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## 7,439 and counting

### Century Farms honor Minnesota's agricultural heritage

Looking for ways to celebrate Minnesota's first 100 years, planners of the state's centennial in 1958 focused on family farms. In a program co-sponsored by the Minnesota State Fair and Minneapolis Star and Tribune newspapers, 413 households in 32 counties were honored as Minnesota Century Farm Families - families who could prove continuous ownership of their land since statehood in 1858.

Eighteen years passed before the idea was revived for the nation's bicentennial in 1976. By then, the rules had changed. To qualify, Minnesota farms had to be at least 100 years old, encompass 50 or more

acres and be owned continuously by members of the same family. That year, another 1,177 farms were designated Century Farms by the Minnesota State Fair.

Fast-forward to the year 2001 and the program, now co-sponsored by the Minnesota Farm Bureau, is still going strong. "Every year we add 200 to 300 more farms to the list," says Ken Giannini, the state fair's group sales supervisor. "Most of those have



Stearns History Museum

The third generation of their family to farm near Watkins in Stearns County, Donald and Beverly Schmitt have switched from dairy to crop farming. Their operation won recognition as a Century Farm in 2000.

just turned 100 years old, but every once in a while we get a farm that's been in the same family since the 1860s. Though most century farms have had four generations of owners, some of the farms have had only two owners in 100 years."

Information gathered on the application form provides a brief history of each farm - from whom it was purchased, how many acres were in the original parcel, whether the first owner also had other trades or occupations, what the farm's major crops or products have been over time, whether any original buildings are still standing. All files eventually go to the Minnesota Historical Society archives.

## If objects could talk

by Fred Livesay

*Former curator, Carver County Historical Society*

Ever wandered into an antique shop, found something that intrigued you and wondered about the story behind it? That happens to me often in our collections storage at the Carver County Historical Society.

All objects can "talk." They can tell you much about themselves if you know how to "read" them - how to interpret what you see. But it's so much easier - and more rewarding - when the donor has left you with a personal history of their treasured possession.

Sadly, too many of our objects donated years ago cannot tell the stories of their past. Often, all the information we have is an accession number and the donor's name and home town. Sometimes, though, we come across a piece that speaks volumes.

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Century Farms continued on page 2

## Century Farms *continued from page 1*

“When you look at the Century Farm files together, they reveal a lot about how Minnesota developed,” says Giannini. “In the early years of the program, most farms added to the list were located in the southern half of the state. Only in recent years have we been getting applications from northern counties, which were homesteaded later. And in predominantly urban counties like Ramsey County, we won’t get any more applications because there are no more working farms there.”

Century Farm status is an honorary designation, explains Giannini. “It means a lot to the families but, unfortunately, it carries no protection. It won’t save their farm if the property is threatened by development or foreclosure.”

Qualifying families do receive a sign to display on their property and a certificate signed by the governor.

County fairs are encouraged to make an occasion of presenting the certificates. And a number of county historical societies annually honor their Century Farm families with displays in their museums or coverage in their newsletters. With a grant from Kraft Foods, Brown County Historical Society staff are gathering oral histories of past and present Century Farm owners for a major exhibit on Brown County Century Farms, slated to open in 2005.

Meanwhile, Ken Giannini extends an invitation to all state fairgoers. “Next time you’re at the fair, stop by the Minnesota Farm Bureau building. You’ll find, arranged by county, the names of all Century Farm owners on

Stearns History Museum



**Kenneth and Jeanette Lahr (right) and their children are fifth- and sixth-generation farmers in Luxemburg Township, Stearns County. During the 1920s and 1930s the Lahr family grew tobacco, then one of the county’s leading crops. The original hanging shed is still standing.**

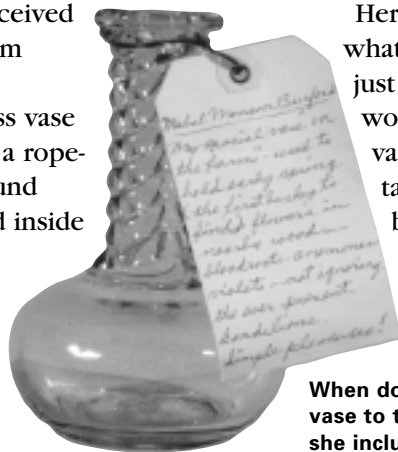
display. That’s 7,439 farms so far. And we’re still counting.”

*For further reading:* Century Farms of Minnesota: One Hundred Years of Changing Life Styles on the Farm, *edited by Dorothy L. Wanless (Dallas: Taylor Publishing Co., 1985).*

## If objects could talk *continued from page 1*

Among my favorite pieces in our collection is an unassuming little vase from one of our most generous donors. Two years ago I received a small box in the mail from Mabel Monson Burford of Watertown. In it was a glass vase barely six inches tall, with a rope-twist neck and smooth round base. Rolled up and tucked inside was a note:

“My special vase on the farm, used to hold early spring flowers – bloodroots, anemones, violets – not ignoring the ever-present dandelions.”



*Photo by Bill Johnson*

In her accompanying letter, Mabel described the “simple pleasures” of springtime in the country.

Her note gave life to what could have been just another artifact. Her words imbued that little vase with the ability to talk, to transport me back to her days as a young woman on a Watertown farm.

**When donor Mabel Monson Burford sent this vase to the Carver County Historical Society, she included a note about its importance to her.**

Mabel died last year at age 94. What she left us was a part of herself – and a small piece of the history of rural life in early 20th-century Carver County.

Next time *you* contemplate giving something to a museum, write down the stories associated with it. That object will have so much more to teach others.

# Caring for musical instruments: Part 1

by Paul S. Storch

*This is the first of two Tech Talk articles about the challenges of caring for musical instrument collections. Paul S. Storch, the Minnesota Historical Society's senior objects conservator, looks at common types of instrument materials and how they react to their environment. Part 1 covers instrument coatings, leather and plastics. Part 2, in the June/July Interpreter, will cover instrument metals, wood and textiles and discuss how to handle, display and store musical instruments.*

Collections of musical instruments generally contain a wide variety of materials, shapes and sizes. That makes their preservation a challenge to collections managers and museum curators. But by applying basic principles of preventative conservation – condition assessment, proper handling, safe storage – even nonprofessionals can ensure the long-term preservation of this popular category of artifact.

This article serves only as an introduction to a very specialized and complicated topic. For more detailed information on instrument types and their care, or for a discussion of the ethics of using historic instruments, refer to the list of resources to be published in Part 2. The more you know about the instrument materials and the problems in your own collection, the better informed you will be when seeking assistance from a professional conservator.

## The materials maze

To understand how to preserve musical instruments, you must first know what they are made of. The



**Fig. 1:** This autoharp, donated to the Minnesota Historical Society by Garrison Keillor, shows the variety of modern materials – plastic, metal and paint – used in its construction. This high-density plastic is more durable than earlier plastics, which deteriorate with exposure to light and heat. When acquired by the Society, Keillor's autoharp exhibited dust and dirt but little deterioration.

range of materials you are likely to encounter in your collection is considerable. You may find metal, wood, leather, plastics, textiles, even paper. And then there are the instrument coatings, both natural and synthetic.

The instruments that will be easiest to care for are those made of one primary material, such as brass for trumpets or wood for violins. Most instruments, however, have components of several different materials. Conservators call items made of multiple materials *composite objects* (see figures 1, 2 and 3). The care of these artifacts is much more difficult.

Several factors make the preservation of composite objects challenging. Sometimes the materials are not compatible. They may affect one another chemically. Or they may

respond differently to changes in relative humidity. For example, wood and metal have different expansion rates so, when exposed to higher humidity, the wood on an instrument might split where it is restrained from expanding by a metal ring.

In Western instruments of the later 19th and 20th centuries, one may find materials that have an innate tendency to deteriorate. This is called an *inherent vice*. Examples of materials with an inherent vice are certain types of plastics, such as celluloid (cellulose nitrate), which turns yellow and becomes brittle over time upon reaction with atmospheric oxygen.

The condition of any musical instrument depends on these and many other factors – the original

*Caring for instruments continued on page 4*

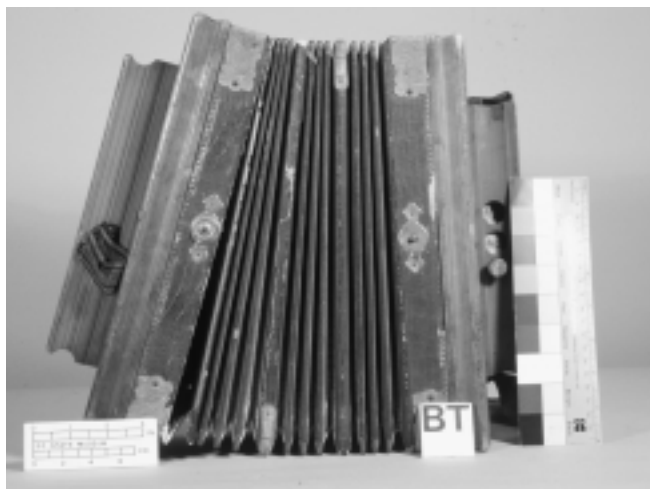
## Caring for instruments

*continued from page 3*

quality of the material, the amount of wear to which the instrument was subjected, the level of care it was given by its owner and the subsequent storage or exhibit conditions to which it was exposed. For an overview of instrument materials and the environmental factors that contribute to their deterioration, see Table 1. The characteristics of coatings, leather and plastics are discussed below. Metals, wood and textiles will be discussed in Part 2 in the June/July Interpreter.

### Coatings

Coatings are applied to musical instruments usually to alter or disguise the surface appearance. Many types of coatings have been used by various cultures throughout the centuries. The major categories of coatings found on the structural materials, or basic substrate, of instruments are pigment; paint (pigment or dye with a binding medium); lacquer or varnish; oil or wax; veneer; paper, leather or textile;



**Fig. 2:** The mix of wood, textile and paper components on a Civil War-era concertina makes the instrument a composite object. Care of such items, made of multiple materials, can pose special challenges.

enamel or glaze; and plating and patination (on metal).

Wherever these surface coatings are applied, there is the potential for physical and chemical interaction. When the coated surface is obscured by dirt and tarnish, as in the case of metal instruments, it may be difficult to identify the coating and to discern the original appearance of the instrument's surface. It is important, therefore, that surface coatings be carefully examined and fully documented by someone with knowledge of the instrument's construction *before* making decisions about care and treatment.

Perhaps the coatings most commonly found on instruments in museum collections are lacquers and varnishes (see fig. 4). Both coatings are made of natural or synthetic resins

or gums, deposited on the instrument surface through the drying of a solvent. Varnishes may also contain drying oils, such as linseed. Lacquers (the term is used here in its European sense) and varnishes differ from paints in that they are transparent. They may, however, contain pigments or dyes to color the instrument surface.

Both lacquers and varnishes are sensitive to ultraviolet light, which can degrade the coating materials, leading to yellowing, cracking and brittleness. And, as with



**Fig. 3:** A bottom view of the concertina in fig. 2 reveals damage from improper handling: the bellows are badly worn and the leather strap is torn.

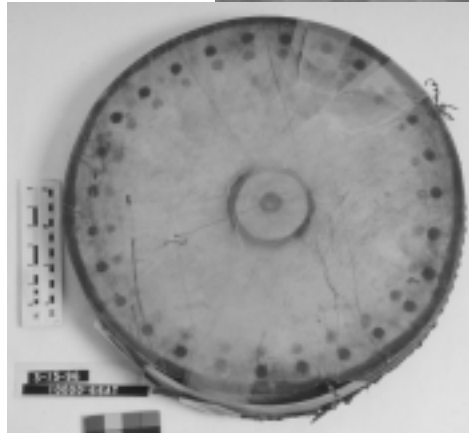
paint, when complete films of lacquer or varnish are applied to objects that expand and contract, the coating can crack and loosen. This problem is seen mostly on wooden surfaces, but transparent coatings on metals that have been heated and cooled may show the same problem. The breakdown of lacquers on metals can lead to spotty local corrosion; cellulose nitrate coatings are particularly prone to this.

### Leather

Leather is used in various forms and preparations on both European and non-European instruments. To make it durable and moisture-resistant, raw hides to be used for instrument construction must be treated with chemicals known as tanning agents. Vegetable tanning is used where flexibility and water resistance are required. Mineral tanning agents such as alum impart durability but do not have great water resistance. Their use also results in lighter surface colors. Organ bellows, bagpipe bladders and other instrument components of European manufacture are generally made from vegetable-tanned or combination-tanned cowhide or goatskin.

Condition problems that apply specifically to leather objects include surface abrasions, tears, distortion of the original shape, excessive dryness and, less commonly, excessive wetness, mold, insect infestation and the fading of dyes and colorants. A condition called red rot, caused by excessive acidity in the leather, often affects late 19th-century instruments. Red rot is evidenced by loss of the grain layer, exposing the inner fibrous layer; by a powdering of the exposed surfaces, creating a reddish-orange color; and by a darkening of the leather on contact with water. Leathers in this condition must be handled very carefully to avoid irreversible damage. An instrument exhibiting the effects of red rot must not be played for any reason.

In many non-European instruments, and some European ones, the skin material of choice for drumheads is untanned rawhide. In some African instruments, semi-tanned

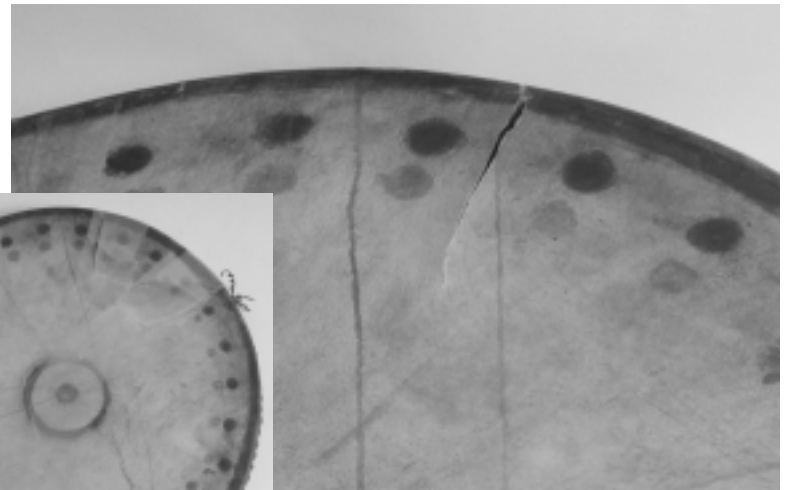


**Fig. 6:** Conservation treatment repaired the split drumhead. To prepare the object for storage, it was bound with a polyethylene strip to support the repairs.

fur skins are used. Rawhide is prepared by removing decayable matter and hair from the hide and allowing it to dry into the desired shape. Rawhide is extremely susceptible to damage by insects, fungus and fluctuations in temperature and relative humidity (see figures 5 and 6).



**Fig. 4:** The shellac coating on this violin brings out the luster of the wood. Note the white powder under the bridge – a dusting of rosin left by the bow during playing. Conservators chose to leave the rosin deposit in place as evidence of the instrument's use.



**Fig. 5:** This detail of an Ojibwe rawhide drum, made in the Mille Lacs area during the late 19th or early 20th century, shows how changes in temperature and relative humidity over the years caused the drumhead to split.

### Plastics

Plastics came into use in musical instruments in late 19th century. The term as used here denotes synthetic organic polymers and covers a wide range of materials. The earliest plastics – applied as decorative elements or as replacements for natural materials such as wood, bone and ivory – were celluloid (cellulose nitrate) and Bakelite (phenol formaldehyde composites). Modern plastics include high-impact polystyrene and high-density polyethylene and polypropylene (see fig. 1).

Plastics are most affected by long-term exposure to light, heat and certain chemicals. They are particularly susceptible to deterioration if the quality of the plastic was poor to begin with. Certain plastics, such as cellulose nitrate, have an inherent vice – an innate tendency to deteriorate. Though little can be done to prevent deterioration of an item with an inherent vice, the process can be mitigated with proper handling and stable exhibit and storage conditions.

**Caring for instruments** *continued on page 6*

Caring for instruments *continued from page 5*

**Table 1: Materials and the effects of deterioration agents**

Material	How used	Deterioration agents
<b>Coatings</b> – natural and synthetic	Surface protection, sound modification, decoration	Mechanical stresses; ultraviolet (UV) light; high relative humidity (RH) (>60%); oxidation; improper cleaning
<b>Leather</b> (tanned) and other skin products (untanned, semi-tanned)	Gaskets in wind instruments, organ bellows, pads, drum heads, banjo membranes	Very high (>60%) or very low (<20%) RH; insects; air pollution; inherent vice: “red rot” (see text)
<b>Plastics</b>	Instrument bodies, drumheads, organ and piano keys	Inherent vice: excess plasticizer; UV light; oxidation; mechanical stresses
<b>Metals</b>	Instrument bodies, frames, strings, wires, cables, drums, mechanical parts	High RH (>38%); acids from finger oils and dressed leather; mechanical stresses
<b>Textiles</b>	Reinforcements for wooden constructions	Extreme fluctuations in RH and temperature; light exposure causing brittleness or fading of organic colorants
<b>Wood</b>	Instrument bodies, sticks, bows, moving parts, cases, frames	High RH (>60%); very low RH (<20%); fluctuations in RH and temperature; insects; fungus (>65% RH); mechanical stresses; improper maintenance

*Watch for Part 2 of “Caring for Musical Instruments” in the June/July Interpreter. It will cover instrument woods, metals and textiles as well as recommendations for the handling, display and storage of a variety of instruments. Part 2 also will feature a list of references for further reading on the care of instrument collections.*

## ‘Sounds Good to Me’

### Exhibit takes a tuneful trip through Minnesota’s musical history

There are musical instruments aplenty in “Sounds Good to Me: Music in Minnesota,” an exhibit now on display at the Minnesota History Center in St. Paul. “We wanted to show the role music has played in the lives of ordinary Minnesotans,” explains curator Benjamin Filene. So instead of being organized by chronology or musical genre, the exhibit features a series of settings where music is produced and enjoyed – a home parlor, ballroom, concert

hall, high school bandroom, deejay booth, tent and music store.

The centerpiece of the exhibit’s parlor setting is a piano, a prized possession in many middle-class homes around 1900. Visiting students can make music the easy way with this 1914 player piano, which promised “perfection without practice.” For exhibit hours, call the



Minnesota Historical Society

Minnesota History Center, 651-296-6126 or 1-800-657-3773.

## Spring is in the air Garden projects brighten museum sites

Volunteers of all ages donned garden gloves last summer to add a splash of color to museums around the state. They braved rain, heat and insects to plant flowers and vegetables, shrubs and rose bushes, all designed to delight and educate visitors. The volunteers will be back this spring to make sure their gardens continue to flourish.

### Cox House, St. Peter

Everyone has a green thumb in Mariah's Victorian Garden Club, the volunteer group that tends the plantings around the Eugene St. Julien Cox House in St. Peter. Named for Mariah Cox, wife of the home's builder, the club has transformed the grounds of the 1871 house into a Victorian wonderland. In the front yard is a formal garden, all symmetry and elegance. The backyard is more informal, with perennial borders and an herb garden just outside the kitchen door.

"Horticulture plays an important part in our house tour," explains Cox House manager Gerry Tostenson.

"After the 1998 tornado here, we had an opportunity to start fresh. Now our plantings are as true to the period as possible." Club members got plenty of help last summer putting the finishing touches on their work. Several men from the community tackled heavier jobs, laying sod and building a garden shed. And a Lutheran youth group planted shrubs around the house and carriage house. Now, during summer and fall months, visitors to the site end their house tour with a stroll through the gardens. Call Tostenson at 507-625-1768 for more information.

### Treaty Site History Center, St. Peter

Not to be outdone, the Nicollet County Historical Society's Treaty Site History Center reaped a harvest of its own last fall. A group of young people from Kid Link, a program serving St. Peter's at-risk youth in grades 5-8, took over the center's Native American/Pioneer Garden. With heirloom seeds donated by a professor from Minnesota State University, Mankato, the children planted corn, sunflowers, squash and other foodstuffs that would have been grown by earlier inhabitants. At season's end they harvested seeds to use for this spring's planting.

"Participating youth benefited in many ways," says Tina Mielke, Kid Link project coordinator. "They learned about the history

of food-growing practices in the region, gained gardening skills they can use in the future and took great



Wright County Historical Society

Guided by master gardeners, the Willing Workers 4-H Club planted a rose garden at the Wright County Heritage Center.

satisfaction in the results of their community-service project." Kid Link plans to continue its involvement in the garden project. For more information call Mielke at 507-931-4210, ext. 424.

### Wright County Heritage Center, Buffalo

To help plant gardens around its new office addition last spring, the Wright County Historical Society turned to area 4-H clubs. From their collaboration grew the ambitious Children's Heritage Garden Project, designed as an exercise in researching community history. To plan their gardens, the 4-Hers started with lists of native vegetation from the Minnesota Department of Natural Resources. Then, armed with oral history questionnaires, they interviewed their families and neighbors to learn what other plants were grown in Wright County gardens before 1950.

In one day last May, dozens of 4-H club young people and their families descended on the Heritage Center to prepare the garden beds and plant more than 500 "heritage" plants donated by local greenhouses or transplanted from home gardens. The clubs will return this May to build on their successful first-year effort. For details call curator Maureen Galvin, 763-682-7322.



Eugene St. Julien Cox House

To raise funds for their Cox House garden projects, members of Mariah's Victorian Garden Club hold an annual heritage plant sale.

## 2001 is International Year of Volunteers

The United Nations has declared 2001 as the International Year of Volunteers, issuing a challenge to communities around the world to promote and celebrate volunteer service.

Volunteers play a key role in strengthening our communities. Each year in Minnesota alone, 66 percent of adults engage in volunteer activities with an estimated value of \$6.4 billion. Where would our museums, large and small, be without their help?

If you missed Volunteer Recognition Week in April, take time soon to honor and thank the many volunteers who donate countless

hours to keep Minnesota's historical organizations strong.

A note to managers of volunteer programs: The National Community Service Conference will be held in Minneapolis June 28 - July 1. Conference planners promise lots of new ideas on working together in service to communities. Registration is rather expensive but there's a price break for one-day attendance. For more information, see [www.PointsofLight.org/2001NCSC](http://www.PointsofLight.org/2001NCSC).

### Preservation workshops

Part of the Minnesota Historical Society's conservation outreach program, these preservation workshops are conducted by chief conservator Bob Herskovitz and co-sponsored by local organizations; they're free and open to the public. Call the local sponsors for details.

#### May 10, Renville:

##### Preserving Family Photographs

Renville City Library, 7:30-9 p.m.

*Sponsor:* Renville Genealogical Society: 507-641-3253.

#### May 17, Moorhead:

##### Preserving Your Family Treasures

Clay County Historical Society, 6:30-

8:30 p.m. *Sponsors:* Clay County

Historical Society, Moorhead

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