

## Minnesota Plant Press

The Minnesota Native Plant Society Newsletter

Volume 20 Number 4 **Summer 2001** 

#### **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. Check the web page for additional program information.

#### Oct. 4

"Fighting Urban Sprawl: 1000 Friends of Minnesota," by Lee Ronning, president and CEO of 1000 Friends of Minnesota

Nov. 1, Speaker to be announced **Seed exchange** 

Dec. 6, Speaker to be announced

#### **Building access limited**

The visitor center closes to the public at 5 p.m. Thursdays. When MNPS meetings are scheduled, the east door will be unlocked at 6:30 p.m. and relocked at 7:30 p.m.

#### MNPS web site

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

## Construction in new urban areas may cause oak wilt

When new houses are constructed in a previously forested area, oak trees tend to die from oak wilt. Researchers at the USDA Forest Service's North Central Research Station are seeking to increase the public's awareness of this problem before construction is started in an oak woods. Prevention is important because there is no cure for oak wilt, which kills thousands of oaks each year.

Jenny Juzwik, project leader of St. Paul's Forest Diseases Unit, and her colleagues saw that since the 1970s, oak wilt was increasingly found in new subdivisions. "At first it was anecdotal," she said, "but it was consistent enough to make us want to document what we were seeing."

As a result, her team is studying how urbanization affects oak tree health and the oak resource in the Upper Midwest. The study is part of North Central's integrated program on Landscape Change and will be piloted in the Minneapolis-St. Paul area. The team's goals are to collect historical data, to use these data to predict the impact of planned development on the oak resource, and to evaluate strategies designed to minimize the impact on oak tree health. The team will work with Gary Johnson and Brian Loeffelholz of the University of Minnesota, and with Jean Mouelle and Susan Burks of the Minnesota Department of Natural Resources.

"We want to raise planners,' developers' and the public's awareness about oak tree health, and particularly about oak wilt, before they build in oak woods —because what they do before and during development may mean life or death for oak trees," Juzwik said. "Because one of the strategies for controlling oak wilt is using trenching and vibratory plowing to break up connected roots, property owners need to know whether there is oak wilt on their property before they develop roads and install underground utilities. Once phone and utility wires and pipes are buried, trenching or vibratory plowing are no longer control options."

Spring construction in an oak-forested area should be avoided, since most insect-spread oak wilt occurs during the spring. An oak wilt infection typically starts at the site of a tree wound, such as a nick or

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#### Oak wilt

continued from page 1

scar caused by heavy earthmoving equipment. Insects attracted by the fresh wound bring fungal spores to the tree. After it enters the tree, the fungus goes underground, spreading from the roots of one infected oak to the joined or grafted roots of adjacent trees. The most susceptible time for infection is one to eight days after the tree is wounded.

"Our hope is that this research will help communities, landowners and foresters look at oak wilt in the larger context of oak forest health," said Ken Holman of the DNR. "Oak wilt control has become more proactive, with cities treating infection centers before roads and homes are built. Perhaps soon we can predict which forests are most vulnerable, and use this ... before properties are platted for development."

(Information is from an article by Norene Blair in the January/ February/March 2001 issue of North Central Research Station News.)

# The Minnesota Native Plant Society

The Minnesota Native Plant Society is a tax-exempt 501 (c)(3) organization as determined by the U.S. Internal Revenue Service.

Dues for regular members are \$12 per year; students and seniors, \$8; families, \$15; institutions, \$20; donors, \$25. All dues include a newsletter subscription. Four issues are published each year. Make checks out to: Minnesota Native Plant Society. Mail them to: Minnesota Native Plant Society, 220 Biological Sciences Center, 1445 Gortner Ave., St. Paul, MN 55108.

#### **Minnesota Plant Press**

The Minnesota Plant Press is the quarterly newsletter of the Minnesota Native Plant Society. Articles are welcomed. Write the editor, Gerry Drewry, at 24090 Northfield Blvd., Hampton, MN 55031; phone her at 651-463-8006; or send an e-mail to: gdrewry@infi.net.

#### 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: Joel Dunnette,** 4526 Co. Rd. 3 S.W., Byron, MN 55920; 507-284-3914 (W); 507-365-8091 (H); dunnette.joel@mayo.edu

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**Treasurer: David Johnson,** 6437 Baker Ave. N.E., Fridley, MN 55432; 763-571-6278; davidjohnson@usfamily.net

## **MNPS Board re-elects officers**

Minnesota Native Plant Society officers were re-elected, committee chairs named, and other business conducted at the June 16 board meeting, which was held at Gerry Drewry's home. Joel Dunnette is again the president; Harriet Mason, vice president; Deborah Strohmeyer, secretary, and David Johnson, treasurer.

The board includes three members who were elected at the June 7 monthly meeting. They are Janet Larson, who succeeds Virginia Card, and Joel Dunnette and Linda Huhn, who were re-elected. Nancy Sather has resigned from the board; Jason Husveth was appointed to serve the final year of her term.

Instead of paying to meet at the wildlife refuge visitor center, the MNPS provides two articles for the U.S. Fish and Wildlife Service newsletter and leaders for two tours. Nancy Sather will again provide the articles; Joel has led one tour this year. Linda Huhn will lead a fall photo safari. (See separate announcement on page 5.)

Newsletters are published quarterly, in November, February, May and August. Articles submitted for inclusion should be e-mailed to Gerry Drewry by the first of the preceding month.

Several committee positions are open. Members interested in filling any of these openings are urged to contact Deborah or Joel. Members who would like to serve on a committee should contact that chair. The current committee list is as follows.

**Monthly program:** Virginia Card, Linda Huhn

**Seed exchange:** Dave Crawford **Plant sale:** Dave Crawford, Gerry

Drewry

**Audio Visual:** Dave Crawford, Joel Dunnette

**Refreshments/clean-up:** rotating

board members

Education and Outreach: Open Web page, listserv manager: Charles Umbanhower

Technical inquiries: Deborah

Strohmeyer

Display board: Deborah

Strohmeyer

Field trips: Jason Husveth

Roster, mailing labels: David

Johnson

Name tags: Open

Postcards: David Johnson

Newsletter editor: Gerry Drewry Newsletter distribution: Chuck

and Ellen Peck

Wildflower Guide: Open

Brochure, stationary: Roy

Robison

**Conservation**: Ethan Perry

Symposium: Nancy Sather, Jason

Husveth, Esther McLaughlin

Historian: Open

### **Evelyn Moyle is honored**



MNPS President Joel Dunnette presents a certificate of appreciation to Evelyn Moyle for the revised edition of her book, "Northland Wildflowers." This new edition of the classic guide by Evelyn and her late husband, John B. Moyle, contains some of Evelyn's photographs from the first edition and new ones by John Gregor. The book-signing/reception, which was organized by Nancy Sather, preceded the June 7 MNPS meeting. (Photo by Linda Huhn)

#### **Knotty Pearlwort**

by Michael Lee (Abstract of Plant-of-the-Month talk March 1, 2001)

Knotty Pearlwort (Sagina nodosa ssp. borealis) is a small, mat-forming perennial in the family Caryophyllaceae. Plants are only a few inches tall. Knotty pearlwort has lots of small white flowers which are about 1/4 inch across. The lower leaves are linear-subulate and often quite numerous. The upper leaves are opposite, scale-like, and subtend axillary bulb-like fascicles. The seeds are tiny, the size of a pin head, black with a warty or pebbled appearance.

Threats to this and other shoreline plants include the rapidly expanding Herring gull population along the North Shore. Herring gull breeding colonies now cover most islands and occur regularly along the mainland shore as well. The gulls cause excessive nutrient enrichment to the lakeshore communities, which results in weeds replacing the native plants. The rock pools, which are important habitats for several rare plants including *Sagina*, become fouled and devoid of plant life.

# Mycological association holds mushroom foray in Minnesota

by Esther McLaughlin

St. John's University, Collegeville, was headquarters July 5 - 8 for the annual mushroom foray (a get-together for collecting, identifying, learning, and eating) of the North American Mycological Association (NAMA), a large organization of mushroom enthusiasts with allied local clubs all around the continent. Although central Minnesota had a rather dry late June, participants managed to collect 210 different species during the weekend.

Attendees went on two collecting trips each day, followed by lab work for identifying specimens in the late afternoon and evening. Several professional mycologists from around the Midwest attended the foray for their own interest and to assist with identification. Daytime and evening presentations provided the group with information about specific groups of fungi.

There were quite a few choices of sites to collect at, including three completely uncollected (mycologically) Scientific and Natural Areas nearby: Partch Woods SNA, Quarry Park SNA, and Rice Lake Savanna SNA. Dave McLaughlin, MNPS member and curator of fungi at the University of Minnesota Herbarium, got permission from the DNR for the NAMA foray to collect at these SNAs. The SNA collections will be deposited in the UM Herbarium; the complete foray species list can be seen at http://www.lactarius.com/nama/nama2001spp.htm.

If you were wishing you knew more about the mushrooms you see in the woods, you might consider hooking up with the Minnesota Mycology Society. They meet at the U of M St. Paul campus on Monday evenings in the spring and fall, and have local and out-state field trips and various educational programs, including instruction in identifying your "catch." The contact people are Robert Fulgency, president of MMS (H: 952-920-9311; W: 763-560-3425; robjoful@aol.com) and membership secretary Peggy Laine (plaine1@juno.com; 612-331-3063).

#### **Collect seeds for November exchange**

Members will exchange seeds of Minnesota native plants during the November meeting. Dave Crawford, chair of the seed exchange, will give guidelines for collecting and storing seeds at the October meeting.

Members are invited to collect mature seeds of native plants, package them and bring them to the meeting. Seeds should be placed in individually labeled envelopes, ready for members to pick up. Do not bring bulk seeds. Labels should include the plant name, scientific name (if known), habitat type and the city or county where the seeds were gathered, as well as the name of the donor.

With NAMA membership (www.namyco.org) or e-mail (membership@namyco.org) you get publications with information about national, overseas, and regional foray, and educational articles on specific groups of fungi and other topics (for example, mushroom poisoning).

Visit their website to get an overview of NAMA activities and opportunities.

# National Forest Ecology Workshop held in Duluth

by Meredith Cornett

The Third North American Forest Ecology Workshop was held in Duluth from June 24 to 27. The conference brought forest researchers and managers together to discuss applications of the latest science to sound forest management. True to the theme of this year's workshop, "Issues of scale from theory to practice," topics ranged from individual leaf chemistry to large, forested landscapes.

Northeast Minnesota was a particularly good location for a conference on the topic of scale in forest management. The state's Sustainable Forest Resources Act (1995) created a framework to start planning forest management at a landscape scale. Six regional landscape committees will implement this framework. By mapping out future landscape-level visions for our forests, the landscape committees will develop voluntary tools to help make local management decisions. Dave Miller, landscape coordinator for the Northeast Minnesota Landscape Committee, presented his experience with this process. Many researchers at the Natural Resources Research Institute (NRRI) have contributed data and other information to the initiative. Conference attendees heard from many of these scientists in a session on spatial assessment and decision tools, led by George Host of NRRI.

In addition to telescoping from trees to stands to landscapes and back again, several sessions explored other linkages within forested landscapes. One session, for example, examined from numerous angles the relationships between forest conditions and the integrity of streams and lakes. Another session addressed the needs of a variety of forest flora and fauna, everything from spring ephemeral wildflowers to salamanders and migratory songbirds, from the micro to the macro scale.

Minnesota Native Plant Society members may be especially interested that one of the concurrent sessions was dedicated to non-timber forest products, the theme of our March, 2001, symposium. Leading this session were two of the speakers who spoke to us, Elizabeth Nauertz and John Zasada of the U.S. Forest Service. MNPS member Nancy Sather presented an overview of biodiversity issues related to native plant harvests. A number of topics not covered in the NPS Symposium were addressed, including the distribution of wild leek (*Allium tricoccum*) in the Southern Appalachian Mountains, the use of black ash and native Panamanian palms in basketry, and stewardship of devil's club (*Oplopanax horridus*) in British Columbia.

This year's North American Forest Ecology Workshop was a huge success. The sessions offered something for everyone, and there was ample opportunity for interaction with local and international forest ecolgists involved with timely applied and basic research. The first in this series of workshops was held in Raleigh, North Carolina, in 1997. The second was in Orono, Maine, in 1999. The 2003 workshop may be in the western United States.

# Linda Huhn to lead photo safari at wildlife refuge

Linda Huhn will lead a photo safari at 7:30 a.m. Thursday, Sept. 6, at Old Cedar Ave. in the Minnesota Valley National Wildlife Refuge. Directions: From Highway 77 (Cedar Ave.), exit onto Old Shakopee Rd. Drive west to Old Cedar Ave. and turn right. The trailhead is at the bottom of the hill, near the old bridge.

# Wild Ones plan two native garden tours

The Wild Ones Natural Landscapers, Ltd. will host two garden tours in place of their August meeting. These tours are free of charge and are open to members of the Wild Ones and the MNPS.

The first will be a tour of four St. Paul gardens, both mixed and native, Saturday, Aug. 18. This will be a conducted tour limited to 50 people. It will begin at 10 a.m. at Horton Park, Hamline and Minnehaha Avenues (north of University Maps and garden Avenue). descriptions will be distributed at this time. Participants will also see the native garden planted there and speak with volunteers who maintain it. Anyone wishing to attend should R.S.V.P. to Barbara Gallagher, 651-690-4366, or barbg2@prodigy.net.

The second tour will be Tuesday, Aug. 21, at 6:45 p.m. It will be a self-guided tour of three Southwest Minneapolis native gardens. Maps and garden descriptions will be available at the Nokomis Community Center, 2401 E. Minnehaha Pkwy., Minneapolis. The community center is home to three very diverse native gardens. For any questions regarding this tour, call Marty Rice at 952-927-6531.

# Minnesota Invasive Species Advisory Committee meets

by Anne Selness
Edited by Esther McLaughlin
(This is an abridged version of their report.)

The Minnesota Invasive Species Advisory Committee held its first meeting May 25. Members present included Lee Peterson, Minnesota Nursery and Landscape Association; Kevin Connors, USDA-Animal and Plant Inspection Service (APHIS); Steve Katovich, U.S. Department of Agriculture-Forest Service; Pete Bauman, The Nature Conservancy; Esther McLaughlin, Minnesota Native Plant Society/Augsburg College; Gary Johnson, University of Minnesota; Eric Nordlie, Bailey's Nursery; Marvin Johnson, Farm Bureau Federation; and Anne Selness, Collie Graddick, Peter Dziuk and Dwight Robinson from the Minnesota Department of Agriculture.

The National Invasive Species Council recommends that all states form invasive species councils.

Tentative goals for the committee were discussed:

- To provide an opportunity to network statewide with other professionals interested in invasive species management;
- To review information on the current status and management of invasive species in Minnesota;
  - To work on an invasive species early warning and detection system;
- To provide input on prioritizing species for the Cooperative Agricultural Pest Surveys (CAPS);
- To avoid duplication of efforts and resources on invasive species management in Minnesota.

The MDA Noxious Weed Committee was explained, and how it differs from this advisory committee. We also talked about the noxious weed laws. The CAPS program was discussed. This USDA program provides money for surveys of exotics that may be intercepted in the U.S. The whole concept is to get groups working together and to pool resources. Each person then summarized what their organization was working on in invasive species management and voiced their ideas for this new group.

Esther McLaughlin said it is important to educate members of the public on invasive species. MNPS had a symposium on invasive species some years ago. Recently, the MNPS began studying ways to educate the public about non-native invasive earthworms and their effects on native vegetation. The MNPS may be useful to help keep people statewide informed about what other organizations are doing in invasive species management.

Pete Bauman stated that the top threats to native ecosystems are invasive species. He mentioned work with sweet clover, trefoil, Kentucky bluegrass, cattail and reed canary grass, which are invading prairies. Eric Nordlie talked about the wholesale nursery-growing industry. Kevin Connors discussed what the USDA-APHIS does to survey and detect invasive species and how they provide information on pathways, eradication efforts, etc.

Lee Peterson came to represent suppliers, growers, and retailers. He stated that the nursery industry is very regulated and would like to see other industries inspected as they are. He feels public education on invasive species is very important.

Steve Katovich said the USDA-FS would like to hire a weeds person to help with the invasive species problem. Gary Johnson works with urban forest health issues and would like this group to work on outreach projects. He would like us to work on how species get labeled as invasive and what is the evaluation process for this. He would like everyone to use the term "invasive," not "exotic."

Carol Mortinse, botanist/exotic species project coordinator for the Leech Lake Division of Resource Management, sent a written report. She wrote that the spread of invasive species could result in loss of species traditionally used by tribal members, especially plants used for food, medicine, income and ceremonial craft purposes. Her group implements biological control projects for control of purple loosestrife, spotted knapweed and leafy spurge. They work cooperatively with the Chippewa National Forest in managing weeds. They have developed a brochure, "Is It a Wildflower or a Weed?" They also work with the earthworm issues and will start some work on zebra mussels this year.

The next meeting will be sometime in September. In the meantime, Anne Selness will set up a listsery so we can communicate frequently with any new species, topics or information that members would like to share.

#### **Plant Lore**

by Thor Kommedahl

#### What is bugleweed?

Bugleweed is a name given to species of *Lycopus* in the mint family. Two species occur in Minnesota, *L. americanus* and *L. virginicus*. *L. americanus* is also called cut-leaved water horehound.

#### What do its names mean?

Lycopus is derived from the Greek for wolf's foot, referring to the fancied resemblance of the leaf shape. Bugleweed is thought to have been derived from old English, French, or Latin: bugle, bugula or even bugloss, named for certain hairy European plants.

### What about cut-leaved water horehound?

Both species grow in wet places, but *L. americanus* has deeply cut, almost oak-like leaves, especially lower ones. Horehound refers to its similarity to species of *Marrubium* in containing horehound used as a folk remedy for coughs.

#### What are the plants like?

They are perennials, produce stolons, have tiny, white flowers borne in whorls in leaf axils, yield four three-sided nutlets per flower, grow 6 to 24 inches tall in wet places in Minnesota. *L. americanus* grows throughout the state, but *L. virginicus* is limited to only a few southeast counties near rivers. They flower in summer and fall.

#### Does it have uses in medicine?

Plant juice prepared from the whole fresh plant has been used as an astringent, a hemostatic substance, and a mild sedative. Plant extracts inhibit iodine metabolism and thyroxine release in the thyroid, thus

### The Richness of Summer

by Joel Dunnette, MNPS president

I struggle through winter, lasting on memories of the flowers, butterflies and birds of the other seasons. Winter is so spare. In spring I treasure each new discovery. A single new flower or bird can make my day. In fall I appreciate each little bit of remaining life as nature closes down. In midsummer I have so much richness of life around me that I often fail to stop and appreciate it all. Yet summer has such a richness, such a diversity, and such a changing show of beauty and wonder.

I often let myself get put off by the heat and humidity and the biting bugs and prickly plants. And the press of work and obligations. But when I set my mind and prepare so I can go where the wonder leads me, what a great time I can have. There is so much to see and hear and smell that is wonderful and changing and native.

Walking to my car after work, I am swept by the fragrance of basswood blossoms. Nearing our house, I see the spectacular beauty of dozens of Turk's-cap lilies in the ditch. Coming up the driveway, I scatter numerous butterflies and birds off into the prairie and woods.

The flowers of spring have faded away, and the birds don't sing so much now. The prairie is tall, and it takes work to move through it. But what lushness and beauty mid-summer brings. Yes, there are lots of bugs and heat. But the days are long and there are wonderful sights, sounds, smells, behaviors and textures to fill your senses at any time of day.

Recently I strolled in some familiar areas and discovered new plants and larger numbers of individuals than I had noticed previously. I need to get there more often — to discover, to feed my senses to get through the coming winter, but also to show other people so that they will enjoy and care about these areas and their plants and animals as much as I do. That is the only way we can have any assurance the native wonder will be there for us to appreciate in the future.

So prepare yourself for the heat and biting bugs and irritant plants. Wear long sleeves and pants in light, breathable fabrics, a good hat and sunscreen and insect repellent. Take plenty of water! And get out into the lushness of

serving as a treatment for hyperthyroidism. Extracts from leaves seem to be more active than those from roots.

#### What about its use as a dye?

The juice is said to give permanent color to linen, wool, and silk fabrics that will not wash out. Root extracts have also been used to stain the face brown.

the summer prairies and wetlands and streams and lakes and, yes, even the forests.

Experiencing the wonder and diversity yourself is by far the best way. Remember, winter is coming! Stock up on those mid-summer memories!

Thank you, Ruth Phipps, for years of making decorative name tags for MNPS meetings.

Minnesota Native Plant Society University of Minnesota 220 Biological Sciences Center St. Paul, MN 55108

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#### **Summer 2001 Issue**

