# RAMSEY COUNTY 1 S COUNTY A Publication of the Ramsey County Historical Society

Mystic Caverns
And Their Short-lived
Days of Glory

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Volume 35, Number 1

The Two Worlds of Jane Gibbs

The Gibbs Farm and the Santee Dakota

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"Guarding the Corn Fields," a watercolor by Seth Eastman, ca. 1850. This would have been a familiar scene for the young Jane De Bow Gibbs. Corn was a staple for the Dakota people. As a child, she lived near Cloud Man's village at Lake Calhoun in what is now south Minneapolis. Reprinted by permission from Seth Eastman: A Portfolio of North American Indians, Afton Historical Society Press. See article beginning on page 4.

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#### Message from Editorial Board

ost of this issue of Ramsey County History focuses on the Gibbs Farm Museum, Most of this issue of *Ramsey County Historical* Society owns in Falcon Heights. Over the past several years, the Society has expanded its interpretation of the Gibbs Farm to encompass both the white culture of the original owners, Jane and Heman Gibbs, and the Native American culture of the young Jane's friends, the Santee Dakota, in the first half of the nineteenth

Historian Julie Humann begins her article with an analysis of how Jane and the Dakota came to know and understand each other, beginning in 1835 when as a little girl, she lived hear the village of the Dakota chief, Cloud Man, in today's south Minneapolis. A key part of their mutually supportive relationship depended upon the genuine reciprocity that these representatives of the two cultures had for each other.

Writer Janet Cass complements Humann's descriptions of Dakota culture with an examination of Dakota gardening at the farm Jane and her husband, Heman Gibbs, later established. Cass writes of the plant species the Dakota commonly used, their gardening techniques, and the relationship their gardening had to other aspects of their culture. Lastly, she explains how the Dakota garden at the farm's site fits in with the museum's expanded interpretation. The Society welcomes any additional information that readers of this magazine can supply about these aspects of Dakota material culture.

This issue next moves to the world of commercial agriculture practiced by the Gibbs family and other Minnesota farmers from the end of the nineteenth century to the present. Retired University of Minnesota agronomist William R. Hueg, Jr., explains how the University acquired the rich farmland that once belonged to the Gibbs family and other early residents of Rose Township and built a world-renowned agricultural experiment station.

John M. Lindley, Chair, Editorial Board

## Gummy, Yellow, White Flint Corn The Dakota Garden at the Gibbs Farm Museum

#### Janet Cass

Fluffy clouds float by on a picture-perfect May afternoon. It is the "moon for planting" according to the Dakota Native American lunar calendar, and Tom LaBlanc is busy hoeing last fall's cornstalks out of the soil in the Dakota Garden he oversees at the Ramsey County Historical Society's Gibbs Farm Museum, a National Historic Site in Falcon Heights. Although the farm was established by Euro-American pioneers Jane and Heman Gibbs in 1849, some land in the region was already under cultivation by the Dakota and the museum offers a rare opportunity to see pioneer and native gardens sideby-side, and to compare the gardening techniques of two very different cultures.

Take those cornstalks, for example. Gardens generally are cleaned up in autumn as vegetation left standing in the fall can harbor overwintering pests. But for the native peoples of the Upper Midwest, it made sense to leave the vines and stalks of their beans, corn, squash, and sunflowers in the garden as winter fodder for their horses. Come spring, what little remained would be burned, its ash returning nutrients to the earth. Similarly, trees felled while clearing ground for a new garden were burned into fertilizer. This "softened the soil and left it loose and mellow for planting," Buffalo Bird Woman recalled in a memoir.

Although Buffalo Bird Woman was born around 1839 into a Hidatsa tribe in present-day North Dakota, her gardening methods were typical of those used by other peoples in the region, including the Santee Dakota, who occupied the eastern part of Dakota-controlled territory. "All [Native American] gardens in the Upper Midwest were pretty much alike," according to ethnobotanist Michael Scullin, professor of anthropology at the Minnesota State University at Mankato, "in



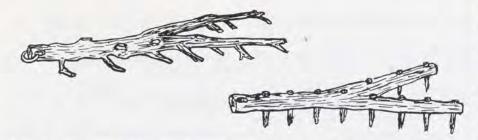
Owl Woman with Antler Rake, 1914. Photograph by Gilbert Wilson and used by permission of the American Museum of Natural History.

terms of crops grown (corn, beans, squash, sunflowers, and tobacco), technology (digging sticks and hoes and maybe a rake . . .) and techniques . . .".

While the Dakota of the mid-1800s and earlier were skilled hunters and foragers, some bands also gardened near the bark lodges of their summer encampments. Every summer, after their corn

had grown about a foot, a village would leave almost *en masse* to hunt buffalo. They would return during the "moon when corn is gathered" (August), cued by ripening milkweed pods.

Another cue was observed by French cartographer Joseph Nicolas Nicollet (1786–1843), whose United States government-sponsored expeditions in



A crude harrow, used to break up the topsoil so it could be planted or seeded. A pioneer farmer would fashion this by driving pegs into forks from trees but Dakota women often used a wooden stick or their own hands. Sketch from Farming in Early Minnesota.

1838 and 1839 produced The Hydrographical Basin of the Upper Mississippi River map and report. Nicollet's diary entry for Monday, August 13, 1838, notes: "The Liatris spicata indicates, when the flower is blue-red, that the corn is good to eat." L. spicata is commonly known as gay feather, dense blazing star, or button snakeroot.

Not far from the Gibbs farm was the Santee Dakota village of Chief Cloud Man, who decided to try agriculture after nearly perishing in a snowstorm while hunting buffalo. Missionary Samuel Pond lived near Cloud Man in the 1830s, and noted that the Dakota women "... never planted [seed corn] until they found ripe strawberries." (A useful reminder to those of us whose eagerness dooms plants to a late spring frost.) Dakota women, in fact, would have owned the gardens because they worked them.

And work they did, cultivating up to one acre per adult. The estimated yields of twenty to forty bushels of corn (Zea mays) per acre is impressive considering their tools: a wooden stick or bison jawbone used to break up the ground, their hands for patting seeds into the soil and for pulling small weeds, a bison shoulder blade hoe for extracting larger weeds, and a rake made from willow shoots or an antler.

With these tools the women grew Northern Flint corn, cultivated in this area since at least 1100 AD. Hardy, productive, and shorter than modern hybrid corn, it grows to an average height of four feet, with low-growing cobs that are shorter than modern ones. The three types of corn grown in the Gibbs Farm Dakota Garden-Gummy, Yellow Flour, and White Flint-are all varieties of this plant.

Gummy corn was traditionally made into balls which were eaten while traveling, as well as used to flavor other foods. Yellow Flour corn was cooked into mush or parched so that it could be carried as traveling food. White Flint corn was added to stews or cooked into mush. In addition, corn sometimes was harvested while unripe, to be roasted and eaten on the spot, made into bread, or dried for winter consumption.

Northern Flint corn's sixty to seventyday maturation is well suited to the short growing season of this zone 4 region. But such rapid growth makes it top heavy, and easily blown over by wind or driving rain, hence the native practice of mounding dirt around the base of the corn stalk to promote growth of prop roots and to mechanically stabilize the plant. (Until I tried this technique, my corn plants were routinely toppled by summer storms.)

"Striped pumpkin" squash (Cucurbita pepo) also is grown in the Dakota garden, similar to squash cultivated in the area nearly 1,000 years ago. These would have been eaten at every stage of plant development, from flower to fruit, with squash leaf stems serving as spoons for stews. The old women of a village sometimes were hired within their community to help during the busy harvest season, using a bone knife to slice squash into rounds which were dried for winter food. Buffalo Bird Woman recalled that grandmothers sometimes would bring their granddaughters along to help at this task, and that little girls were allowed to select a squash from among those harvested. "Each little girl carried her squash about in her arms and sang for it as for a babe."

Also growing here are large white beans with a brown "shield," believed to have been introduced to the Dakota via trade with the agriculturally sophisticated Arikara peoples who lived in present day South Dakota. Lewis and Clark encountered the Arikaras while trekking westward in 1804, subsequently traveling north and bartering for vegetables with the Hidatsa, who, in turn, traded produce for Dakota animal hides and meat.

The Arikara Shield Beans (Phaseolus vulgaris) in the Dakota garden are traditionally planted in a row of mounds between every few rows of corn. This benefits the corn, since bean roots, like those of other legumes, increase the soil's concentration of nitrogen, which is important for overall plant health.

Which may be why Buffalo Bird Woman recalled that corn leaves yellowed—a sign of nitrogen deficiency when grown too close to another nitrogen-hungry crop, tobacco (Nicotiana quadrivalvis). Tobacco was grown by natives of the Upper Midwest for spiritual and ceremonial use, its rising smoke believed to carry prayers to spirits. Thus horticultural reasons and sacred attributes both may account for the native practice of growing tobacco in a plot separate from the main garden.

In another example of successfully working with the challenges presented by a particular plant, sunflowers (Helianthus annuus) were grown only along the perimeter of Dakota gardens to minimize their tendency to inhibit the growth of other plants (i.e. their allelopathic effect). Then, too, says Buffalo Bird Woman, "We thought a field surrounded thus by a sparse-sown row of sunflowers had a handsome appearance." Sunflowers were cultivated for their oil and protein-rich seeds. (For more about sunflowers see Early American Homes Gardens 1999.)



Wild rice winnowing tray made of birchbark. This is another of the replicated artifacts at the Gibbs Farm Museum.

For traditional Dakota, a successful harvest could mean survival in times of poor hunting. But just as importantly, the garden was a reflection of Native spirituality, both as a source of sacred tobacco and as an annual reminder of the people's kinship with the natural world.

Like many other Native American cultures, Siouan tribes-linguistically related groups which include the Dakotarevered corn as a symbol of Mother Earth and her abundance. That reverence continues today, with prayer ties fastened onto each of the four sides of the Gibbs Dakota Garden.



Indian sap bucket. Sketched by Edward J. Lettermann for Farming in Early Minnesota.

Another horticultural connection to Native American heritage began last summer with the installation of the Gibbs Farm's first ever Native American Children's Garden. Here, Native American youngsters worked alongside tribal elders, who orally transmitted their culture's lore. Seeds representing a variety of native people were planted, including Mandan red pole bean, Cree corn, and Winnebago (Oklahoma) pumpkin. Beans and corn were planted in the same hills in Seneca fashion.

Seeds for both the Children's Garden and the Dakota Garden came from scattered families who maintain traditional crops, and from Michael Scullin. Children's Garden director Paul Red Elk says that his sponsoring organization, The Dream of Wild Health Network (which is lent space by Gibbs Farm), is propagating these plants in hopes of becoming "the Seed Savers Exchange for Midwestern Native American seeds.'

Although a bean closely resembling the Arikara Shield Bean (the Hidatsa

Shield Figure Bean) is available from Seed Savers Exchange, seeds for most of the plants grown in these gardens aren't yet commercially available. However, it's clear that the soil at Gibbs Farm is nourishing something equally important: an understanding of some of our country's earliest inhabitants.

Minnesota-based freelance writer Janet Cass gratefully acknowledges Early American Homes magazine's permission to reprint this article, most of which first appeared in Early American Homes Gardens 2000. Reprinted with permission of Early American Homes magazine, a publication of Celtic Moon Publishing, Inc. She also acknowledges the generosity of Professor Mike Scullin and of the Ramsey County Historical Society staff in providing some of the information used herein.

#### **Visitor Information**

#### Gibbs Farm Museum,

open May through October 2097 West Larpenteur Avenue Falcon Heights, MN 55113 651-646-8629 www.rchs.com/nuGrdn1.htm

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Minnesota Landscape Arboretum, 3675 Arboretum Drive, Chanhassen, MN 55317-0039, 612-443-2460.

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"Sioux Indians," an 1851 watercolor by Johann Baptist Wengler, Oberosterreichisches Landesmuseum, Linz, Austria. Wengler painted this at a time of transition for the Dakota people. The dress of the man suggests a ceremonial costume and the lance probably was for parade use, but the women's dress reflects their gradual adoption of the clothing of the white community. Photo by F. Gangl and reproduced by permission of the museum. See article beginning on page 4

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