

### Minnesota Plant Press

The Minnesota Native Plant Society Newsletter

Volume 22 Number 4 Summer 2003

#### Monthly meetings

Minnesota Valley National Wildlife Refuge Visitor Center, 3815 East 80th St. Bloomington, MN 55425-1600 952-854-5900

6:30 p.m. — Building east door opens

6:30 p.m. — Refreshments,

information, Room A

7 – 9 p.m — Program, society business 7:30 p.m. — Building door is locked

9:30 p.m. — Building closes

#### **Programs**

The MNPS meets the first Thursday in October, November, December, February, March, April, May and June. The next meeting will be Thursday, Oct. 2. Check the Web site for more information on programs.

## Dues for individual members are changed

At their June 22 meeting, MNPS board members voted to raise individual dues from \$12 to \$15. No other categories were changed. Family memberships (two or more related persons at the same address) remain \$15. Dues for full-time students and seniors (62 or over or retired) are \$8; institutions, \$20; donors, \$25.

The membership year starts Oct. 1. A member registration form is on page 7 of this issue.

#### **MNPS** Web site

http://www.stolaf.edu/depts/biology/mnps e-mail: MNPS@HotPOP.com

#### **MNPS** Listserve

Send a message that includes the word "subscribe" or "unsubscribe" and your name in the body of the message to: mn-natpl-request@stolaf.edu

# Member finds dwarf iris new to Minnesota

by Ron Huber, MNPS member and museum associate, Science Museum of Minnesota.

[Figures 1 and 2 are included as an insert in the mailed copies of this newsletter and as PDF files with the e-mail edition.]

On May 30, 2002, while my wife, Cathy, and I were exploring various portions of Minnesota Hill in northern Roseau County, we discovered a small patch of a beautiful little dwarf iris that we could not identify. Betsy Betros, our traveling companion from Kansas, took several photographs of the overall patch, plus some individual plants, including a few nice close-ups of the sepals. Most of the plants appeared to be 10-12 inches tall, just barely above the grasstops.

Robert Dana of the Minnesota DNR Heritage Program examined the 35 mm slides and identified the iris as the Eurasian *Iris pumila*. Figure 1 is a group shot, while Figure 2 is a close-up of a single flower. Note the small patch of erect white "beard" in the center of each sepal in Figure 2, a distinguishing feature of this species. Robert said that the iris has been previously reported in Maine, Michigan, Wisconsin, Illinois and Missouri. In Michigan, Voss (1972:431) records it from two lower peninsula counties, noting, "apparently escapes from cultivation or perhaps only persisting where dumped." The Roseau County record appears to be the first known for Minnesota.

Minnesota Hill is a deep sandy ridge that runs northeast-southwest and is located roughly 10 miles north and four miles west of the city of Roseau. It is also about four miles east of the little community of Pinecreek. Minnesota Hill is apparently a three-mile-long remnant of one of the beach lines from glacial Lake Agassiz. It is a very interesting area, with an amazing floral and faunal diversity. We seem to find something different on every visit. The *Iris pumila* was in the southeast quarter, Section 30, Township 164 North, Range 40 West, less than half a mile south of the International Boundary obelisk.

The area immediately south of this boundary marker is being slowly excavated for sand, and what was once a level, sandy, conifer-studded barren in the 1970s is now, unfortunately, a very large pit some 15 –

Continued on page 3

# Jason Husveth elected president of the MNPS

## Northern Tallgrass Prairie bill supported in Senate

Sen. Tom Harkin (D) of Iowa announced July 9 that \$470,000 in funding for the Northern Tallgrass Prairie National Wildlife Refuge was included in the Interior Appropriations bill. The bill was to go through the full Senate Appropriations Committee and was expected to be voted on in the Senate later in July. Harkin is a senior member of the committee.

"These funds are critical to the refuge's efforts to acquire and preserve additional land," he said. "If the refuge doesn't purchase the land soon, other buyers may take over the land."

The funds will be used to buy land in Western Minnesota and Northwest Iowa to preserve native prairie land. The goal is to preserve 25 percent of the remaining prairie through permanent conservation easements. Four species of plants and seven species of animals whose natural habitat is in this area are listed as endangered or threatened.

Jason Husveth was elected president of the Minnesota Native Plant Society at the June 22 board meeting. Linda Huhn was re-elected vice president. She is also program chair. Joel Dunnette and Karen Schik will share the duties of secretary. David Johnson was re-elected treasurer and membership chair.

#### Postcard volunteer needed

The board is seeking a volunteer to prepare and mail the meeting-notice postcards. Labels will be supplied. For more information, contact David Johnson at 763-571-6278 or MNPS@HotPOP.com

#### Plant-of-the-Month

Would you like to learn more about a favorite native plant? Linda Huhn, program chair, would like your suggestions for plants-of-the-month.

Do you have information on a native plant that you could present during the plant-of-the-month portion of one of the meetings?

Call Linda at 612-374-1435 with your suggestions for plants or to volunteer as a speaker.

### Minnesota Native Plant Society's purpose

(Abbreviated from the bylaws)

This organization is exclusively organized and operated for educational and scientific purposes, including the following:

- 1. Conservation of all native plants.
- 2. Continuing education of all members in the plant sciences.
- 3. Education of the public regarding environmental protection of plant life.
- 4. Encouragement of research and publications on plants native to Minnesota.
- 5. Study of legislation on Minnesota flora, vegetation and ecosystems.
- 6. Preservation of special plants, plant communities and scientific and natural areas.
- 7. Cooperation in programs concerned with the ecology of natural resources and scenic features.
- 8. Fellowship with all persons interested in native plants through meetings, lectures, workshops and field trips.

## MNPS Board of Directors

President: Jason Husveth, cciecology@att.net

Vice-President: Linda Huhn, 612-374-1435

Secretary: Joel Dunnette, dunnette.joel@mayo.edu

Shirley Mah Kooyman, shirley@arboretum.umn.edu

Janet Larson, janetl@supremecompanies.com

Daniel Mielke, WildMentha@yahoo.com

Douglas Mensing, dougm@appliedeco.com

Karen Schik, Secretary #2, kschik@fmr.org

Dianne Plunkett Latham, plunkettdi@mn.rr.com

Treasurer: David Johnson, MNPS@HotPOP.com

Listserv Coordinator: Charles Umbanhowar, ceumb@stolaf.edu

Minnesota Plant Press editor: Gerry Drewry, 651-463-8006; fax, 651-463-7086; gdrewry@infionline.net

Technical or membership inquiries: MNPS@HotPOP.com

### Fall prairie field trip to be Sept. 6

by Dan Mielke

I will lead a field trip to Peik's and Mielke's prairies in McLeod County on Sept. 6. The first site is a dry prairie; the second site is a wet prairie. The field trip will start at 9 a.m. The first site tour should last about two hours, while the second site tour can last into the afternoon. Feel free to bring water, snacks, or even a packed lunch.

From the Twin Cities, go west on Hwy. 212. Approximately 4.5 miles west of Glencoe the four-lane road becomes two lanes. Continue westward on Hwy. 212 for approximately four more miles. Ahead and to the west, a long, low, big hill with three clumps of trees on top will be visible. This hill is immediately south of Peik's prairie. As you see this hill, Hwy. 212 will bend towards the south and then come back to the west. At the bottom of this curve is a gravel road named Nature Ave. Turn right (north), cross the railroad tracks and the country road intersection. The prairie is on the left. Park on the right side of Nature Ave. This site is about 45 miles from Chaska. Directions to the second prairie site will be given out at that location.

Please feel free to bring a walking stick, as at this time of year there may be a few spiders in the grassland. Wood ticks will be non-existent. If we are lucky, we may be in the middle of the monarch butterfly migration. One year I saw as many as 250 butterflies clinging to an old willow tree on a windy day. Let's all hope!

I will try to limit this tour to 20 participants. If you have any questions, please contact Dan at wildmentha@yahoo.com. I am looking forward to this tour.

# Friends of Springbrook rally to save the Fridley Nature Center

Supporters of Springbrook Nature Center in Fridley are in the midst of a campaign to save the 127-acre nature center. On June 23, City William Burns Manager recommended closing facilities at the center and cutting its staff of three full-time employees and one parttime maintenance worker. This would save the city about \$300,000. A second threat is coming from council members who have proposed turning the park into a golf course or a housing development.

Burns said that if the budget cuts are made, the center would remain a passive recreational area. There would be no programs in the buildings, but trails would be maintained.

Springbrook has hosted nature programs since 1982. It has an

interpretive center with live animal displays, hiking trails, wetlands, native prairie and oak forests. It attracts about 150,000 people each year, according to Siah St. Clair, director of the center.

In 2002 the center began a wetland restoration process with the assistance of grants from the Minnesota Pollution Control Agency, the Metro Council, the McKnight Foundation and neighboring cities. Springbrook Creek enters the Mississippi just above the location where Minneapolis and many of its suburbs take their water. As a result, Springbrook Nature Center's drainage and water quality problems residents of municipalities. That restoration project is on hold until the fate of the center has been determined.

#### Iris discovery

#### Continued from page 1

20 feet deep and several hundred yards across. We are attempting to find out who is doing this excavation, but it is probably for road maintenance in the county. On the county map, the site appears to be part of the Lost River State Forest, and we will make an inquiry there as well.

We thank Betsy Betros for permission to scan the slides, Robert Dana for the identification, for checking the literature and Web sites and for doing the scans, and Deb Schoenholz, science publications specialist, Science Museum of Minnesota, for printing the two-sided color inserts.

#### **References:**

Voss, E.G., 1972, "Michigan Flora, Part 1, Gymnosperms and monocots." Cranbrook Institute of Science, Bloomfield Hills, Mich.

USGS Plants Database: http://plants.usda.gov/cgi\_bin/topics.cgi [IL, ME, MI, MO, WI]

Wisconsin: www.botany.wisc.edu/wisflora/hand/IRIPUM.gif

The campaign to save the center is being conducted by Friends of Springbrook. This organization was formed after Burns proposed the budget cuts. About 300 people attended a one-hour rally in front of Fridley City Hall July 10 to voice their support for saving the center. On July 14, about 250 people attended a city council meeting. The golf course proposal was on the agenda that night, but no decisions were made.

Friends of Springbrook is selling T-shirts, accepting donations and distributing lawn signs and bumper stickers. Their mailing address is P.O. Box 32722, Fridley, MN 55432. Information on the campaign is on the nature center's Web site, www.springbrooknaturecenter.org

## Orchid infatuation: Teenager's tiny hobby creates a big impression

by Lynn Underwood, Star Tribune Staff Writer

[This article was printed in the June 18, 2003 issue of the Star Tribune. Otto Gockman is a member of the MNPS.]

Otto Gockman uses typical teen expressions to describe his atypical hobby — growing orchids. But the 17-year-old isn't cultivating the bigbloomed phalaenopsis and cattleyas that sit on many coffee tables. He's enamored with pleurothallids, which are miniature – almost microscopic — orchids that he grows on cork or in tiny pots inside his basement orchidarium.

"This one has hairs that dangle and blow in the wind," Gockman said, gently touching the minute brown petals of a *Pleurothallis ornate*. An orange and yellow *Lapanthes pecunialis* resembles "a little jewel," he said. The long Latin names of the tiny orchids flow easily off his tongue, like the lyrics to a favorite pop song.

"Every species of orchid is so different in some way," Gockman said. "It's hard not to be intrigued by them."

Like larger, more common orchids, the pleurothallids boast long-lasting, vibrant colored blossoms in otherworldly shapes. But you may need a magnifying glass to see them; most are smaller than a thumb nail.

Gockman credits a photo in an American Orchid Society magazine for igniting his passion for pleurothallids. "A white one that was so small and different caught my eye," he said. He ordered the tiny *Ornithocephalus inflexus* and it launched his exotic orchid collection.

Miniature orchids thrive in the mountain forests of South and Central America, and many grow on moss-covered trees. The orchidarium built by his dad, Terry, re-creates the environment in his basement with a mister, grow lights and a humidifier.

But Gockman's orchid obsession started much closer to home. When he was 13, he discovered native orchids growing in Minnesota's woodlands and bogs. Hiking trips to photograph birds turned into hiking trips to photograph wild orchids. Today, yellow lady's slipper, showy orchis and green adder's-mouth are among the native orchids he grows in his back yard. Gockman also rescues wild orchids by moving them from areas where new housing developments are being built.

#### A mother knows

His mother, Jeanne Schacht, knew early on he was a budding naturalist. He was bird-watching by the time he was in kindergarten. And there were early symptoms of orchid fever during a 1999 trip to Canada.

"We were looking for elk in a bog," she said. "All of a sudden Otto saw a tiny pink orchid and started crawling around on his hands and knees looking for more. We were there for three hours."

It's no surprise that Gockman plans to study botany in college. "My dream job would be to discover new orchids in the rain forests around the world," he said.

For now, the Como Park High School junior is working part time at Orchids Limited in Plymouth, watering, repotting and helping in the lab. "I like being surrounded by orchids and I'm continuously learning more about them," he said.

"Otto has a great enthusiasm for plants," said owner Jerry Fischer. "Sometimes he gets side-tracked and stops to admire their beauty and diversity. Then it's 'where's Otto?"

Gockman said it's easy for him to get carried away with orchids, especially the under-appreciated and less-cultivated *pleurothallids*. "I'm doing my part in keeping the underdog plant around," he said.

Copyright 2003 Star Tribune. Republished with permission of Star Tribune, Minneapolis-St. Paul. No further republication or redistribution is permitted without the written consent of Star Tribune.

## Dakota County project receives award

The successful Dakota County Farmland and Natural Areas Project received the 2003 Merit Award from the Minnesota Chapter of the Soil and Water Conservation Society "for partnerships formed to accomplish perpetual conservation easements on farmland and natural areas in Dakota County."

As a result of this project, voters in November 2002 approved a \$20 million bond issue to preserve some of the most significant areas in the county. Applications to preserve farmland are now being accepted. Applications to preserve natural areas will be received this fall.

### Field trips feature wide variety of flowers

#### Spring Prairie tour

by Dan Mielke

On June 29 I led a field trip to two prairie sites in central Minnesota. One is a dry prairie owned by my uncle, Walter Peik. It consists of a three-acre sandy hilltop and 25-acre dry prairie restoration. The second site is a 20-acre wet prairie with ponds and sedge and cattail marshes, with semimesic wet areas next to a shallow mud bottom lake. I own this prairie.

At Peik's prairie we saw meadow garlic, ox-eyes and wild turnip in bloom. In the restoration area I have been hand-broadcasting seed from surrounding prairie remnants. Some, like the wild garlic, blue bottle gentian, and fragrant giant hyssop, have taken hold readily. Others, such as the blazing star, side oats grama, and wild onion, will be noticeable later in summer. There is a broken tile area in which I have managed to put a few wetland plants. Great blue lobelia thrives here. I added plugs of cord grass, which are now spreading out. But the overwhelming features of this restoration are the stands of big bluestem and Indian grass, which had come into this area naturally. These grasses will be just grandiose in the fall tour. There are also woody type plants. Wild prairie rose, false wild blue indigo, and lead plant are taking hold.

We moved to the wet prairie site, where we lost one person to bobolinks. Swamp milkweed, wild field mint (native), and many types of sedges were in bloom. In somewhat drier areas were white camas, hedge nettle, and false Solomon's seal. White camas is a member of the lily family, with the stalk rising one to two feet above the ground, covered with 10 to 30 white blossoms. Hedge nettle has lavender colored flowers blooming at the top of the main stalk. We continued down to the edge of the lake. I am looking forward to fall, and I hope you can join the Sept. 6 tour.

#### Wildflower Weekend and Louisville Swamp Walk

by Doug Mensing

#### **Whitewater State Park**

The weekend of May 9 through 11, the MNPS sponsored a spring wildflower weekend at Whitewater State Park in beautiful southeastern Minnesota. Jason Husveth did much of his graduate school research in this part of the state, and he has explored some of the area's less traveled nooks and crannies in search of rare native plants. His knowledge of the park and the adjacent wildlife management area ensured that all who attended were rewarded with a fun and informative (albeit damp) weekend.

A small clan of native plant enthusiasts gathered at the group campground Friday evening. Immediately we were identifying orchids and other native wildflowers. Some of us even stalked a secretive woodcock.

Saturday morning additional folks brought the group to about a dozen people. Our first outing was into the Beaver Creek ravine. Starting in its headwaters, lush green spring vegetation blanketed most of the ravine slopes and bottomlands. Wood anemone, false rue anemone, spring beauty, Jacob's ladder, Dutchman's breeches, trout lilies, squirrel corn, toothwort, bishop's cap, bellwort, ferns, and sedges created carpets of color and texture, interspersed with gray limestone outcrops and bluffs. After returning to our campsite and following a mild hailstorm, we braved a goat prairie. Layers of clouds were blowing three different directions as we hiked up a steep slope to find bird's-foot violet, puccoon, and other bluff prairie species.

On Sunday we ventured into the lower reaches of Beaver Creek where we saw many of the same species we saw on Saturday, but were also treated to marsh marigold, sweet cicely, wild ginger, and large patches of wild leek. Some of the rare plants observed in this ravine included twinleaf, false mermaid, squirrel corn, and a rare sedge (*Carex careyana*).

#### **Louisville Swamp**

On May 31, the MNPS sponsored a spring wildflower walk at Louisville Swamp, one of the U.S. Fish and Wildlife Service's units in the Minnesota River Valley. Jason Husveth and Doug Mensing led about 22 people on an informative walk through restored prairie and savanna, floodplain forest, and native oak woodland-brushland.

Blooming species on the restored prairie and savanna included prairie violet, prairie plum, blue-eyed grass, and false Solomon's seal. One participant identified a patch of kittentails, a state threatened plant. Common buckthorn had recently been removed from the woodland's understory as part of the savanna restoration work. Buckthorn resprouts, Virginia waterleaf, and poison ivy were seen in much of the restoration area.

The floodplain forest contained silver maple and cottonwood trees, with a dense groundcover of wood nettle. Canada anemone and several sedge species were near the edges of this forest. The native savanna and oak forest contained Pennsylvania sedge, black raspberries, wild geranium, and woodland phlox. Several patches of kittentails (previously unknown to the Minnesota DNR and the Refuge) were also found in this area. A small depression in this area contained yellow star grass and several sedge species.

Louisville Swamp is a fantastic place for the nature enthusiast, and if you were unable to attend the spring wildflower walk, we would highly recommend you visit during the late summer and fall months.

### **Plant Lore**

by Thor Kommedahl

#### What is wild bergamot?

Wild bergamot is *Monarda fistulosa*. It is also called bee balm and horsemint because of its similarity to closely related species. It is a member of the mint family.

#### How did it get its names?

Monarda is named after Nicholas Monarda, a 16th century Spanish physician and botanist. Fistulosa, meaning hollow, refers to the tubular calyx. It is called wild bergamot because the scent is like that of oil of bergamot extracted from the bergamot orange. Oil of bergamot is used to flavor foods (Earl Grey tea, for example). Bumblebees, butterflies, and humming birds are attracted to the flowers.

#### What is the plant like?

It is an aromatic, rhizomatose, native perennial that grows in dry wood edges, thickets, and prairies throughout the state. The flowers are in dense heads and bloom from May to September. The calyx is tubular and bright (yet pale) lavendar. Leaves are opposite on the square stems, and plants are 2 to 4 feet tall.

#### Is it poisonous or medicinal?

Not poisonous but it has a variety of medicinal uses. American Indians made tea for treatment of colds, fevers, and heart trouble, and physicians used tea from leaves to expel worms and gas. (The oil is high in carvacrol which expels worms.) But it is not officially recommended today. Another species, *M. didyma* (Oswego tea), was used by the Shakers as a tea after the famous Boston Tea Party. Oswego tea has a citrus odor, while wild bergamot has a spicy, minty odor. Oswego tea, also native, grows in western Minnesota.

# Why should we battle buckthorn?

by Dianne Plunkett Latham

Many of you may have participated in your community's buckthorn abatement program last fall. If so, you realize that buckthorn has been declared a noxious weed by the State of Minnesota. Many of your neighbors, however, may yet need to clear their property of this pest. If they maintain this noxious weed on their property, it will reinfest nearby property. Birds carry buckthorn berries up to 1/3 mile. Several of you have asked me what information they should give their neighbors to encourage them to remove their buckthorn. The following is what I tell my neighbors. Please spread the word!

- Buckthorn berries, bark and roots are toxic. The berries cause severe cramping and diarrhea in humans. Keep small children out of areas where buckthorn berries fall, as the blue/black berries may be mistaken for blueberries and accidentally eaten.
- Buckthorn is a starvation food for birds. It causes diarrhea and weakens them. The blue stains on your house and sidewalk are the result of droppings from birds eating the berries. Bird numbers decline in areas infested by buckthorn, because food sources and nesting sites are greatly reduced.
- Buckthorn has an allelopathic chemical in its roots that suppresses the growth of surrounding plants, much like black walnuts do. Wildflowers and tree seedlings are greatly reduced.
- Buckthorn stays green 58 days longer than our native species, which gives buckthorn a competitive edge.
- Buckthorn, which has little fall color, is replacing our forests. Anything that is still green in October and November is buckthorn.
- Buckthorn eventually forms dense thorny thickets. It shades out other

plants and provides cover for crime perpetrators in parks. Homeowners who say they want buckthorn for privacy should consider conifers, which offer much better privacy.

• Buckthorn infestations reduce property values. Savvy buyers ask that buckthorn be removed before sale, or ask to lower the sale price by the cost of buckthorn removal.

Buckthorn stumps must be sprayed with Roundup<sup>©</sup> (Glyphosate) at a minimum strength of 20 percent to keep the stumps from resprouting. Spraying must be done ASAP after cutting, and well before any rain. This stump treatment, however, won't work during bud break (late March to June 1). Sap flows in a predominantly upward direction in the spring, thus there is little intake of chemicals.

Ask your city to purchase Weed Wrench and Root Talon tools, which residents can borrow to uproot buckthorn trees up to 2-1/2 inches in diameter. These are only effective when the ground is not frozen.

Buckthorn seeds are viable for up to five years. Woodlands must be maintained annually for several years after buckthorn removal. This can be done by a combination of techniques including replanting and mulching, or mowing/brush cutting. For small areas, hand-pull seedlings. Large areas of buckthorn saplings up to three feet in height can be sprayed with a maximum strength of 3 percent Roundup<sup>®</sup> in late October or early November. Wait to spray until after at least two hard frosts (below 28° F), when everything else is dormant, but buckthorn is still green.

Professional buckthorn removal is the least expensive during the winter, when tree services may give steep discounts. The longer you wait, the more buckthorn you will have, and the more expensive removal will become.

Dianne Plunkett Latham, a MNPS board member, is the Buckthorn Abatement Steering Committee chair for the Edina Garden Council and the League of Women Voters of Edina.

## Bell Museum has exhibit of nature art

More than 80 works of art inspired by threatened land and water sites in Minnesota and Wisconsin are on display at the Bell Museum of Natural History at the University of Minnesota. Entitled "Project Art for Nature: Close to Home," the exhibit opened June 21 and will continue until Aug. 31.

The exhibit features the works of 17 Minnesota and Wisconsin artists and includes prints, book arts, textiles, drawings, paintings and sculpture that depict areas of natural beauty and the threats they face. Participants include Vera Ming Wong, Barbara Harman, Mimi Holmes and Wendy Lane. At least 20 percent of monies raised from

artwork sales will go to the Scientific and Natural Areas Program of the Minnesota Department of Natural Resources.

Vera Ming Wong, a member of the MNPS, is founder of Project Art for Nature. Inspired by a 1999 Bell Museum exhibit, 16 local artists banded together to formed PAN to promote stewardship of threatened natural areas in Minnesota and Wisconsin

For additional information about the exhibit, call the Bell Museum Information Line at 612-624-7803 or visit www.bellmuseum.org

The museum is located on the Minneapolis campus of the University of Minnesota at the southwest corner of 17th Ave. (Church St.) and University Ave. S.E.

# Wildflowers and native grasses can still be planted by highways

Transportation departments may continue to plant native grasses and wildflowers along Minnesota highways. An effort to forbid planting these seeds was thwarted, and that amendment was removed from the transportation bill in the closing hours of the 2003 session of the Minnesota Legislature.

Several MNPS members talked about the folly of this "money-saving" measure at hearings at the Legislature and personally contacted legislators. Roy Robinson monitored progress of the measure. Speakers at the hearings included Roy, Dianne Plunkett Latham and Deb Anderson.

## Minnesota Native Plant Society Member Registration

Name					
Addr	ress				
City			State	Zip	
Phon	e (work) (he	ome) _			
E-Ma	nil				
Mem	bership category (New Renewal)				
\$15	Individual				
\$15	Family (2 or more related persons at same address)				
\$8	Student (full time)				
\$8	Senior (62 or over or retired)				
\$20	Institution				
\$25	Donor				

Please fill in the form above and check the appropriate membership category. Your check should be made payable to the Minnesota Native Plant Society. Mail the completed form and your check to the Minnesota Native Plant Society, University of Minnesota, 250 Biological Sciences Center, 1445 Gortner Ave., St. Paul, MN 55108.

Minnesota Native Plant Society University of Minnesota 250 Biological Sciences Center 1445 Gortner Ave. St. Paul, MN 55108

#### **Summer 2003 Issue**

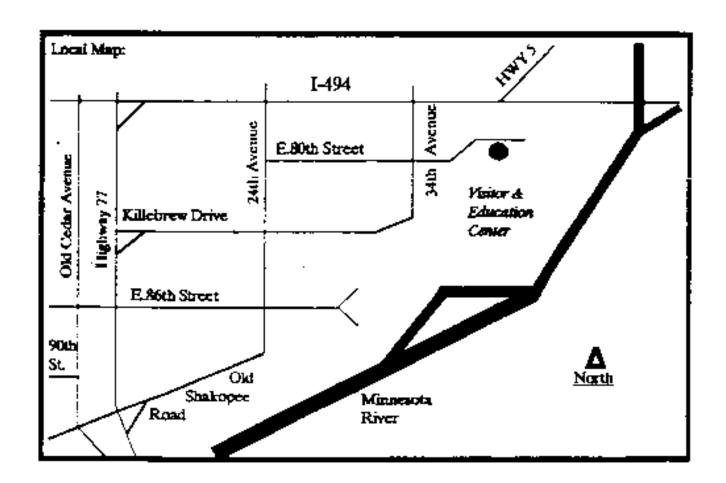




Figure 1



Figure 2