



# Minnesota Plant Press

The Minnesota Native Plant Society Newsletter

Volume 27 Number 2

Winter 2008

## Monthly meetings

Thompson Park Center/Dakota Lodge  
Thompson County Park  
360 Butler Ave. E.,  
West St. Paul, MN 55118  
651-552-7559 (kitchen)

## Programs

The MN NPS meets the first Thursday in October, November, December, February, March, April, May, and June. Check the website for more program information.

6 p.m. — Social period

7 – 9 p.m. — Program, society business

**Feb 7: “Biofuels: Threats and Opportunities for Native Plants,”** by Joe Fargione, regional scientist, The Nature Conservancy, Minnesota Chapter. **Plant of the Month** (also by Fargione): *Panicum virgatum* (switchgrass). **Announce slate of new board member candidates.**

**March 6: “Rare Plants in Temporary Rainwater Pools on Bedrock Outcrops: Recent Discoveries on Some of Southwestern Minnesota’s Most Scenic and Threatened Habitats,”** by Fred Harris, Plant Ecologist, DNR. (No POM since many plants will be covered in detail.) **Annual Meeting/Election of three new board members.**

**April 5, 8:30 a.m. - 4 p.m.: Annual symposium, “The North Shore Highlands,”** Bell Museum of Natural History, University of Minnesota, Minneapolis. See article on page 3.

## MN NPS website

For current information about MN NPS field trips, meetings, and other events, check the website: [www.mnnps.org](http://www.mnnps.org)

## Canoes help searchers in dwarf trout lily hunt

by Russ Schaffenberg

I first saw the rare dwarf trout lily in 2006 when I volunteered with the DNR Natural Heritage Program. I helped with the count in Nerstrand Big Woods State Park, close to the park headquarters, near the waterfalls — a gorgeous scene on a beautiful spring day. To stare at the emerging greenery on the forest floor all day puts me in a very happy place after a long winter. I guess when you linger a long while in nature and immerse yourself in it and leave other thoughts behind, you will sense and experience nature at a much deeper level of detail and sensation. I felt great satisfaction while driving home that day, glad spring was here, eager to plan more outdoor adventures.

I shared with Derek Anderson and Nancy Sather my love to canoe and kayak and that I had paddled past the dwarf trout lily SNAs on the Cannon River before. There are several SNAs along the Cannon, and it makes a great day-trip from the metro, whether you bike, rollerblade, paddle the river, or simply hike. If you choose to paddle, you don’t even need an extra vehicle to shuttle between Cannon Falls, Welch and Red Wing, as you can just bike or skate back to the car on the scenic trail. I also shared that I could equip any plant search they had to do via boat.

They took me up on my offer. They had been studying maps, zeroing in on possible dwarf trout lily habitat on private land along the Straight River, which joins the Cannon near Faribault, and contacting landowners to get permission to search. The easiest way to access the sites was via the river, because these places were often far from a road and because some landowners preferred that we access via the river. A canoe trip was planned.

I met up with DNR staff members Derek, Sharon Goetz Hollister, and Amanda Plain at Medford City Park. We unloaded the gear and canoes, drove to our destination, left my vehicle, and returned. Derek, our leader, came well prepared with GPS and great maps. On larger rivers with larger bends, it’s easy to navigate with a

*Continued on page 3*

## In this issue

Society news .....	2
Symposium .....	3
President’s column.....	4
ATV damage .....	4
Herbarium .....	5
Medicinal plant harvests ...	6
Field trips .....	7
Plant Lore: Fireweed .....	7
Membership form .....	7

# Meet Russ Schaffenberg

Russ is one of the newest members of the Society's board. He grew up in Mankato, amid a strong tradition of gardening, hunting, fishing and love of nature. But his hippie friends in college gardened organically, which greatly influenced him, and ever since then he has grown much of his own food and loves to cook.

With strong environmental values, he studied chemistry and biology and became good at plant identification, and still has his tattered *Britton and Brown* and *Thomas Morley*. But ultimately he became a chemist, first in the environmental field, then in the water purification industry. He was also a working musician and recently was inducted into the Minnesota Rock & Country Music Hall of Fame. He finally traded his drumsticks for a lake cabin in northern Wisconsin.

Russ is president of his lake association, writes their newsletter, does the lake monitoring and loves to canoe and kayak the nearby Wild and Scenic rivers. He retired early

and finally had time to study the flora again, gaining inspiration, information and connections from the MN NPS. Now basically a homemaker, he has time to travel, enjoy nature and study the flora.

## Updates to plant keys are available

Bruce Barnes has updated his Flora ID plant keys with added images, nomenclatural changes, etc. Contact him if you wish to get an update for \$6 for shipping and handling. He is planning to bring out new, updated databases on an annual basis, with updates available around the first of each year.

Contact him at: Bruce S. Barnes, Flora ID Northwest, LLC, 731 NW 5th, Pendleton, OR 97801; 541-276-5547; FAX 541-276-8405; or [flora@uci.net](mailto:flora@uci.net); or [www.xidservices.com/FID](http://www.xidservices.com/FID)

If you have not yet purchased a Minnesota interactive plant key through the MN NPS, contact Ron Huber at [huber033@umn.edu](mailto:huber033@umn.edu). The cost is \$70 to members who are up-to-date on their dues.

# MN NPS Board of Directors

**President:** Scott Milburn, [scott.milburn@mnnps.org](mailto:scott.milburn@mnnps.org)

**Vice President:** Shirley Mah Kooyman, [shirley.mah.kooyman@mnnps.org](mailto:shirley.mah.kooyman@mnnps.org)

**Secretary:** Sean Jergens, [sean.jergens@mnnps.org](mailto:sean.jergens@mnnps.org)

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**Ken Arndt**, board member, [ken.arndt@mnnps.org](mailto:ken.arndt@mnnps.org)

**Peter Dziuk**, board member, [peter.dziuk@mnnps.org](mailto:peter.dziuk@mnnps.org)

**Linda Huhn**, board member and program coordinator, 612-374-1435

**Daniel Jones**, board member, [daniel.jones@mnnps.org](mailto:daniel.jones@mnnps.org)

**Beth Nixon**, board member, [beth.nixon@mnnps.org](mailto:beth.nixon@mnnps.org)

**Russ Schaffenberg**, board member, [russ.schaffenberg@mnnps.org](mailto:russ.schaffenberg@mnnps.org)

**Listserv Coordinator:** Charles Umbanhowar, [ceumb@stolaf.edu](mailto:ceumb@stolaf.edu)

**Field Trips:** [fieldtrips.mnnps@mnnps.org](mailto:fieldtrips.mnnps@mnnps.org)

**Memberships:** [memberships.mnnps@mnnps.org](mailto:memberships.mnnps@mnnps.org); 651-739-4323

**Historian-Archives:** Roy Robison, [historian-archives.mnnps@mnnps.org](mailto:historian-archives.mnnps@mnnps.org)

**Technical or membership inquiries:** [contact.mnnps@mnnps.org](mailto:contact.mnnps@mnnps.org)

**Minnesota Plant Press Editor:** Gerry Drewry, 651-463-8006; [plantpress.mnnps@mnnps.org](mailto:plantpress.mnnps@mnnps.org)

## 21st Prairie Conference

The 21st North American Prairie Conference will be Aug. 4 to 8 on the Winona State University campus, Winona. The theme is "The Prairie Meets the River." The conference will be part of the university's sesquicentennial celebration. Additional information is available at <https://w3.winona.edu/events> or by contacting Dr. Bruno Borsari at 507-457-2822. [bborsari@winona.edu](mailto:bborsari@winona.edu)

## 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.

## Dwarf trout lily search

*Continued from page 1*

canoe map, but the bends were so many and so small that we couldn't keep track with the map and had to check GPS along the way. Our targets were a number of parcels on either side of the river.

Rivers in southeastern Minnesota are prone to flooding because of the shape of the land and rapid runoff from fields. This disturbance creates zones of different vegetation, reflected in elevation. Zones vary from gravel, sand and clay — with opportunistic annuals and tough perennials — to rich, mature hardwood forest on the high ground, and a continuous gradient of high to low floodplain in between. There seemed to be a line in elevation above which the false rue anemone was abundant and below which there was none. Other species showed variable tolerance to flooding and/or were quicker to repopulate low ground. The common trout lily was scattered on the middle ground and abundant on high ground. We lingered at large patches, hoping we would find some dwarfs mixed in, looking for the telltale thread-like flower stalks.

We hopscotched our way down river — paddle, search, paddle, search — and had fun finding a bullfrog, interesting flotsam and skipping stones on the river during lunch break, but otherwise, no luck. About 42 known dwarf trout lily populations are found in three counties. Many of these small patches occur in groups close together and may be re-considered as single populations, so there really are very few populations. It had been about 10 to 15 years since the last really new population was found, so our chances were slim. Guided by the differences in vegetation, we realized that much of the land was too low and looked for higher ground, even just a small hill or hummock tucked in somewhere. By mid-afternoon we were down to

# North Shore Highlands is focus of symposium

by Scott Milburn

This year's symposium will be April 5, again at the Bell Museum of Natural History. The focus will be on the North Shore Highlands Subsection. A brochure, with reservation form, is available at our website on the link for "Annual Symposium." The brochure will be mailed to our members

in February. We have a great line-up of speakers on this fascinating portion of the state. I want to thank these folks from the Minnesota County Biological Survey for their help: Supervisor Carmen Converse; Lynden Gerdes, ecologist; and Lawson Gerdes, ecologist.

We are honored to have Professor Emeritus Dr. John Green, University of Minnesota-Duluth, start the day with a presentation on the geology of the North Shore Highlands (NSH). He will be followed by Chel Anderson, DNR, speaking about the plant communities of the NSH and Lynden Gerdes, DNR botanist, discussing rare plants of the region.

the last few parcels. We planned our approach to one section, then spread out to sweep across the bottom towards a hillside.

On the final pass along the hillside, it looked promising — just the kind of scene *Gleason & Cronquist* describe: "rich woods, often on north slopes." Amanda found a skull; we thought it was a fox. We paused to speculate about it. Then, moments later and a few steps away, there they were! Eureka! With joy, we converged on the spot, then went back to get the flags we had carried all day without needing and



*Dwarf trout lily photo by Russ Schaffenberg*

Registration cost, including lunch, is \$40 for members and \$50 for non-members. Vendors must register and also pay \$50 for a table. Mail registrations by March 25 to: MN NPS Symposium Registration, c/o Shirley Mah Kooyman, 4520 Terraceview Lane N., Plymouth, MN 55446.

this time had left behind. (Is it good luck to forget them?) We counted 152 blooming plants, most in one big patch and the rest in a smaller one. Then we splashed down a nice rapids just before our take-out and were tired but happy after a day of paddle, search, paddle, search.

We will also focus on two other important components of the NSH flora. Dr. Jan A. Janssens, of Lambda-Max Ecological Research, will speak about the bryophytes, and Joe Walewski, of Wolf Ridge Environmental Learning Center, will speak about the lichens.

The symposium will conclude with a panel discussion on NHS conservation issues. Panel members so far include Lawson Gerdes; Jack Greenlee, plant ecologist, Superior National Forest; Mike Schrage, wildlife biologist, Fond du Lac Reservation Resource Management Division; and Jan Green, citizen conservationist/birder.

Registration cost, including lunch, is \$40 for members and \$50 for non-members. Vendors must register and also pay \$50 for a table. Mail registrations by March 25 to: MN NPS Symposium Registration, c/o Shirley Mah Kooyman, 4520 Terraceview Lane N., Plymouth, MN 55446.

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# ATVs and the environment

by Matt Norton. This is an abstract of his presentation May 3, 2007.

ATVs, off-highway motorcycles, and mudder trucks — collectively known as off-highway vehicles (OHVs)—have an inherent capacity to damage the environment severely in numerous ways, regardless of how well behaved the rider. OHVs cause erosion, sedimentation, and wildlife disturbance.

OHVs are extremely effective at spreading non-native weed species, which invade and destroy native plant communities. They readily pick up weed seeds from roadways and often travel into the backcountry, depositing these seeds in new locations. ATVs' knobby tires also destroy or beat down vegetation and expose soil, making a more favorable seedbed for these weed seeds. In short, because of their engineering (extreme power, aggressive tire tread, ability to drive anywhere), OHVs cause tremendous damage to vegetation, wildlife, lands, and waters of the state.

Renegade OHVs do damage that is more severe and extensive than any other outdoor recreational activity. They are more likely to intentionally disobey signs, gates, and berms, either in order to flout the law, or in the search for wetlands (mudholes), steep slopes (hill-climbs), and other "challenge areas." Riders generally do not see a problem with using natural features on the landscape to test the engineering limits of their machines. According to the DNR's 2001 OHV Recreation Planning Tool Report, "riders neither understand nor appreciate the possible connection between their riding and environmental damage. Respondents think mud, natural water hazards, and hill climbs are all appropriate uses in the forest."

Providing more designated trails does not automatically prevent

# President's column

by Scott Milburn

We had a great 2007 with several notable items, such as adding Peter Dziuk and Russ Schaffenberg to the board, hosting a great symposium on the Prairie Coteau, providing informative programming, and enjoying many opportunities to see our flora in the field. As we ended 2007, our account was hovering around \$25,000. This represents quite an achievement for an all-volunteer organization such as ours.

Since the Society is not a for-profit business, the board decided to put a portion of last year's revenue to a worthwhile cause. We considered several options that were in keeping with our mission. We felt the best use of our monies would be toward something capable of reaching as many people as possible, thus furthering our cause. As many of you know, *Orchids of Minnesota* by lifetime member Welby Smith is out of print. Near the end of this past year, the board unanimously approved the donation of monies to the Minnesota Department of Natural Resources, specifically earmarked for the printing of a second edition. Our treasurer, Ron Huber, provided a check for \$2,700 to the DNR. This will not cover all of the costs, but it is a significant contribution. Our understanding is that this second edition will be in paperback, with newly revised distribution maps, along with additional information pertaining to habitat, plant description and commentary. The Society will receive mention for this donation in the future publication.

Board member elections will be in March, and I encourage those who are interested in serving or have someone in mind to serve on the board to contact our vice president, Shirley Mah Kooyman. An initial slate of candidates will be presented at our February meeting, and nominations will be open until we vote at the March meeting.

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these inherent environmental problems. Rather, when trails are provided in proportions that outstrip limited resources available for state enforcement and monitoring, those added trails expose more areas to both inherent and renegade damage from OHVs.

Finally, the management situation likely will get worse. The "open-unless-posted-closed" management system ensures trail proliferation and guarantees environmental damage. The DNR is ensuring this outcome north of U.S. Hwy. 2, where 74 percent of state forest acres are located. On "managed" state forests, the DNR establishes the presumption that all *de facto* trails, regardless of whether they were created legally, are thereafter open to motorized recreation unless and until the land manager undertakes the substantial process of closing the user-created trail and then posts it as such.

We have an exciting year of programming ahead. The topics we are exploring should be of great interest to the Society. As these programs are set, we will be posting them on the website and in the *Plant Press*. I would also like to remind folks about the Annual Symposium, which is discussed on page 3.

We have changed our e-mail addresses for key contacts. We had been receiving a great deal of spam, so we changed our addresses to reduce this problem. Instructions on how to contact us via e-mail are provided on the website.

This leads me to one last item — we need more feedback from our membership. It is often difficult to gauge how we are doing, and feedback would be useful. Please e-mail your comments to me, and I can present them to the board. With that, I would like to wish everyone well this winter, knowing that spring will be here soon.

# Explore the Herbarium, a hidden state treasure

by Anita F. Cholewa, Ph.D.,  
curator of the herbarium

The University of Minnesota Herbarium — plants, algae, fungi and lichens, previously under the direction of the Department of Botany/Plant Biology, was formally incorporated into the Bell Museum of Natural History in 1996. It has become a hidden state treasure.

## **Cryptogamic Section**

The collections of algae, fungi, lichens, and mosses are one of the most comprehensive in the nation, numbering over 145,000 lichens, over 60,000 fungi, 50,000 mosses, and 13,000 algae. Important collections include J. Tilden's algae from the Pacific Northwest coast and South Pacific islands, E.W.D. Holway's rusts of North and South America, M.E. Palm's collection of Minnesota slime molds, and the best collection of Minnesota's fleshy fungi, notably those of D.J. McLaughlin, M.E. Palm, and M. Weaver.

The lichen collection comprises the best representation of national park and national forest lichens and has an excellent representation from China and Sonora, Mexico (primarily Clifford Wetmore's collections), along with the collection of the American Bryological and Lichenological Society. The collection includes Bruce Fink's Minnesota lichens, G. Llano's collections, and S.K. Harris' New England lichens, and there is a very good representation of the European lichen flora.

Significant moss collections include those of J.M. Holzinger from Minnesota, R.M. Schuster's Minnesota liverworts, and the Bescherelle European collection. This section also houses the cereal-rust repository collection of the U.S. Department of Agriculture.

## **Botanical Section**

The botanical collection numbers over 600,000 vascular plants, approximately 25,000 slides of spores/pollen, and a small seed collection of approximately 2,000 lots. The representation of Minnesota's flora is unparalleled, with over 160,000 specimens collected throughout Minnesota's history by L. Moyer, E. Nielson, O. Lakela, J.W. Moore, W.R. Smith, and many others.

The assemblage of historic flora of the Upper Midwest, including the Dakotas, Wisconsin, and southwestern Ontario, is among the best in the U.S. There is an excellent collection of circumboreal and arctic flora due to past research interests of E.C. Abbe, W.S. Cooper, D. Lawrence, and their students.

Additionally, there is an excellent collection of historic Pacific island flora, through the efforts of J. Tilden, A.A. Heller, and J.W. Moore, and a collection of early Amazonian flora by H.H. Rusby and R. Squires as part of the early exploration (1895-1896) of the Amazon region by the Oronoco Company Limited (of Minnesota). J.W. Congdon's collection (over 9,000 specimens) of early California plants (including Yosemite National Park) and approximately 7,000 specimens of early western U.S. and tropical Asian flora acquired through J.H. Sandberg's exchanges are other significant collections.

The primary emphasis of the museum is to build and preserve a core series of collections representing the flora and fauna of the Upper Midwest, to be a permanent record of regional biodiversity. The museum's collections are also an important part of the graduate program in bio-systematics at the University of Minnesota in that the collections act as a source of

examples for educational training and as a source of data for research hypotheses. Thus, the collections also seek to preserve representative examples of worldwide diversity, to preserve collections of importance to the research of curators and students and government agencies, and to act as sources of data for scientific study.

If you would like to be part of this exciting but hidden resource and have some time during the day, consider volunteering a few hours a week by helping prepare specimens or providing data entry services. If interested, contact one of the curators: Dr. Anita F. Cholewa, [chole001@umn.edu](mailto:chole001@umn.edu); Dr. Dave McLaughlin, [davem@umn.edu](mailto:davem@umn.edu); Dr. Imke Schmitt, [schm2109@umn.edu](mailto:schm2109@umn.edu); or Dr. George Weiblen, [gweiblen@umn.edu](mailto:gweiblen@umn.edu).

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## **Dakota County, DNR protect 130 natural acres**

Almost 130 acres of prairie on two properties south of Hastings have been protected this year. Dakota County paid \$638,000 for conservation easements; the DNR paid an additional \$50,000.

This is the second-largest natural area preserved in the county's Farmland and Natural Areas program, according to Al Singer, supervisor. The \$20 million program began in 2002 and is expected to be completed this year.

Singer said the county worked closely with Friends of the Mississippi River, and the two families owning the land will continue to work with that organization to restore their land.

Paul and Kari Curtis own 69 acres with rolling grasslands and remnants of an oak savanna. Gene and Carol Almquist own 59 acres with oak, maple-basswood forest and converted grassland. Both areas are on Hwy. 61.

# Harvesting of medicinal plants raises concerns

by Erica Fargione, herbalist. This is an abstract of her talk at the Oct. 4, 2008 MN NPS meeting.

The harvest of plants for medicinal uses is as old as the use of plants for food. People have used plants for medicines in every culture in the world. Plants are the best and cheapest chemists we have for our health. It is imperative that we protect the plants, because if we lose our valuable medicinal plants, we will have nowhere else to turn. Plants are more than medicine for humans. Plants clean the air and water, produce our oxygen, feed the animals, heal the animals, and their beauty enriches our lives. We need to be stewards of this richness and understand our role as humans and the effects we have on the natural environment.

A particular concern is our harvesting of plants for medicine and the sustainability of our harvesting. To address the impacts on plant populations, the World Conservation Union IUCN Medicinal Plant Specialist Group, along with WWF-Traffic, have been working on international standards for the sustainable wild collection of medicinal and aromatic plants (ISSC-MAP). The catalyst for these standards was the concern that many plant researchers, herbalists, conservationist and others have for the plants that are now threatened because of both market demands and habitat loss. Currently, worldwide, 10,000 to 15,000 MAPs are threatened. 64 MAPs are listed on CITES (Convention on International Trade in Endangered Species), including two native Minnesotan species — Goldenseal (*Hydrastis canadensis*) and American ginseng (*Panax quinquefolium*).

What makes medicinal and aromatic plants special? The diversity of uses — teas, essential oils, medicines, food, cosmetics, hair care products, and spices. Harvesting demands on many plant species are great. The demand on plants for medicinal purposes is a big part of this demand. Here are some figures about the medicinal herb market.

- The global market for medicinal herbs is \$60 billion annually.
- \$17 billion was spent on herbal medicines in United States in 2000.
- In 2002, one in five U.S. adults used natural products for health.

Worldwide, 70 - 90 percent of all MAPs in the marketplace are wild-harvested. Only 900 plant species are cultivated worldwide. There are many reasons for this. Many of these plants have difficulties growing in cultivation, the market fluctuates so much that to invest in the cultivation is risky, the demand is usually ahead of the market so that there is no time to develop cultivation techniques, not much is known about how to successfully cultivate the plants, the income from harvesting is a secondary income for the harvesters who also may not own land, and the wild varieties of plants are considered better medicine. Wild harvesting will continue to be the main source of medicinal plants.

What makes a plant susceptible to over harvesting?

- Life cycle: slow growing, seed production and viability;
- Small population size;
- Narrow genetic variability;
- Part harvested: root, seed, flower, bark;
- Explosive demands: When a new study comes out to state the benefits of a plant, then the demand skyrockets;
- Wholesale price: When the price rises, so does the harvesting.

The new standards now in place look at each species and its needs. There is no single standard. Each plant is looked at to ascertain what a sustainable harvest for that species is. The IUCN has researchers in four countries, working with harvesters and companies marketing the herbs to develop species-specific standards. They are also trying to develop ways to certify and market sustainable harvests, much like organic certification.

As consumers, we can look at where our plants come from — look at tea boxes, hair care products, tinctures, massage oils, perfumes, cosmetics, dietary supplements. Many of these plants come from the wild. Wouldn't it be nice to know if their harvest was sustainable?

Consumers also need to know the right ways to use herbal medicines. Many herbal medicines are marketed to promote sales. They are touted as wonder cures with health benefits that aren't real. The use of medicinal plants by herbalists is based on traditional uses of plants. Herbalism is complex, and plants have specific uses. We cannot get our health education from the people trying to sell product — the market is not an advocate for your health.

As conservationists and stewards of plants, we can be mindful of the changing market. A plant may someday become a very important medicine. Be aware of what plants are being marketed and the possible demands this may put on the wild populations.

The issues facing our natural ecosystems are vast. Destruction of habitat, invasive species, over harvesting, and climate change, all have their effects on the plants. When we talk about and tackle these issues through research, legislation, and working together, we are building a better future for both the plants and people. We need to be able to pass on the richness of plants to the next generations.

## Field Trips for 2008

by Ken Arndt

The Society is planning another exciting year of field trips. Stay tuned to our website for details. Look for another winter botany trip around the metro in late February or early March, followed by spring wildflowers in April and May. We plan a follow-up to this year's symposium with a weekend field trip to the North Shore Highlands in late June. Other trips will include another year of work at Pioneer Park in Blaine, prairie hikes in out-state Minnesota, a canoe trip on the St. Croix, and possibly a train ride in Wisconsin.

We are planning one or two trips a month, depending on field trip leader availability. If anyone you know is interested in leading a trip, or if you have suggestions as to where to go on a trip, e-mail me at ken.arndt@mnnps.org. We are always looking for additional field trip leaders and co-leaders to take us to the many fantastic areas around the region and state.



*Epilobium angustifolium*,  
photo by Peter Dziuk.

## Plant Lore

by Thor Kommedahl

### What is fireweed?

Fireweed is *Epilobium angustifolium*, in the evening-primrose family (Onagraceae), and native to Minnesota.

### How did it get its name?

*Epi* comes from the Greek meaning *upon* and from *lobos* meaning *pod*, referring to the way flowers appear to grow on the seed pod — it's the way that the corolla is positioned on the ovary. *Angustifolium* is Latin for *narrow leaf*, which has given this species another common name, willow herb, because of the resemblance to willow leaves. Because it occurs on fire-desolated areas, it is called fireweed.

### Where does it grow?

Most frequently, fireweed grows in clearings on moist soils, rich in humus, often after fires, mainly in northern, wooded parts of the state. It rapidly invades disturbed sunny sites.

### What do plants look like?

Plants are perennial, 3-7 feet tall, with coarse, rhizome-like roots. Four pink-purple, roundish petals make up each flower. The tiny seeds are borne in reddish, long and narrow seed pods (capsules), 300-400 seeds per capsule. The simple leaves are alternate on reddish stems.

### Is it poisonous or medicinal?

It has not been reported poisonous. American Indians made a paste of peeled roots for treatment of burns, sores, and boils. A leaf tea was drunk for bowel problems, and a leaf paste was applied for mouth ulcers. Leaf extracts have been shown to be antibacterial.

### Has it any economic or other uses?

Northwest Indians used stem fibers to make fish nets and twine. Because plants are high producers of nectar, bees and other insects are attracted to it. It is not often grown in gardens because it becomes an aggressive weed.

## Minnesota Native Plant Society Member Registration

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone (home) \_\_\_\_\_ (work) \_\_\_\_\_

E-mail \_\_\_\_\_ e-mail newsletter? Yes \_\_\_ No \_\_\_

Membership category (New \_\_\_ Renewal \_\_\_)

\$15 Individual

\$15 Family (two or more people at same address)

\$ 8 Student (full time)

\$ 8 Senior (over 62 or retired)

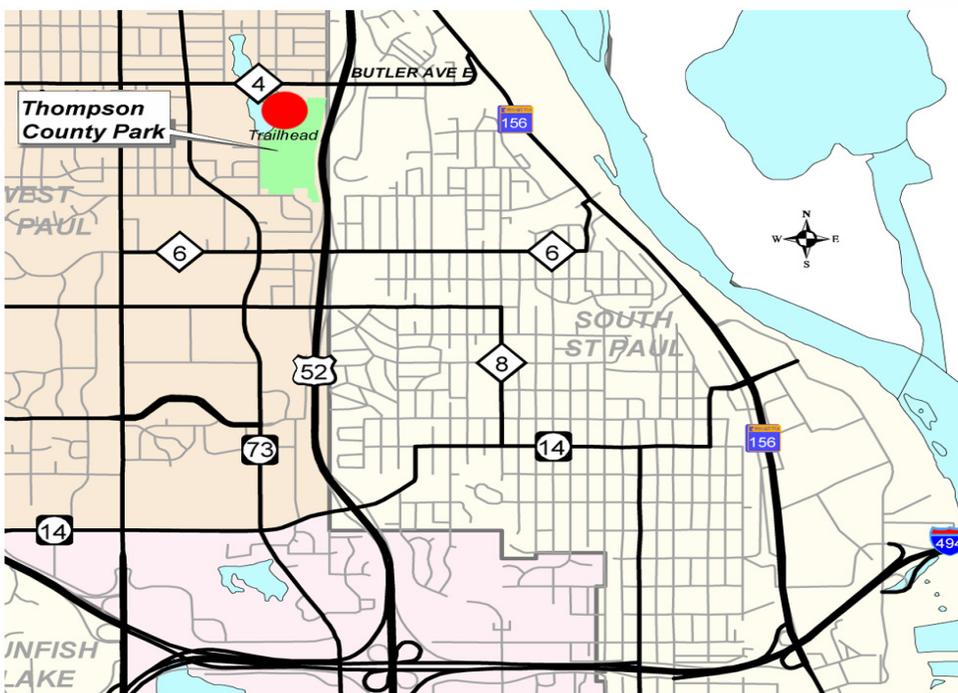
\$20 Institution

The membership year starts Jan. 1. To join, fill in this form. Make your check payable to Minnesota Native Plant Society. Bring your check and the form to a monthly meeting, or mail them to: Minnesota Native Plant Society, P.O. Box 20401, Bloomington, MN 55420.

Minnesota Native Plant Society  
P.O. Box 20401  
Bloomington, MN 55420

## Winter 2008

**Thompson County Park:**  
360 Butler Ave East, West St. Paul, MN 55118



**Directions from St. Paul:**  
MN Hwy 52 to Butler Ave. exit in West St. Paul.  
West on Butler Ave.; East 0.2 miles to Stassen Ln.