health Agency (OSHA) respirator standard (29 CFR 1910.134). Both acetone and toluene are strong organic solvents, so do not breathe in their vapors. Keep skin exposure to all solvents to a minimum.

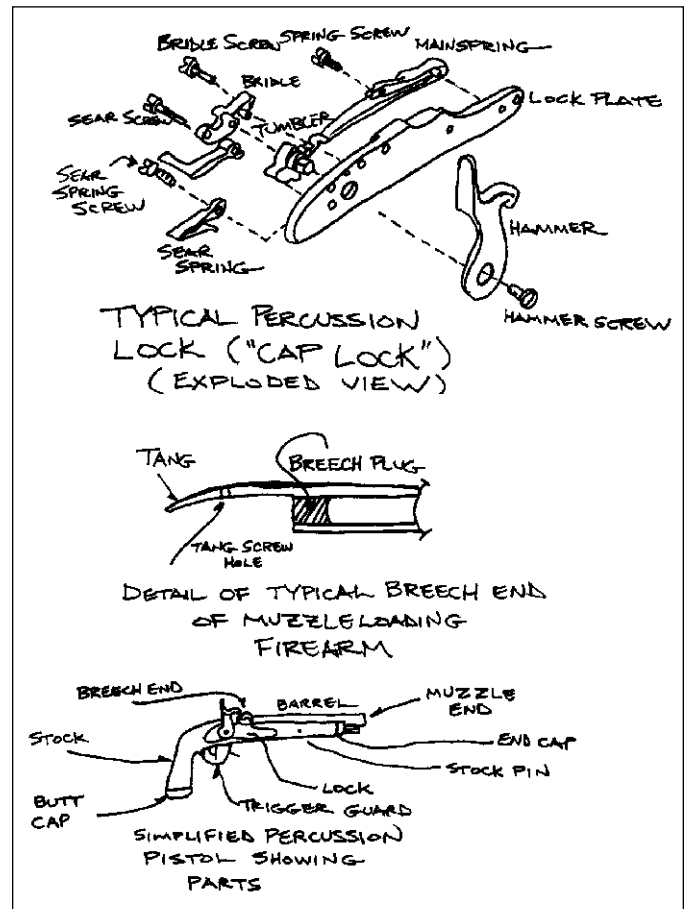
Smoking must not be permitted in the laboratory area while firearms, or any other objects, are being treated. Materials Safety Data Sheets (MSDS) must be on file for all chemicals being used.

These are available from the distributor and manufacturer. The Minnesota Pollution Control Agency (MPCA) and your local county PCA can be consulted for further details on the safe handling and storage of flammable solvents.

Disassembly and Treatment Procedures

The methods and procedures described below have been developed through experience with the treatment of 18th- and 19th-century American and

Figure 1 (right)
Schematic drawings of generalized firearms and components. (Not drawn to scale.)



Drawing by Paul Storch

European-made flintlock and percussion weapons, and are applicable to both short- and long-arms. Figure 1 (above) will help the non-conservator understand the terms used throughout this article that refer to the object components. Refer to the reference books listed in the bibliography for details on specific firearm models.

Editor's note:

TECH TALK is a bimonthly column offering technical assistance on management, preservation and conservation matters that affect historical societies and museums of all sizes and interests. Comments and suggestions for future topics are welcome.



Disassembly Procedure: Removing the Barrel from the Stock and Disassembling the Lock

1) *Removal of stock pins and wedges:* Gently tap out pins or wedges with a rawhide or wooden mallet and soft metal punch. Figure 2 shows a disassembled

Photograph by Paul Storch



Figure 2, above. A disassembled percussion-lock, muzzle-loading "Brown Bess"-type pistol, showing the components and standard tools used in the conservation treatment of firearms.

smooth-bore percussion pistol with the applicable tools. Look for evidence of previous removal to determine to which side of the stock the punch should be applied.

2) *Removal of tang screws:* Figure 3 (right) demonstrates the correct way to hold the gunsmithing screwdriver. Use a screwdriver head that fits both the length and width of the screw head.

3) *Removal of barrel from the stock:* Gently pull the hammer back to the half-cock position to free it from the pan or nipple. Turn the weapon over and, starting at the breech end, gently pull the stock upward while grasping the barrel as the barrel rests on the table. If the barrel is heavily corroded, it may adhere to the wood. A steady pressure will usually free it from the stock.

4) *Removal of lock from the stock:* Remove the side screw. Grasp the lock by the hammer and the front part of the lockplate and gently pull the lock straight out. Look for previous mends of the lock mortise area and try not to pull these out; however, if they do come out, save them for later repair.

5) *Disassembly of the lock:* Apply the mainspring vise to the mainspring. Make certain that the hammer is in the fired position, since this releases the tension on the springs. Let down the hammer slowly by carefully pressing on the *sear*, which is the lever near the rear of the lock. Remove the remaining parts.

6) *Removal of the trigger guard and assembly from the stock:* When the trigger guard and trigger assembly are held in with pins, do not remove them. If the trigger assembly is a double trigger (set type) mechanism, remove the large spring first. If other stock furniture is pinned to the stock, do not remove it. Butt plates can sometimes be removed and cleaned, if the screws holding them in turn easily. I would also discourage you from removing barrel plugs and percussion nipples from museum firearms, because the probability of damaging a unique object is so high.

Re-assembly

Re-assembly should proceed in the reverse order of disassembly. The mainspring on the lock should be replaced after the other lock parts are in place. Place the spring in its proper position, then compress it with the vise and slip the upper lip into the slot. Make certain it is properly seated, then remove the vise.

Figure 3, right. This shows the correct way to remove a screw from a historic firearm. Apply pressure perpendicularly to the screwhead while turning it. It is important to maintain this rigid perpendicular pressure to avoid stripping the screwhead.



Photograph by Paul Storch



Metal Cleaning

Degreasing: It is important that the following operation take place under a fume hood or with other adequate ventilation, using the proper gloves. Using cotton wool and cotton swabs, apply Stoddard's Solvent, or a similar mineral spirits-type solvent, to the metal parts. This should also remove surface dirt and some corrosion products.

Removing ferrous and non-ferrous corrosion: Apply a petroleum-based rust and lubrication oil such as WD-40 or the equivalent. **Do not use an oil with silicones or other "permanent" lubricant added.** Apply with cotton to both the patinated and unpatinated components. A mild steel brush and very fine steel wool (0000 grade and finer) may be gently used on heavily corroded, unpatinated parts.

Note: Brass brushes and scrapers, contrary to common gunsmithing recommendations, should not be used on exterior surfaces; brass is soft enough to leave a yellow metallic residue on the steel surfaces. Be careful to remove only the corrosion and not the patination layer. Avoid touching engraved and stamped areas with abrasive tools. Do not clean brass and silver parts until they shine. Remove the cleaning oil with acetone or mineral spirits; do not leave the oil on the parts as a coating. Following these steps may not remove all the corrosion, but it is good for first-level cleaning and stabilization. A conservator should be consulted for more difficult corrosion problems.

Cleaning barrel interiors: While holding the barrel over a solvent-resistant container, pour mineral spirits into the muzzle end. Discard dirty solvent in an approved container; do not pour down the drain. Secure the barrel in padded vises and clean it, using a brush of the proper caliber on the cleaning rod. Rinse out the barrel with solvent after each brushing, until the cotton patch comes out relatively clean. Finally, apply a liberal amount of rust inhibiting grease (called "RIG," sulfonated petroleum jelly) down the entire length of the barrel on a clean patch.

Coating metal parts: The best coatings to use are the Acryloid series of acrylic resins (Rohm and Haas; available from conservation supply distributors). Acryloid B-48N was formulated specifically for use on clean metal surfaces. Incralac is a similar polymer to B-48N, with the addition of a copper corrosion inhibitor. Both of these are soluble in toluene and xylene. Use a good quality natural bristle brush.

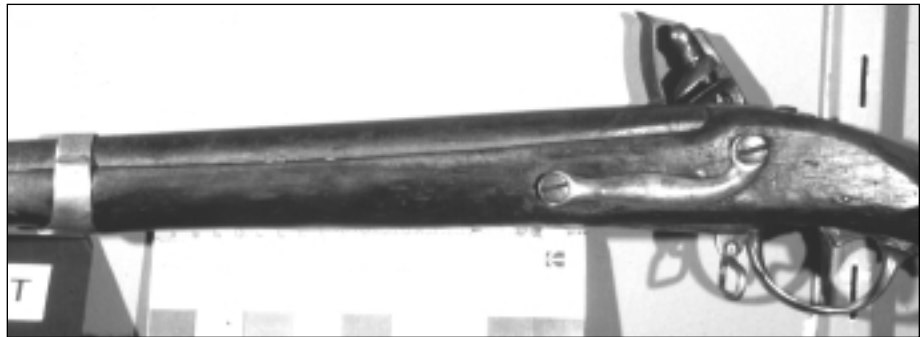
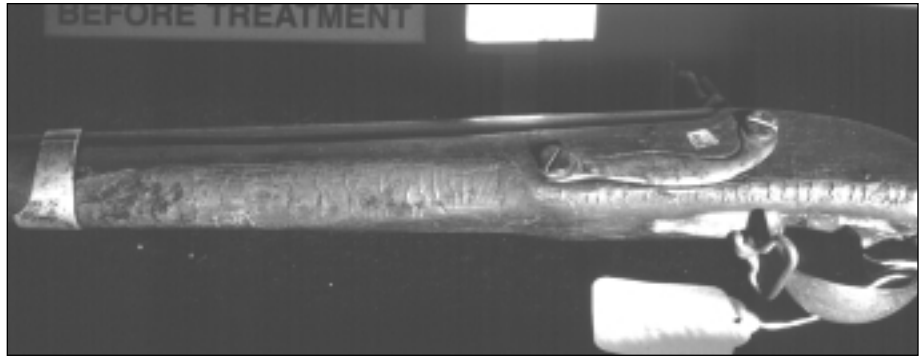


Figure 4a, right, above: Fire-damaged forestock. The wood is friable and fragile.

Figure 4b, right, below: Forestock after treatment by the author with consolidants and epoxy putty.

Photographs by Paul Storch, courtesy of Upper Midwest Conservation Association

Allow the parts to dry thoroughly before re-assembly. Reapply a small amount of coating to the screw heads after re-assembly. Coat the stock furniture before cleaning the stock.

Re-label the firearm: Refer to Part I of this article for a discussion of proper labeling procedures.

Cleaning the Wood

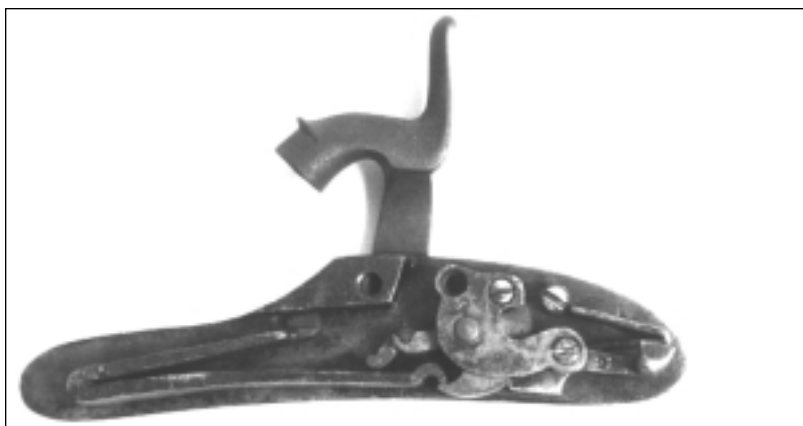
Removal of dirt and corrosion from the interior of the stock: Use Stoddards or mineral spirits on swabs. Do not soak the wood. Consult a conservator if insect damage or major breaks are found.

Cleaning the exterior: Use a mild soap, such as Murphy's Oil or Vulpex (available from conservation supply distributors) in distilled or de-ionized water at a dilution of 2-3 percent. Do not soak the wood. Wipe with a damp cloth after the soap application, then dry with a clean cloth. Consult a conservator if the finish is delaminating, water spotted, or needs other more involved treatment beyond simple cleaning.

Protective coating: Apply a good quality paste wax (without silicones) to the exterior surfaces of the wood. Petroleum-based microcrystalline waxes such



as Renaissance brand (available from archival and conservation supply distributors) or natural carnauba wax brands such as Butchers or Trewax are acceptable. The carnauba waxes are in turpentine. Follow the manufacturers application instructions carefully. Avoid waxing checkered areas of the wrist and forestock grip because wax makes it difficult to buff indentations and will dry to a light color, which is very visible.



Photographs by Paul Storch; courtesy of the Upper Midwest Conservation Association

Figure 5a, above: Exterior of percussion lock after re-browning and replacement of the hammer and hammer screw. Treatment by the author; the original tumbler was damaged.

Figure 5b, immediately above: Interior view of lock, showing replacement tumbler and assembly modification.

Other Levels of Treatments

It is important to know what should not be done to a historic firearm, and when the problem exceeds your skills and resources. Firearms that have been damaged by fire and/or water should be examined by a conservator prior to disassembly and cleaning. The use of epoxies or any other fillers or adhesives must be avoided except when applied by an experienced

conservator and their use is warranted by the condition of the object. (See figures 4a and 4b.) The procedures described above will clean and stabilize historic firearms with the minimum alteration of the original materials.

Do not attempt to “rebuild” parts, make replacement parts, or drastically alter the nature of the object by polishing or refinishing. There are cases when those operations may be performed, but other issues must be taken into account before they are applied. (See figures 5a and 5b.)

Always document each step of your treatment carefully with both photographs and written records. Note any special problems that arise during the treatment of the object. If followed carefully, these procedures should preserve both the historical and aesthetic value of a museum firearms collection.

Remember: Proper storage of firearms is also an essential part of preventive conservation. The firearms should be protected from dust and should be checked regularly for the recurrence of interior or exterior corrosion. Refer to Part I of this article for a more complete discussion of this topic.

FURTHER READING

The current Track of the Wolf, Inc. catalog has an extensive offering of books on the history and manufacture of historic firearms, and is also a good resource on the parts of the mechanisms:

- Edition 14-D, 1998-2000; Track of the Wolf, Inc.; P.O. Box 6, Osseo, MN 55369-0006
- McCann, Michael, “Respirators,” in *Art Hazards News*, Vol. 22, No. 3, 1998, New York.
- Fadala, S. and D. Storey, *Black Powder Hobby Gunsmithing*, Northbrook, Ill., DBI Books, Inc., 1994.
- Prytulak, G., “Threaded Fasteners in Metal Artifacts,” *CCI Technical Bulletin No. 17*, Canadian Conservation Institute, Ottawa, Canada, 1997.
- Storch, P. S., “Care and Handling of Firearms Part II: Disassembly and Cleaning,” in *Conservation Notes No. 9*, August 1984, Texas Memorial Museum, University of Texas at Austin, Texas.
- White, P. R., “The Care and Preservation of Firearms,” *CCI Technical Bulletin No. 16*, Canadian Conservation Institute, Ottawa, Canada, 1995.

Paul Storch has been objects conservator in the Daniels Objects Conservation Laboratory at the Minnesota Historical Society since January 1991. He is a frequent contributor to The Interpreter. Phone: 651/297-5774; e-mail: paul.storch@mnhs.org



Doing Local History on the Internet: Stearns County Historical Society Program

Community Quest, a program created by the Stearns History Museum (SHM), brings primary sources and historical artifacts into the classroom to give students the tools to help them study community history and understand their own relationships to their communities.

Available without charge on the Internet at www.stearns-museum.org, the program is adaptable for grades four through 12. It was developed to comply with the National Social Studies Standards and the Minnesota Graduation Standards, and its three units can be used in conjunction with the study of state history.

An Educator's Guide and Resource Kit is available to supplement the computer program. It includes the Internet text and several useful teaching aids and materials, such as a

video and a teacher's field trip packet. The kit costs \$295, plus shipping and handling, and can be purchased at the SHM store, 235 33rd Ave., St. Cloud MN 56301; 320/253-8424.

Funding for *Community Quest* came from several sources: the Institute of Museum and Library Services, a federal agency; Central Minnesota Initiative Fund; The Whitney Foundation; Laura Jane Musser Fund; and the Central Minnesota Community Foundation.

NOTE: The "Stearns History Museum" is the new name for the Stearns County Historical Society.



Above: One of the photographs on the program brochure.

History of Negro Leagues Exhibit at Minnesota History Center

In cooperation with the Negro Leagues Baseball Museum in Kansas City, Mo., the Minnesota Historical Society is presenting a mini-exhibit about a vital part of American history unknown to many people, even to many baseball fans. *Discover Greatness: An Illustrated History of Negro Leagues Baseball* includes many photographs, pennants, and a Hall of Fame locker display featuring some of the Negro League players who have been named to the National Baseball Hall of Fame at Cooperstown, N.Y. An accompanying display gives visitors a glimpse of black baseball in Minnesota, both amateur and professional.

The exhibit shows how men determined to participate in the national pastime refused to bow to the prejudice that organized baseball was not for them. It spans a period from before 1900 to 1959, when the last major league club fielded an integrated team.

The exhibit will be on display at the Minnesota History Center through March 14, 1999. For further information, call 651/296-6126.

MHS Field Services Coordinator Returns to Work

David Nystuen, Field Services Coordinator for the Minnesota Historical Society, is recovering from his recent illness and is now moving gradually into a full-time schedule. Though he can be reached by telephone, 651/296-5460, for the time being he prefers to communicate by e-mail: david.nystuen@mnhs.org.

REMEMBER: All changes of address and related information for the *Interpreter* and the *MHO Directory*—which is now accessible only through the MHS web site, www.mnhs.org—should be sent directly to David.





New Director at Chisago Historical Society

Sherry Stirling began work in September as the new executive director at the Chisago County Historical Society (CCHS). Prior to coming to CCHS, Ms. Stirling worked for the Chisago Soil and Water Conservation District. She has a bachelor's degree from the University of Minnesota and a master's degree from Webster University in St. Louis. She also served on active duty with the U.S. Army in the Vietnam war, retired as a colonel from the Army Reserve in 1994, and now operates a sheep farm north of Lindstrom with her husband, Warren Johnson.

Carol Bisek, CCHS executive director until February, now works at the Hazelden Foundation.

For further information, call CCHS at 651/257-5310.



New Grants Assistant at MHS

The Minnesota Historical Society has appointed Peggy Tolbert as Grants Assistant in the Grants Office of the Historic Preservation, Field Services and Grants Department. She will assist Mandy Skypala, Administrative/Grants Associate, in working with organizations applying for grant assistance under the state grants-in-aid program.

Ms. Tolbert has a master's degree in art history from the University of Iowa, and has worked in many museums. Associate registrar at the Minneapolis Institute of Arts for eight years, most recently she managed the historic fur trade site at Folle Avoine Historical Park of the Burnett County (Wis.) Historical Society.

She can be reached by phone at 651/296-5434 or e-mail at peggy.tolbert@mnhs.org.

Coordinator Position Open at Washington County Historic Courthouse

The Washington County Historic Courthouse, listed on the National Register of Historic Places, seeks a full-time coordinator to begin work in March, 1999. Duties include coordination of restoration work, volunteer and public programs; fund raising and budgeting; and directing staff and volunteers. Qualifications include a bachelor's degree in history, historic preservation, recreation, education or related field, and experience in administering public programs. Salary (1998 figures): \$30,449-\$40,068. Applications must be received by Friday, Feb. 5, 1999. Call the 24-hour service at 651/430-6084 for application instructions.

The **Minnesota History Interpreter** is published by the Historic Preservation, Field Services and Grants Department of the Minnesota Historical Society, and distributed to Minnesota's county and local historical societies and heritage preservation commissions.

Readers are invited to submit information for publication. To be considered, items must reach the editor by the 18th of the month, two months before publication (example: the deadline for the October issue is August 18). Send to: **Interpreter** Editor, Minnesota Historical Society, 345 Kellogg Blvd. W., St. Paul, MN 55102-1906; 651/296-8196 or jjm.smith@mnhs.org.

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Britta Bloomberg, Head, Historic Preservation,
Field Services and Grants Department
David Nystuen, Field Coordinator
James P. Smith, Editor

Send address changes to David Nystuen,
651/296-5460; e-mail: david.nystuen@mnhs.org.



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