



Minnesota Plant Press

The Minnesota Native Plant Society
Newsletter

Volume 16, Number 3

Spring 1997

Upcoming Monthly Meetings

Minnesota Valley National Wildlife Refuge
Visitor Center, 3815 East 80th Street

Bloomington, MN 55425-1600 612-335-2323

6:30-7:00 PM—Refreshments, Room A
7:00-8:30 PM—Program & Society Business
8:30 PM—Socializing
9 PM—Doors close sharply at 9 PM

1997

April 3—Lee Ronning: *Land Stewardship*

May 1—Plant Photography Contest

June 3—Kathy Boleen, *Exotic and Problem
Plants in Minnesota Parks and Natural Areas*;
Plant Sale; see p 3. Book Store Open

June 22—Board Meeting, 12-4 PM at
Minnesota Valley National Wildlife Refuge
Center

Deadline for Summer Issue is June 15, 1997

MNPS Home Page—

<http://www.stolaf.edu/depts/biology/mnps>

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To pool rides to the **Minnesota Valley National Wildlife Refuge**, please call—well in advance—Grace Gray who will coordinate pooling

On making a butterfly garden

by Marcie O'Connor

Now that spring is on its way, many of us are thinking of new things we might try in our gardens. One of the most enjoyable things I have tried is planting flowers that attract butterflies. I have a small area of sunny garden in my front yard in St. Paul, and I have successfully attracted at least 14 different species of butterflies.

When I decided to plant a butterfly garden last summer, I consulted many of the recent books and magazine articles about butterfly gardening. Some of the plants recommended were native, but most were not. I decided to experiment, and to branch out a little from my all-native garden. After a summer of gardening and butterfly watching, I have come to some conclusions that I'd like to share. I would also like to compare notes with other butterfly gardeners to see if they have had similar experiences. And I'm anxious to try some new plants in next year's garden.

The clearest result of my experiments was that native plants attract many more butterflies than non-native plants do. Among the native plants I include purple coneflower, which is not quite native here, but which grows naturally as far north as southern Minnesota.

There were a few non-native plants that did attract butterflies. Black swallowtails laid eggs on my curly parsley. As I walked around my neighborhood, I noticed black swallowtail caterpillars on nearly every parsley, dill, and fennel plant. Garden varieties of *Verbena* attracted hummingbird clearwing moths and silver spotted skippers.

(continued on page 7)

Meet the new members of our board for 1997-2000

Bill Capman

Bill is a native of Illinois and moved to Minnesota about 3 years ago to teach ecology and general biology at Augsburg College, in Minneapolis. His professional education is in the areas of plant ecology (including experience with natural plant communities and revegetation of coal strip mines), insect ecology (plant-insect interactions), and microbial ecology. He has a strong interest in native plants, natural history, preservation of native plant communities, in addition to interests in nature photography, drawing and painting, fish breeding, gardening and horticulture.

Catherine Reed

Catherine is a Lecturer in the Department of Entomology at the University of Minnesota, St. Paul. She says "All my life I've been interested in native plants. At work I'm doing research on interactions among insects and plants with a special interest in prairie conservation and restoration ecology. I would like to encourage MNPS to become even more involved in those issues. I'm also involved with helping teachers and kids work with insects. At home, I have a small native-plant garden. I appreciate MNPS's confidence in electing me, and I look forward to serving on the board."

John and Jackie Buffalow

They live in Mendota, Minnesota. Both have been active in MNPS and have handled refreshments for the past several years. They indicated that they became interested in native plants because of their involvement in the savanna restoration project.

Please welcome these new members to the board.

Board Briefs

- Ideas for a symposium were discussed with possibility of substituting a day-long tour of Prairie Moon in June.

- Nancy Albrecht agreed to again coordinate field trips for MNPS.

- Membership patterns over the years were discussed and how that affects the future of MNPS.

- The Board agreed to become one of 60 Minnesota organizations to support the effort on *Teaming With Wildlife*. The proposal will be submitted in March in Washington, DC, by the Minnesota Nongame Wildlife Program Supervisor.

- The Board approved taping MNPS programs with speaker approval. Dave Crawford will handle procedures.

Financial report for 1996

Cash on hand 1 January 1996	\$1892.64
Income during 1996	6690.88
Total assets 1996	6166.83
Expenses during 1996	10497.82
Balance on hand 1 January 1997	1714.84

Income	
Membership	\$3720.00
Donations	224.00
Symposium	474.00
Wildflower Guide sale	442.00
Tester books	1060.00
Ownbey books	100.00
Plant sale	283.00
Interest checking acct	24.84
Interest on cashed CDs	363.04
Total income	\$ 6690.88

Expenses	
Printing & copies	\$ 2311.10
Postage	1415.89
Speakers	300.00
Symposium	449.57
Supplies	83.72
Books acquired to sell (Tester)	1042.10
Paid services	265.00
Meeting Room rent	300.00
Arboretum dues	60.00
E-mail account	75.00
Updating display	15.18
Phone calls	66.86
Repayment of loan for WF Guides	3962.32
Refreshments	151.08
Total expenses	\$10497.82

Checking account balance 1/1/97 **\$1714.84**

Assets on hand January 1, 1996

CD #1861306877 at TCF 23 mo. @ 4.92% due April 1996 \$1129.14
CD #2861306872 at TCF 23 mo. @ 5.25% due July 1996 \$2500.00
CD #6567265944 at TCF 17 mo. @ 5.25% due Dec 1996 \$645.05

Other Assets

CD #556705944 at TCF 16 mo. @ 5.65% due 4/18/98 \$694.63
At renewal Dec 1996, \$49.58 in interest was added to CD

Total current assets (checking + CD) \$2409.47

The checking account is #0726653 at Anchor Bank of West St. Paul

— Pat Ryan, treasurer

The Minnesota Native Plant Society

Minnesota Plant Press

Thor Kommedahl, editor

Membership dues are \$10 per year for regular members and includes subscription to the newsletter; dues for students and seniors are \$8, for family \$12, for institutions \$20, and donors \$25. Checks can be made out to: Minnesota Native Plant Society, and sent to: Minnesota Native Plant Society, 220 Biological Sciences Center, 1445 Gortner Avenue, St. Paul, MN 55108.

Four issues are published each year.

MNPS Board of Directors

President: Char Bezanson,

Vice-President: Charles Umbanhowar,

Treasurer: Pat Ryan,

Secretary: Christine Drassal,

Deb Anderson,

Dave Crawford, 4051 Gisella Blvd., White

Gerry Drewry,

Thor Kommedahl

Val O'Malley,

Gary Perrault,

Roy Robison,

The Minnesota Native Plant Society is a tax-exempt 501 c3 organization as determined by the US Internal Revenue Service.

Society Activities

MNPS Plant Sale will be in June

The popular MNPS plant sale will be held following the program at the meeting on Thursday, June 5. This annual event offers an opportunity for members and non-members to diversify their native gardens while providing income for the society. A broader selection of plants is expected this year than in previous years, because the sale will be a month later—in June, instead of May.

All members and visitors are encouraged to participate as donors, buyers and helpers. People who bring plants to the sale will have the first opportunity to select plants to take home. Most of the plants will be sold for \$1 each; unique or large plants will have higher prices.

Guidelines

- Bring only native plants. They should be plants that you raised from seed or took from your own garden. Do not take plants from the wild.

- Each plant should be in an individual container. There will be no facilities for repotting them that evening.

- Label each plant. Include your name, the plant name—both common and Latin (if known), preferred habitat (woodland, wetland, prairie, etc.) and the geographic location where it grew.

- If possible, bring a box in which to carry your new plants.

- When the sale opens, each person may select three plants to buy. Those who brought plants will be at the beginning of the line. After all have made their initial purchases, anyone may go back and purchase additional plants.

Anyone who would like to help with the sale is invited to attend a plant sale committee meeting before the April 3 and May 1 MNPS meetings. These committee meetings will be at 6:30 PM, during the refreshment period.

—Gerry Drewry, Plant Sale Committee Chair

Guide to Spring Wildflower Areas

This MNPS guide prepared by Marilyn and J.B. Andersen, Jim Schuster, and John Moriarty has been updated, redesigned, and reprinted as the 1996 edition, and covers the Twin City natural areas. Vera Ming Wong prepared new illustrations. Purchase copies at regular meetings of the MNPS.

To receive a copy by mail order, send \$5 (check or money order) to MNPS, c/o Char Bezanson, The School Nature Area Project, 1520 St. Olaf Avenue, Northfield, MN 55057. Make checks payable to the Minnesota Native Plant Society.

For those with or thinking about getting E-mail

MNPS is now hosting an E-mail group. It will work as a means to get out field trip and meeting reports or responses, gardening help and notices for sharing materials, coordinate political or management actions, instant announcements including rescues, questions to an interested or knowledgeable community, and a place for ongoing discussions of any and all related matters. E-mail groups such as this one are a means for a group of any size and distribution to communicate with itself, quickly and in all directions. A message from a home computer of a member, for example, is received by their local "server" and sent to the large central computer at the University of Minnesota that houses the software for our group. This message is then distributed back to the E-mail boxes of all other members, more or less instantly, and then "downloaded" to the individual's home computer at that person's convenience. E-mail groups vary greatly in size and traffic. At the moment we are small, as such things go, with rather moderate aspirations.

Our E-mail group, MN-NATPL, is for both members and non-members of MNPS. There is no editor, so all messages are automatically posted. Only subscribers may post messages but anyone may quickly and easily subscribe (or unsubscribe). All this service is free (actually underwritten by MNPS) and the plan is that it will remain so. Membership is basically not anonymous since the membership list is available to "list" members, and in addition our protocol is to sign all messages.

To become a member:

In the "TO" box: listserv@tc.umn.edu

"Subject" box: (leave blank)

"Message" box: subscribe MN-NATPL your name here without brackets (or put in signoff instead of subscribe if you wish to unsubscribe)

MNPS Display Board Use

All members are welcome to show our display board at events, museums, and schools, if an attendant is present or it is safely displayed. This 3 by 5 foot, 2-sided board holds information on the Society, native plants, and stewardship. Request it from Don Knutson

Announcements

Native Plant and Landscape Restoration Day at Wild River State Park May 3

Each spring for the last 13 years, Wild River State Park has put on a special event, "Seegwan - A Celebration of Spring". This year's theme revolves around native plants and their role in small and large-scale landscapes. Although a schedule of events is not available now, presenters and exhibitors have been lined up for the day-long event Saturday, May 3.

Presenters include the Wild River Audubon Chapter with an early morning bird hike, Dean Hansen on creating and enjoying a sand prairie, a representative from the Minnesota Land Trust on protection options for landowners, Terri Goodfellow-Heyer on using native ecotypes to design home landscapes, Don Del Greco on butterflies and plants, Dave Crawford's musical plant kingdom slide show and a talk on the value of native plants in landscaping, a representative of the Ramsey County Watershed District on the pilot project to use native plant gardens to capture urban lawn runoff, and a video on nationwide use of native plants in roadside management. In addition, a hands-on activity is planned for park visitors to help sow an old farm field in the park with more than \$1500 dollars' worth of prairie grass and wildflower seed collected by volunteers last fall.

Exhibitors will include some of the presenters mentioned above, plus the Minnesota Native Plant Society display board, Landscape Alternatives, and the Chisago County Master Gardeners. For information about the event, call Dave Crawford at

(a long distance call from the Twin Cities) or E-mail to dave.crawford@dnr.state.mn.us

If you have seen and enjoyed some of these presenters at MNPS meetings, recommend them to people you know, and tell people about the chance to see them on May 3, 1997, at Wild River State Park.

If you are a landscaper or designer who uses native plants, or a supplier of native plant materials, send particulars about your business to Dave Crawford, Wild River State Park, 39755 Park Trail, Center City, MN 55012. Time permitting, a handout listing native plant landscaping resources will be prepared for distribution at the park.

Volunteers sought for tree planting May 3

Greening the Great River Park is sponsoring tree planting Saturday, near the NSP High Bridge plant on the Mississippi River, near downtown St. Paul. Volunteers of all ages are invited (rain or shine) from 8:30 to 9:30 AM to plant trees until noon. Lunch is provided. Bring shovels. Call _____ for details or by April 23 to register.

Adult Nature Seminars at the Maplewood Nature Center

Saturday environmental gardening series

April 5, 1-3:00 PM *Water gardening with native plants* Greg Smith will speak on native plants you can use, and their sources. He will also discuss how to build, plant and maintain marsh gardens. Prepay by April 2.

May 3, 1-4:00 PM *Naturalized home landscaping: designing for you and wildlife* Landscape architect and plant ecologist, Diane Hilscher will show you how to use native plants and wildflowers in your home landscape: includes slides, landscape plans, and a visit to a nearby wildlife garden. Prepay by April 30.

June 14, 10-12:00 AM *Wetlands in your backyard* A speaker from the Ramsey-Washington Watershed District will help you to identify common wetland plants and go through planning steps for enhancing a wetland. Prepay by June 11.

Fee: \$8/person, per program.

To register, send a check with your name, address, daytime phone number, and title of class you are registering for to: Maplewood Nature Center, 2659 East Seventh St. Maplewood, MN 55119. For more information call _____

Midwest Oak Savanna and Woodland Conference in Madison, Wisconsin

This conference will be held July 30 to August 2, 1997, at Memorial Union, University of Wisconsin-Madison, and its purpose is to evaluate current knowledge on restoration of Midwest oak savanna woodland systems. Paper sessions will accompany field trips. For details, contact Nancy Braker, Director of Science and Stewardship, The Nature Conservancy 633 West Main St., Madison, WI 53703; 608-251-8140; nbraker@tnc.org. See web site at <http://www.uwsp.edu/acad/cnr/oaksavan/wiconf97.htm>

Volunteers are needed to watch the door and let people in to the Minnesota Valley National Wildlife Refuge Center just before each of the regular meetings of the Society. Perhaps a teenager of a member? Let Charles Umbanhowar know of any such volunteers by calling him at _____

Thanks

Spring Field Trips

Nancy Albrecht

April 27 1-3 PM *Nerstrand Big Woods Wildflower Walk*. Char Bezanson is leader. Meet in picnic area. RSVP at

April 30 7:30 to 11:30 AM. *Woods, Warblers and Wildflowers: Nerstrand Big Woods State Park*. Hike trails while birdwatching and seeking early spring flowers. Naturalist Elaine Feikema will discuss bird migration. Fee is \$10 and includes refreshments. Reserve a place from The Nature Conservancy at 612-331-0700 or call for information.

May 3 2 PM *Nerstrand Big Woods State Park Dwarf Trout Lily Wildflower Walk*. See plants and environment and efforts to protect them. Call 507-334-8848 for details and directions.

May 3 10 AM *Rice Lake State Park: Wildflowers Forever*. Learn how state parks manage woods. Call 507-455-5871 for details and directions.

May 3 7:30-11:30 AM *Nerstrand Big Woods State Park: Woods, Warblers and Wildflowers*. Artist Dan Milbert will show slides and relate nature to art, especially birds. Reservations required. Call The Nature Conservancy at 612-331-0700 for details.

May 14 7:30 to 11:30 AM *Nerstrand Big Woods State Park: Woods, Warblers and Wildflowers*. Birdwatching, botanizing, sustainable forestry, big woods ecosystems are topics for activity. Forester Dick Peterson leads. Fee is \$10 and includes refreshments. Call The Nature Conservancy at 612-331-0700 for details.

May 17 10-11:30 AM *St. Croix State Park: Wildflower Watercolors Walk*. Spring flowers on banks of Sand Creek. Meet at interpretive center to car pool to Sand Creek. Call 320-384-6615 for directions.

May 17 4 PM *Sakatah Lake State Park: Living on the Edge Wildflower Walk*. Area is example of Big Woods, oak savanna and Cannon River shore as ecosystem. Call for directions.

May 17 2 PM *Wild River State Park: Spring Wildflower Identification*. Free Minnesota orchid poster to each participant. Meet at visitor center. For directions call 612-583-2925.

June and July Sundays. *Lake Bemidji State Park Bog Walk*. Board walk 1/4 mile long. Naturalist or volunteer available for queries or directions. Call 218-755-3843 for details and directions.

•See page 6, column 2 for **Prairie Moon Trip**

Burning Issues in Management of Native Plant Communities

Charles Umbanhowar

Fire has played an important role in shaping native plant communities in Minnesota since at least the last glaciation and the suppression of fires since settlement in the 19th century continues to promote change in many of our remnant forests, prairies and wetlands.

This week I attended a conference titled *Fire Ecology: Understanding Theory and Practical Application* sponsored by the Minnesota Department of Natural Resources Parks and Recreation and the University of Minnesota College of Natural Resources. Several important ideas emerged from the talks.

Fire is ancient—Fire has been present in this area for a long time. Fires produce microscopic charcoal that is deposited in lake sediments, and is present in the sediments of most lakes in Minnesota—whether from woods or prairies. This charcoal dates back to about 12 000 years ago when the glaciers were retreating but disappears from most lakes at about the time of Euro-American settlement. Ample fire scars—thin black bands in the wood that parallel the growth rings might be fire scars—on the trunks of pines and oaks also testify to the repeated presence of fire, and the journals and accounts of early explorers are filled with reports of fire.

Native peoples' role—A second idea was the importance of native peoples in burning. Dry lightning can start forest or prairie fires but one speaker estimated that in Wisconsin, for example, 70-80% of the fires were started by native peoples. They used burning as a management tool to attract and maintain populations of white-tail deer, elk, bison or turkey. Fires were also used directly and indirectly in warfare. Burning was a way to remove cover that could hide an enemy or cover your own tracks, and burning in the fall would drive game away from the encampment of your enemy (including European traders).

Apparently, some differences existed in when fires were started. In Illinois most native-set fires were in fall, whereas in Wisconsin most fires were in spring; in the Dakotas the burning season peaked in August.

Different cultures apparently used fire in different ways but little of this knowledge has survived and information about when and how frequently areas were burned has largely been lost.

Fire absence is a disturbance—The long history of fire in Minnesota and the Midwest means that an absence of fire is not "natural" and represents a disturbance. (continued on page 6... **Fire ecology**)

On all field trips, wear appropriate clothing and hiking shoes, make reservations and get vehicle permits when requested; bring field guides, hand lenses, camera, binoculars, and mosquito lotion. Bring your own lunch and beverage when trips start or end at noon. Enjoy the panorama of nature!

Many prairies and oak savannas were converted to forests with the ending of fire. In prairies, fire removes dead leaves and stems that can accumulate to a depth of 6 inches or more. Fire blackens the soil encouraging faster growth in the spring especially of warm season grasses such as big bluestem and Indiangrass and fire may also remove excess nitrogen from prairie soil. Recent management efforts have emphasized (1) using fall or summer burns in addition to spring burns so as not to favor the growth of warm season grasses at the expense of forbs or cool season grasses such as porcupine grass, (2) burning at different time intervals (1-5 years), and (3) burning only a part of a prairie in any one year to enable recolonization by fire sensitive insects and other species from unburned areas.

Fire absence changes flora—In the absence of fire, oak savannas and oak woodlands have become dense forests invaded by native species such as sugar maple or adventives such as buckthorn. Oak savannas are plant communities dominated by widely spaced oaks (pin, bur, or white) with a grassy, prairie-like understory as a result of frequent, recent fires. These savannas became oak woodlands with more densely spaced trees and reduced sedge-dominated understory when fires were less frequent. Such savannas-woodlands occurred on sandy soils or heavier, moist sandy-loams.

Fire as restoration means—Restoration work in Wisconsin, Minnesota, Illinois and Indiana has focused on fire as a management tool. Restoration includes use of an intense fire to open up the canopy followed by several less intense burns. Sites dominated by buckthorn may not have enough fuel to carry a fire so mechanical cutting is necessary, but cutting or logging must be followed by fire or species such as aspen will take over. Most oaks resprout vigorously after being burned in these

fires and the seed bank, at least in sandy soils, contains many prairie species that germinate after fire.

Fire education—All speakers emphasized the need for monitoring ecosystems, to measure effects of burning, and the need for educating us and the public on fire ecology.

Most of the conference participants were Parks and Recreation employees but other DNR employees and representatives from agencies such as the U.S. Fish & Wildlife Service were included. Several conference organizers and presenters were MNPS members. The conference was held March 24-27, 1997 at the Earle Brown Center, Brooklyn Park, MN.

Field trip to Prairie Moon nursery and Mound Prairie School Nature Area June 14

Prairie Moon Nursery, 9:30 AM.

Wildflowers and gardens in the Wiscoy Valley Land Cooperative.

- From Winona, take Highway 43 south one-fourth mile to Winona County 17, 7 miles to Witoka, continue on Cty 17 for 3.6 miles.

- From Rochester, take highway I-90 to highway 43, north exit. Go south, left on Cty Road 19, 5.8 miles. Turn left (east) onto gravel Cty Road 17, go 1.5 miles.

Prairie Moon Nursery is on the north side of the road

Mound Prairie School Nature Area (SNA) Noon. (*Bring food and beverage*). Hike or relax at Bluffland's largest and noteworthy SNA. Ken Kailing of Eco-Systems Design from Hokah will share experiences as steward of these mesic oak forest and dry prairie habitats.

- From Houston, take east hwy 16, 7 miles

- From Hokah, take hwy 16, 5 miles. Meet east of SNA sign at parking area on north side of highway near the forest road gate and a rock face.

For details, contact Deb Anderson,

(Food, lodging, camping)

Plant Lore

What are pussytoes?

Pussytoes belongs to the aster family and its Latin name is *Antennaria*, which means "antennae".

How did it get these names?

The female parts of the flower are split into two threads that resemble antennae of insects to give the genus name. Obviously, the soft, fuzzy flowerheads look like kitten's paws to give the name pussytoes.

Are pussytoes native to Minnesota?

The plantain-leaved pussytoes, *A. plantaginifolia*, is native and grows on both sides of a line drawn from southeast to northwest Minnesota, often at the edges of open woodlands and in dry, gravelly areas.

What kind of a plant is pussytoes?

Well, it is a woolly stemmed perennial and grows in rosettes. Flower stalks grow from the center of these rosettes in spring. The male and female flowers are on different stalks. The flower stalks have no leaves, only bracts. New plants come from leafy stolons and underground rhizomes that overwinter.

Is it true that female plants produce seed without sex?

It's possible. In plantain-leaved pussytoes, male plants occur as frequently as female plants but in other species of *Antennaria* male plants are rare. In fact, in most species of pussytoes there are no male plants; female plants produce seed anyway—without sex.

Why can clusters of male plants be seen at one place and female plants at another?

Because plants can grow from runners and rhizomes, clones are produced, sometimes as separate colonies and sometimes intermingled. This is not a substitute for sex [but then what is?]. However cross pollination by wind is ensured by having separate male and female plants.

Planting and Enjoying a Sand Prairie

A sand-gravel mix offers homeowners, gardeners, landscapers, park managers and construction engineers with an interesting way to recreate a fascinating, beautiful, short and amazingly weed-free community: a sand prairie.

If the construction site already offers you a sand or sand-gravel mix, you're all set; however, if the site has heavier soil, a load of "pit run" sand-gravel mix must be brought in. A cubic yard of sand will cover an area of 30 square feet and 11 inches deep—6 to 8 inches of sand works well.

To start, kill existing vegetation with an herbicide or a mulch. Plugs of plants can then be planted in this sand without competition from weeds.

Forb selection—Suggestions for a basic "pit run" sand prairie are: pasque flower, prairie smoke, showy penstemon, silky aster, lupine, harebell, cream indigo, aromatic aster, purple prairie-clover, butterfly-weed, rough blazingstar, and grey goldenrod.

Other desirable plants include: prairie larkspur, dotted blazingstar, cylindric blazingstar, prairie buttercup, blue-eyed-grass, pussytoes, alumroot, prairie onion, lead plant, slender penstemon, prairie phlox, thimble flower, New Jersey tea, pale-spiked lobelia, pale purple coneflower, coreopsis, golden aster, long-leaved bluet, spiderwort, black-eyed Susan, compass plant, white prairie-clover, silky prairie-clover, partridge-pea, dotted mint, upright coneflower, roundheaded bush-clover, showy goldenrod, bird's-foot-violet, heath aster, flowering spurge, prairie phlox, hoary vervain, ground plum, and scurf-pea.

Audio tapes. If you can't attend a meeting but would like to hear the presentation, you can purchase an audio tape of the meeting, starting with the one on March 6, 1997 (subject to permission by the speaker). Send a check for \$5 payable to the *Minnesota Native Plant Society* and a mailing label with your full name and address. Send check and meeting date selection to Dave Crawford.

Remember, tapes do not include visual material.

Grass selection—For grasses in the Twin City area, suggestions include junegrass, hairy or blue grama-grass, little bluestem, prairie dropseed, side oats grama, and possibly sand reed grass (tall) and porcupine grass (has quills).

Sources of plants and seeds—Materials are available from companies listed in the MNPS web site <http://www.stolaf.edu/depts/biology/mnps>, the MNPS Directory, or the yellow pages of phone books.

Why make a sand prairie?

- Flower bloom from pasque flower in mid-April to asters in October
- Insect variety
- Plants usually short, probably less than a foot tall
- Few if any weeds
- Little thatch buildup to reduce or eliminate periodic burning.

Locations of sand prairie preserves—Guides are available from the Minnesota Department of Natural Resources and the local chapter of The Nature Conservancy. Some natural sand prairies near the Twin Cities are: DNR St. Croix Savanna, just south of Bayport; Helen Allison Savanna in northeast Anoka County; and the Grey Cloud Dunes in southern Washington County.

The Cheyenne National Grassland in North Dakota is unsurpassed as a true sand prairie.

Material selected from a handout prepared by Dean Hansen for a talk to the MNPS on March 6, 1997, at the Minnesota Valley National Wildlife Refuge Center. Dean is a private consultant living in Stillwater, Minnesota.

Butterfly garden

(continued from page 1)

Of the native plants, the best were purple coneflower, common milkweed, marsh milkweed, and *Liatris*. Purple coneflowers attracted swallowtails, monarchs, red admirals, and mourning cloaks. Monarchs laid eggs on both the common milkweed and marsh milkweed, and many butterflies (swallowtails, banded hairstreaks, monarchs, painted ladies) came to the milkweeds for nectar. *Liatris* attracted many monarchs during the time that monarchs were migrating. Sometimes there would be 6 or 8 monarchs on each stalk of flowers. The native species of *Liatris* seems to attract monarchs more than the cultivated varieties do.

A birdbath and some flagstones are favorite perching sites of some butterflies, especially banded hairstreaks.

Other flowers which successfully lured butterflies were: green-headed coneflower, fireweed (cabbage butterflies, moths, monarchs), butterfly-weed, ironweed, and Joe-Pye-weed.

I would like to share information and observations with other butterfly watchers and gardeners. Please E-mail, call, or write me at: Marcie O'Connor,

Marcie is a member of MNPS, and prepares labels and the Directory of Members for MNPS. She is also an avid gardener and lives in Falcon Heights, Minnesota

Jewelweed—moisture indicator

The 7-inch-below-normal rainfall at the Eloise Butler Wildflower Garden in 1996 resulted in an absence of plants in the upland area and sparse growth in the bog area of jewelweed (*Impatiens pallida* and *I. capensis*). These species are good indicators of moisture. (*The Fringed Gentian* 47[2]: 2, 1996)

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220 Biological Sciences Center
St. Paul MN 55108

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