



Minnesota Plant Press

The Minnesota Native Plant Society
Newsletter

Volume 15, Number 4

Summer 1996

Upcoming Monthly Meetings

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

Bloomington, MN 55425-1600 612-335-2323

6:30-7:15 PM—Socializing, Room A
7:15-8 PM—Regular Meeting, Auditorium
8-9 PM—Refreshments, Room A
9 PM—Doors close sharply at 9 PM

1996

September 5—Board Meeting, 6:30 to 8:30
PM at MVWR Visitor Center

October 3—Program Meeting

November 7—Program meeting and Seed
Exchange

December 5—Program meeting.

December 7—Board Meeting, 10-12 AM

1997

February 6—Program meeting

March 1—Board Meeting, 10-12 AM.

March 6—Program Meeting

April 3—Program Meeting

May 1—Program Meeting

June 3—Program Meeting and Plant Sale

June 22—Board Meeting, 12-4 PM

Field Trips, see page 4.

Deadline for Fall Issue is August 15, 1996.

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

New Decisions made at the MNPS Board Retreat on June 23

The MNPS Board of Directors met for four hours on Sunday, June 23. The annual Board Retreat is an opportunity for the Board, including both outgoing board members and new board members, to get together for an extended period of planning, and to elect officers. This year, major agenda items included the following:

Board Election. Officer responsibilities were discussed. We would like to move to a system where the Vice President moves into the presidency the following year, and is the chair of the Nominations Committee during the vice-presidential year. In the recent past, the Vice President has been the Program Chair; this responsibility was uncoupled from the office. Char Bezanson was reelected President; Charles Umbanhowar was reelected Vice President. Pat Ryan was elected Treasurer, and Chris Drassal was reelected Secretary.

Program. The board discussed ways to structure meetings to make it easier for members to connect with each other, and to make it easier for new members to meet others. While we will retain our emphasis on a strong program of speakers, we will attempt to provide structured opportunities to meet others in smaller groups for part of some meetings.

Membership Involvement. The board has been concerned for some time that much of the work of the Society is concentrated in a few key people, and board members brainstormed ways to improve the situation. We are a diverse group with a wide variety of backgrounds, including academics, agency professionals, gardeners, and other native plant enthusiasts. While many of us know each other, the structure of our meetings doesn't always make it easy for people to participate and interact with one another. The "lecture" nature of the program, while meeting many needs, is essentially passive.

(continued on page 7, New Decisions...)

MNPS officers, board members, committee personnel, and function coordinators—1995-96 and 1996-97

Board Directors	1995-96	1996-97
1	Nancy Albrecht (93-96)	Roy Robison (94-97)
2	Arden Aanestad (93-96)	Char Bezanson (94-97)
3	Esther McLaughlin (93-96)	Val O'Malley (94-97)
4	Roy Robison (94-97)	Gerry Drewry (95-98)
5	Char Bezanson (94-97)	Thor Kommedahl (95-98)
6	Val O'Malley (94-97)	Charles Umbanhowar (95-98)
7	Gerry Drewry (95-98)	Gary Perrault (96-99)
8	Thor Kommedahl (95-98)	Deb Anderson (96-99)
9	Charles Umbanhowar (95-98)	Dave Crawford (96-99)
Officers		
President	Char Bezanson	Char Bezanson
Vice President	Charles Umbanhowar	Charles Umbanhowar
Secretary	Chris Drassal	Chris Drassal
Treasurer	Ruth Phipps	Pat Ryan
Program Committee		
Chair	Charles Umbanhowar	Dave Crawford
Board Liaison	Charles Umbanhowar	Charles Umbanhowar
Monthly Program	Charles Umbanhowar	Gary Perrault
Symposium	Esther McLaughlin/Don Knutson	to be filled
Field Trips	Nancy Albrecht	Nancy Albrecht
Hospitality	John & Jackie Buffalow	to be filled
Audio-Visual	Charles Umbanhowar	Gary Perrault
Facility	Char Bezanson	Char Bezanson
Security	Don Knutson	Don Knutson
Seed Exchange	Ry Robison/Char Menzel	Roy Robison
Plant Sale	Gerry Drewry	Gerry Drewry
Postcard Notification	Esther McLaughlin	to be filled
Publication Committee		
Chair	Roy Robison	Roy Robison
Board Liaison	Roy Robison/T. Kommedahl	Roy Robison/T. Kommedahl
Printing/Mailing	Roy Robison	Roy Robison
MN Plant Press Editor	Thor Kommedahl	Thor Kommedahl
Membership-Outreach		
Chair	Diane Hilscher*	to be filled
Board Liaison	Roy Robison	Roy Robison
Roster	Marcie O'Connor	Marcie O'Connor
New members	Diane Hilscher	Diane Hilscher
Brochures & Stationery	Don Knutson	Don Knutson
Display Board	Don Knutson	Don Knutson
Mail Pickup/Distribution	Rae Montgomery	Bettina Darveaux
Car Pooling	Grace Gray	Grace Gray
Conservation Committee		
Chair	Vacant	to be filled
Board Liaison	Char Bezanson	Char Bezanson
Issues	Vacant	to be filled
Adopted Gardens	Char Bezanson*	Chris Armstrong

*Function performed by default

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,

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 and Announcements

MNPS Calendar for 1996-1997

August

MPP fall issue deadline: 8/15/96

September

Board meeting: 9/5/96, 6:30-8:30 PM. MVNWR

October

General meeting and program: 10/3/96, 6:30-9 PM.
MVNWR

November

General meeting, program, and seed exchange: 11/7/96,
6:30-9 PM, MVNWR

MPP deadline for winter issue: 11/15/96

December

General meeting and program, 12/5/96, 6:30-9 PM
MVNWR

Board meeting 12/7/96, 10-12 AM, location TBA

January

No society meetings

February

General meeting and program, 2/6/97, 6:30-9 PM.
MVNWR

MPP deadline for spring issue: 2/15/97

March

Board meeting: 3/1/97, 10-12 AM, location TBA

General meeting, program, and election: 3/6/97 6:30-9
PM. MVNWR

April

General meeting and program: 4/3/97, 6:30-9 PM,
MVNWR

Symposium or alternative event: TBA

May

General meeting, program, and plant sale: 5/1/97, 6:30-9
PM. MVNWR

MPP summer issue deadline: 5/15/97

June

Board retreat: 6/22/97, 12-4 PM, Location TBA.

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. Call Don Knutson to request it.

Minnesota Native Plant Society's *Guide to Spring Wildflower Areas*

Due to the significant efforts of members Marilyn and J.B. Andersen, Jim Schuster, and John Moriarty, the MNPS' *Guide to Twin Cities Wildflowers* has been updated, redesigned and reprinted for your use as the 1996 edition. New features include an appendix of plants listed by both common and scientific names, updated information on Twin Cities area natural areas and new illustrations courtesy of Vera Ming Wong.

The 1996 publication is now available by special order through the MNPS and is being carried by the Blufftop Bookstore (MVNWR), the DNR Giftshop, the Blue Heron Bookstore (Bell Museum), Landscape Alternatives, Prairie Restorations Inc., and the St. Olaf Bookstore for \$5. If you would like to mail order a copy of the Guide, please send \$5 (check or money order please) per copy to: MNPS c/o Char Bezanson, The School Nature Area Project, 1520 St. Olaf Ave., Northfield, MN 55057. Make checks payable to The Minnesota Native Plant Society.

If MNPS members would like to distribute the guide to local nature centers or bookstores, copies can be purchased by interested members (\$3 wholesale) and then resold to the centers or bookstores at that price with a suggested retail price of \$5. Invoices, if needed, can be obtained from Char Bezanson or me.—Nancy Albrecht

The May Apple (*Podophyllum peltatum*)

"May Apples should be eaten in moderation. I vividly recall an experience of my own when I was a small boy perhaps eight years old. One afternoon in August my parents went to a neighbor's [home] for a few hours leaving a brother who was three years older than I, at home with me with instructions not to get into any mischief. We went down a lane to a large open woods where thousands of May Apples were at their best. Some were as large as the eggs of a chicken. We filled our hats to overflowing, then sat under a tree near the house to enjoy them. They were delicious, and it was the first time that I could eat all the May Apples that I wanted and not have someone around to say "no". Half an hour later I was rolling on the ground with the worst colic that one could imagine. I felt certain that I was going to die but hoped to put off the fatal moment until my parents returned. An hour or two later the discomfort left me without any ill effects; but I shall never forget the agonizing experience."—Oliver Perry Medsger, 1966.

Summer and Fall Field Trips

Nancy Albrecht

July 27, Saturday, 9 AM to 1 PM Residential Alternative Lawn Tour

Sponsored by *Friends of the Mississippi River*, this tour provides opportunities to view native woodland and prairie gardens; attractive shoreline plantings; plantings to attract butterflies and birds; and minimal maintenance, low input turf grass lawns. Choose a tour of Ramsey or Hennepin County. Registration required by July 12. The \$10 fee includes bus tour and written materials. For registration or details, contact Friends of the Mississippi, at 612-222-2193.

August 3, Saturday, 1:30 PM Roadside Plants: Weeds or Wildflowers?

Deep Portage Conservation Reserve, Hackensack

Some of the toughest plants are those that grow along highways of the state. Master Gardener Ione Strandberg, creator of the Deep Portage "Living Library" and Memorial Garden, will identify some of these beautiful plants and their characteristics. Fee and prior registration required. For details and registration, call 218-682-2325.

August 10, Saturday Minnesota Prairie Day

1—*Minnesota Landscape Arboretum*.

8:30 AM to 3:30 PM, Chanhassen. Join Ron Bowen and Chase Cornelius to learn about restoration at Schaefer Prairie, and native grasses and forbs. Tours include the Arboretum's reconstructed prairie and a bus trip to Schaefer Prairie. Lunch and transportation are included in fee of \$22 for Arboretum or Nature Conservancy members, and \$28 for nonmembers. Contact Janet Kampf (TNC) at 331-0767 for details and registration.

2—*Des Moines River Prairie SNA*. This Scientific and Natural Area is a high quality hill prairie, home to numerous prairie plant species

including the federally threatened prairie bush clover.

Directions: From Windom go 4 miles south on County Road 79, then 0.5 miles east on County Road 30. Public access is east of the river and road. Contact DNR at 612-296-6157, or 800-766-6000.

August 17, Saturday afternoon Prescribed Burn Field Trip

Why do natural resource managers set areas on fire? You will learn firsthand the important role of fire in certain plant and animal communities. After a slide show, hikers will travel to a bluff prairie where a burn will take place. Call for reservations and information at the park 507-932-3007. A vehicle permit is required.

September 11, Wednesday, 12 to 2 PM.

Landscaping with Natural Vegetation, Minnesota Valley National Wildlife Refuge, Bloomington.

Join Char Bezanson (School Nature Area Program, MNPS) and Nancy Falkum (TNC) to discuss and tour landscaping with native plants at the MVNWR. Topics include partnerships with local governments, industry and schools, site evaluation, control of exotic species, and seed collecting. The tour will be a short walk on paved trails. Bring lunch and beverage. Reservations and fee are required. For details call Janet Kampf (The Nature Conservancy) at 612-332-0767.

September 14, Saturday, 10-noon Lichens: What are they? Where are they?

Interstate State Park.

Join Jim Schuster and Nancy Albrecht for a walk through the pot-hole area of Interstate State Park to search for these fascinating plants. Meet in the lower parking area near the gift shop. Vehicle permits are required. For details call Nancy at (after 6 PM) or Jim at (evenings).

September 28, Saturday, 1:30 PM

Fall Colors Bog Walk

Deep Portage Conservation Reserve, Hackensack

There is no better place to observe some of nature's preparations for the coming cold season than the bog. In addition, the hiking trails will be ablaze in brilliant colors. Fee and prior registration are required. For more information and registration, call 218-682-2325.

In 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!

Did you know that:

•Choke cherry (*Prunus virginiana*) is the most widely distributed tree in North America, according to Professor Charles Sprague Sargent. Its growth range extends from the Arctic Circle to Mexico, and from the Atlantic to the Pacific Ocean.

•An individual poison ivy plant may have all male flowers, all female flowers, or have both male and female flowers.

•*Potentilla* comes from the word meaning "potent" referring to medicinal uses of the plant. The high tannin content made it useful as an astringent to help stop bleeding from minor cuts.

•Chicory is one of the earliest flowers to bloom in the morning, and, according to Linnaeus, it blooms at 5 AM (later on cloudy days)—probably Swedish time. A bindweed bloomed at 3 AM.

Garden Group Meetings this summer at MVNWR Center

May 1 meeting

The Garden Group met on Wednesday, May 1, with Judie Miller, Mike Marxen, and Kathryn Mikulay from the Refuge. Several items were discussed.

Woodchucks. Any information or experience that anyone has on woodland wildflowers that woodchucks especially DO or DO NOT like to eat is solicited; contact Chris Armstrong, Mary Stanley, or Char Bezanson to offer comments.

Garden purpose and audience. The audience is the general public including casual hikers and people who want to establish native plants on their own property, on school grounds, or elsewhere.

Interpretation. The MVNWR will work this out probably by including a kiosk display with photos.

Planting schemes and plant access. "Clumps" or "drifts" of plants should be established to enable easy identification. This is a prairie garden, not a restoration. We agreed to use wood chips as a mulch for the first year(s).

Representative plants. Plants in the garden should reflect the flora of the Refuge, especially the Visitor Center grounds.

Summer plans. Plans include monitoring and identifying plants currently grown in each area, soil testing, and identification or removal of weeds. Weed wrenches and other tools are available from the Refuge. Two dates in June were selected—June 6 and June 20, both at 6:30 PM. Other members are welcome to participate at any time. Work times are 1-2 hours long. —Char Bezanson

June 20 meeting

The group working on the two gardens that MNPS has adopted at the Minnesota Valley National Wildlife Refuge was rained out on their first plant identification date, but four of us (Chris Armstrong, Ed Plaster, Ellen Fuge and Char Bezanson) met on Thursday evening, June 20, to begin to identify plants currently growing in the areas and to do some weeding.

The Classroom Garden has a healthy population of ostrich fern and wild geranium, as well as Canada goldenrod. There are also some jack-in-the-pulpit, spiderwort, and violets. Unfortunately, it is not really cool or shady enough at this point to be a woodland garden, as originally envisioned. The area also includes a number of weedy species. While we didn't want to remove all of the weeds until we have something to replace them with, we did pull Canada thistle, burdock, bitter nightshade, dandelion, some raspberry and blackberry, some of the reed canary grass, and a few ash and Siberian elm saplings. This garden might do very well as a "woodland edge" garden. We may want to encour-

age the wild geranium and violets, while adding species such as columbine.

Another tree might also be a good addition. Since we have designated this growing season for observation and weeding, those decisions will wait a while, however. The refuge has "weed-wrenches" in a few sizes, which made pulling the saplings a very satisfying experience: for those of you who have never experienced the thrill of pulling a one-inch diameter sapling out by the roots, we may have an opportunity for you later this summer when we work on the prairie garden.

The prairie garden area had a number of species that we recognized, and quite a few that we hope to identify once they bloom. There are many butterfly milkweed, Canada goldenrod, coreopsis, thimbleweed, and gray coneflower, as well as goatsbeard, potentilla, Indian grass, a variety of native and exotic brome grasses, and a number of other grasses we were not too sure of, especially since no one brought a grass-identification book. There were also grape, nettles, both ragweeds, and a variety of exotic weeds. Because of the drainage from the roof and shade near the building, some of the native non-prairie "weeds" will probably be left in place. We didn't do much weeding here, but there are many saplings, primarily Siberian elm, that we may work on later.

One highlight of the evening was watching a large (painted?) turtle lay her eggs next to the garden path. She did a good job of burying the eggs, and at the time of the Board retreat on Saturday, there was no sign of them. It seems a risky business; I hope the next generation makes it!

If you're interested in participating in the next work day, feel free to call or email me, Chris, Ed, or Ellen—once a work day is planned, we'll know about it. —Char A. Bezanson.

Mayflower, or the Trailing Arbutus

On landing at Plymouth, Massachusetts, the Pilgrims saw this flower (*Epigaea repens*) and named it after their ship—according to legend.

Yet God be praised! the Pilgrim said,
Who saw the blossoms peer
Above the brown leaves, dry and dead,
Behold our Mayflower here!

God wills it, here our rest shall be,
Our years of wandering o'er,
For us the Mayflower of the sea
Shall spread her sails no more.

—John Greenleaf Whittier

Minnesota DNR Seeks Locations for Cooper's Milkvetch

Nancy Sather

Native plant. Cooper's milkvetch (*Astragalus neglectus*) is a native Midwestern legume, which apparently has its stronghold in Minnesota's prairie-forest transition zone. Until recently, this species was thought to be one of the rarest plants in the United States. Fewer than a dozen collections were made of this plant in Minnesota before 1980, and these collections suggested that it was a rare lakeshore or prairie plant. More recent sightings by the Minnesota County Biological Survey and keen local volunteers in northwest Minnesota indicate that it is not rare in that part of the state.

State locations. Although we know now of more than 100 locations for this species, these locations are concentrated in a band extending from central Marshall County to northern Becker County. Nearly all of the recent records are from disturbed areas. Most of the sightings have been in lightly maintained rights-of-way. Cooper's milkvetch is frequently observed in areas where exposed, coarse loamy banks lie between an oak upland and a small lake. Those records that do occur in native prairie appear to be concentrated in areas where shrub or aspen invasion has occurred and recent prescribed fire has opened an otherwise woodland understory for colonization by prairie species.

Current range. The DNR is preparing a status report for this species during the winter of 1996-97, and is seeking information on locations south and east of the area where it is now known. We are especially interested in tracking the species' distribution and range southward and eastward along the edge of the Alexandria Moraine through Becker, Douglas, and Otter Tail counties and eastward. Historical collections also indicate that the species extended into the forest region as far east as Itasca State Park.

Botanical features. Fully grown Cooper's milkvetch plants can stand between one and two feet tall. Although it is not a woody plant, it

generally grows in clumps that resemble a low shrub. Like other milkvetches, it has compound pinnate leaves. During the flowering season, it is difficult to distinguish it from Canada milkvetch (*Astragalus canadensis*). Cooper's milkvetch, however, is easily spotted in August and September when its large, showy pods have matured to a rich brown. Cooper's milkvetch has loose heads of nearly orbicular half-inch pods; whereas Canada milkvetch has tight, elongate racemes with narrow pods about a half-inch long and a quarter-inch in diameter.

Report procedure. Please report sightings and locations to Nancy Sather, DNR Box 7, Lafayette Road, St. Paul, MN 55155-4007; (612) 297-4963; E-mail nancy.sather@dnr.state.mn.us. Reports should include your name, a way to contact you for further information, date of observation, county, precise location information (legal description or mileage from an easily located point), and habitat. Voucher specimens are preferred and should be collected and prepared according to guidelines recently released by the University of Minnesota Herbarium. No permit is necessary for collection because neither Cooper's milkvetch nor any of its near look-alikes is protected by law. If voucher specimens are sent to the address above, we will convey them to the herbarium for you. If they are deposited directly at the herbarium, please provide a copy of your label information. Photos and sight records will also be accepted.

Nancy Sather is the Botanist for the Minnesota Natural Heritage and Nongame Research Program. She is a former president of the Minnesota Native Plant Society.

Arbutin hydrolyzes to hydroquinone, an active urinary disinfectant that is toxic and can cause nausea, delirium, even death.

Have you seen this plant ?



Cooper's milkvetch

Plant Lore

What is bearberry?

Bearberry is *Arctostaphylos uva-ursi*, a member of the Heath Family, native to wooded areas of the state.

How did it get its name?

The genus name in Greek means bear and a bunch of grapes, bear-grape, or bear's grape. We call it bearberry.

What does the plant look like?

It is a low shrub, with long, creeping, densely leaved stems. The leaves are leathery, glossy dark green on the upper surface and pale green underside. The urn-shaped flowers are white to pink and are arranged in a cluster of three to twelve. The dry berry is red.

Did Native Americans use bearberry?

It was mixed with tobacco for smoking by some tribes, and valued also for its medicinal properties.

What medicinal properties?

A tea made from it is a diuretic, used for cystitis of the urinary tract, and for nephritis. It is also an astringent. However, it contains *arbutin*—a toxin.

New Decisions made at the MNPS Board Retreat

Continued from page 1

The scheduling of board meetings before the general program has made it difficult for board members to interact with other Society members, and tends to stratify the Society. And a lack of communication about who does what in the Society, and for how long, contributes to confusion about how members can contribute without necessarily taking on more than they intend. The remaining agenda items were all looked at in relation to these concerns.

Calendar. The board decided to reschedule Board meetings, separating them from the general meetings so that Board members could participate with the general membership in both social and planning activities. Board meetings will be held quarterly, on dates different from the general meetings. The board also decided to eliminate the January meeting, which has been poorly attended, add a June meeting, and move the Plant Sale from the May meeting to the June meeting for 1997. Having the plant sale in May emphasizes spring wildflowers, but it is too early for many plants. Moving it to early June, we hope, will allow more people to bring home-grown seedlings as well as divisions, and will result in more diversity in the offerings. A June meeting might also allow for an outdoor program activity, weather permitting.

Manual of Operations. The 1994-95 Board, and especially Rick Jannett, put considerable work into writing a manual that could help orient new Board members and guide the current board. While the manual had been caught between computer formats for some time, it was available at the Retreat, and promises to be very helpful to the 1996-97 Board. Many thanks to Rick and others who contributed to the manual, and especially to Thor Kommedahl who reformatted it and arranged for hard copy! All board members will review the Manual and bring suggestions for revisions to the September board meeting.

Officer and Committee Responsibilities. We will try to better define the responsibilities of officers and coordinators, and improve communication by having Committee Chairs check with coordinators and volunteers on their committee on a yearly basis. As things stand now, we assume people will do a function forever unless they say otherwise; this can result in people doing a job longer than they would like because there isn't an easy, gracious way to pass the responsibilities on. We also want to publish a list of the main society volunteers on a yearly basis (see list in this issue) so that people know who to contact about a specific concern. We also recognize that, since this is a volunteer organization, if there is no volunteer for a function, that job may not get done.

Symposium. The Board discussed the purpose of the Symposium. One possible purpose is to provide in-depth concentration on a particular topic. The success of this kind of Symposium relies on the expertise of the speakers and the strength of their presentations; speaker selection is critical. Another purpose might be to reach out to a broader constituency with information on native plants. Yet another might be to give members an opportunity for workshop and hands-on experiences with some practical questions about native plants. Board members expressed a desire to be less involved in the details of planning the symposium or some other event; a move to quarterly board meetings makes this almost a necessity. It was suggested that we skip the symposium this year, since there is no coordinator identified at this time. A suggestion was made that this year, instead of an academic symposium, we jointly host an event that might focus on field trips or workshops, perhaps with an organization such as the Landscape Arboretum or the Nature Photography Club. This idea was met with enthusiasm. Much depends on whether coordinator(s) emerge, and what their preferences are.

This summary is from the notes and memory of Char Bezanson, and reflects her interpretation; it is not intended to be the official minutes of the meeting.—Char A. Bezanson

Volunteer Opportunities

continued from page 8

CONSERVATION COMMITTEE

Chair. This person coordinates conservation activities of the Society, including awareness of native plant legislation and issues, as well as projects such as cooperation with other agencies on action projects such as the MVNWR-adopted gardens and Society participation in the Audubon wetland monitoring project. Contact Char Bezanson if you're interested in this.

Issues Coordinator. This person keeps track of emerging issues relating to native plants, and acts as point person for members' concerns and announcements in this area. Could be the same person as Chair. Contact Char Bezanson.—Char A. Bezanson, President

Do you have suggestions for speakers or topics for 1996-97? If so, contact Gary Perrault or Dave Crawford—addresses and phone numbers on page 2.

MNPS is a voluntary organization. Its work is accomplished through the Board of Directors, the Officers, and four Standing Committees: Program, Publications, Membership and Outreach, and Conservation. Board members, Officers, Committee Chairs, and the coordinators of various functions are listed in the chart on page 2. Board meetings are open to members; members wishing to present an idea to the Board are encouraged to contact the President ahead of time to ensure inclusion on the agenda.

Many of the functions of the Society are accomplished by individuals working on their own, while some require coordination with others. Society members who take on a responsibility generally have broad latitude to shape the position to their interests and abilities, so the way a committee works depends to a great degree on its volunteers. For this reason, volunteering for the Society can be an excellent opportunity for one to develop skills and experience in an interest area. The Board is also happy to consider adding functions which support our mission of preservation of and education about native plants. Projects such as establishment of a Speaker's Bureau have been suggested, and if a volunteer wanted to organize such a project, the Board would be supportive.

We currently have several committee vacancies; members interested in volunteering for these jobs are asked to contact the person listed as Committee Chair or Board Liaison for that committee, or, the function coordinator for jobs that require several persons, such as security and audiovisual people. Some functions, such as Conservation Committee Chair, have been vacant for a while; when this happens, the function disappears for a time. Society volunteers can deduct mileage or expenses as a charitable contribution on federal taxes. Also, the Society may reimburse individuals for committee expenses.

PROGRAM COMMITTEE

Symposium Coordinator. The Symposium Coordinator(s) plan the Spring Symposium. This job can be divided into Facilities Coordinator and Program Coordinator. Although direction and guidance will be provided by the Board, this person has considerable latitude, and the position provides opportunities to gain experience in event planning. If a symposium or other special event is to be held this year, a Coordinator is needed soon. One option is to host a workshop or field-oriented event, possibly by working with another group such as the Audubon Society, the Minnesota Landscape Arboretum, or the Minnesota Nature Photography Club. People in these groups are encouraged to discuss such an event with a Program Committee member.

Hospitality Coordinator/ Hospitality Volunteers. The Hospitality Coordinator arranges for treats at monthly meetings; the position could be shared by several people, and could be rotated Fall/Spring or some other way. This person should be at the Refuge by 6:30, to start coffee, and bring treats. Coffee is purchased from the Refuge; food expenses are reimbursed by the Society. Contact John or Jackie Buffalow or Dave Crawford if you can help.

Audiovisual Volunteers. We need several people skillful in operation of slide projectors, lights, and microphones. Contact Gary Perault if you can help.

Security Doorkeeper. We need someone to become familiar with the Refuge lockup procedure, and to staff the door as people arrive. The door-keeping function is suited to a student who is free to study during the meeting. The Board will pay a reliable student \$10 per meeting; see Dave Crawford or Don Knutson.

Postcard Volunteer. This person sends out the postcard announcing each monthly meeting. The person contacts the Monthly Program Chair to obtain the program title or other information, design the postcard to fit four-to-a-page, photocopy

on heavy paper and cut. Labels are provided by the Membership Committee. Cards are mailed at least a week before the meeting. Expenses are reimbursed. Contact Gary Perault or Char Bezanson for details.

PUBLICATION COMMITTEE

Writers. Articles on native plants and related issues are always welcome from members. If an article is selected as a "lead article" for an issue of the Minnesota Plant Press, an honorarium of \$50 is paid to the author. Personal accounts, reports of native plant locations, book reviews, and other shorter articles are also solicited. Committee members are encouraged to write occasional short pieces about its activities. Mail or e-mail articles to the MPP Editor; for longer articles, submit copy by e-mail, computer disc, or mail.

MEMBERSHIP & OUTREACH

Chair. This person communicates with individual volunteers of this committee, coordinates committee functions, and may also initiate press releases or other publicity. This position has been unofficially shared by Diane Hilscher, Roy Robison, and others but would benefit from its own person! Contact Diane Hilscher or Roy Robison if you'd like this job.

Mail/Phone Response Volunteers. The Society receives many requests for information on the Society and native plants; these are routed by the Mail Distribution volunteer. A network of volunteers with knowledge of native plants can make this process more systematic. The Board is also considering a message phone line for announcements to members and others. We will need someone to return or refer calls requesting information about the Society. Contact Diane Hilscher or Char Bezanson if you're interested in these outreach activities.

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Volunteer Opportunities....*

Effect of Deer Browse in the Big Woods

Land-use patterns. In southeastern Minnesota, the current agricultural, urban, and dispersed residential landscape contrasts sharply the mesic deciduous forests, oak savannahs, and prairies that once covered the region. Within this matrix of human land-use practices, however, many efforts are focused on conserving and restoring remnants of native plant communities. The success of these efforts depends not only on social and economic considerations, but also on changes in the ecological processes operating in human-dominated landscapes. Increasing white-tailed deer densities in residential and agricultural regions of Minnesota over the past three decades have generated concerns regarding the influence that increased herbivory may have on natural community remnants. As a result, research initiated in 1994 through the Minnesota Agricultural Experiment Station and the University of Minnesota's Department of Fisheries and Wildlife has been designed to examine the influence of deer on remnants of the highly fragmented Big Woods forests ecosystem.

Understory diversity. Big Woods forests, dominated by shade tolerant tree species such as sugar maple, elm, and American basswood, often contain an exceptional diversity of spring and summer forb species in the understory community. Our first step in examining deer impacts on this understory community was to assess the grazing intensity and species preferences of deer in four remnant Big Woods forests during the spring and summer of 1995. Although the overall intensity of deer herbivory was relatively low, deer foraged in a highly selective manner. One clear pattern emerging from these analyses was the selection for species in *Liliaceae* family (for example *Trillium*, *Uvularia*, *Allium*, *Erythronium*, and *Smilacina*) in the spring and early summer. Later in the summer, foraging preferences shift to late-flowering forbs such as *Laportea canadensis*, *Solidago flexicaulis*, and *Impatiens pallida*. However, more than 15 forest forb species were consistently ungrazed or unpreferred forage species for deer. Such selective behavior is likely to have an important role in altering the overall plant community composition in areas supporting high deer densities.

Understory herbivory. Our research has also used deer exclusion experiments, forb transplant experiments, and surveys of natural forb populations to examine the influence of deer on both particular forb species and the overall Big Woods understory community. Patterns emerging from both the species preference analyses and these experiments indicate that species such as *Trillium cernuum* and *T. flexipes* can be significantly impacted both in terms of plant density, reproduction, and population recruitment in areas supporting high

deer densities. After only one year of study, the enclosure experiments are also beginning to reveal significant impacts on late-summer species in the understory community such as *Laportea canadensis*, *Osmorhiza claytonii*, and *Circaea lutetiana* in areas supporting high deer densities. In contrast, virtually no herbivore effects have been observed in areas where deer are currently managed at lower densities. As these studies are continued through the 1996 growing season, we hope to develop a more refined picture of the effects that deer are exerting on Big Woods remnants and determine local deer densities that will complement plant community conservation efforts.

Deer foraging patterns. During the upcoming field season, our research will also look beyond the boundaries of these forest remnants into the surrounding human-dominated landscape. Due to the mobility of white-tailed deer, understanding their influence in remnant plant communities requires both a focused look within these communities, and a broader scale perspective. Studies in 1996 will include surveys of Big Woods remnants throughout Hennepin and Rice counties and analyses of landscape features such as the relative distribution of particular agricultural crops, residential neighborhoods, and other forest types in the regions surrounding the Big Woods remnants. Understanding the influence that landscape features can have on deer foraging patterns will provide additional insight into management activities that will effectively address the influence of white-tailed deer on native plant community conservation efforts.

This is a summary of a presentation to the Minnesota Native Plant Society by David Augustine, on April 4, 1996, at the Minnesota Valley National Wildlife Refuge. David is in the Department of Fisheries and Wildlife of the University of Minnesota, St. Paul Campus.



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