

Minnesota Plant Press

The Minnesota Native Plant Society Newsletter

Volume 29 Number 1

Winter 2010

Monthly meetings

Thompson Park Center/Dakota Lodge Thompson County Park 360 Butler Ave. E., West St. Paul, MN 55118

Programs

The Minnesota Native Plant Society meets the first Thursday in October, November, December, February, March, April, May, and June. Check at www.mnnps.org for more program information.

6 p.m. — Social period 7 – 9 p.m. — Program, Society business

Feb. 4: "Looking at Lichens," by Dr. Imke Schmitt, assistant professor, University of Minnesota. Plant of the Month: One-flowered broom rape or cancer-root, *Orobanche uniflora*, by Ken Arndt, Critical Connections Ecological Services, Inc.

March 4: "Ash Genetic Conservation," by Dr. Andy David, associate professor, University of Minnesota. Plant of the Month: Black Ash, *Fraxinus nigra*.

April 1: "Extension forestry in the 21st Century: Capacity, Innovation, and Impact," by Eli Sagor, Extension educator, University of Minnesota Extension Service. Plant of the Month: Black spruce, *Picea mariana*.

March 27: Symposium (See page 6.)

MNNPS website

For information about Society field trips, meetings and events, check the website: www.mnnps.org

A Rose Is a Rose Is a Rose?

by Anita F. Cholewa, Ph.D., curator of the UM Herbarium, Bell Museum of Natural History, University of Minnesota.

In last month's newsletter, we learned a little about what scientific names mean and how to pronounce them. Now, why do "they" keep changing the names?

To answer this, we must first consider what makes a species a species. This sounds like a simple question, but it's not — the answer has changed over the centuries as we have gained a better understanding of nature. Initially, a species was defined as populations that looked identical. Eventually, a breeding requirement was included, and the definition changed to populations that contained *similar looking* individuals with the *potential* to interbreed and produce viable offspring. Then it was recognized that, at least in the plant world, external morphology could change depending on the environment (desert plants can become more hairy during droughts; flower color could change due to soil pH; habit could change due to elevation; etc.). Then it was discovered that plants, unlike most animals, can survive chromosomal alterations such as extra doubling or loss of a chromosome, and many species were found to self-breed, and some species (for example, dandelions) don't even need pollen to produce viable seed (known as agamospermy). Today, the actual genetic makeup and the ancestral history of plants are taken into account in our definition of a species.

As a result of these changes in our concept of the species, the species boundaries have changed, and our names for some species have to change (and sometimes a species is moved to a different family altogether). Sometimes several different species (for example in *Achillea*, the yarrows) in reality are only one or a few, highly variable species. Other times one species

turns out to be two or more (for example in *Cenchrus*, the sandbur, and *Elymus*, the rye grasses). And sometimes, a group of plants was once thought to be different species, then combined, and then split again (for example in *Pyrola*, the shinleafs or wintergreens).

But there are rules for how these nomenclatural changes occur. When a species (or genus) is split

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Who Does What

The MNNPS is an all-volunteer organization. Following are the people who were filling various duties in December. If you would like to help, please contact the person listed or an officer.

Officers

President: Scott Milburn Vice-President: Shirley Mah

Kooyman

Secretary: Andrés Morantes Treasurer: Ron Huber

Committees, Responsibilities Program, Education, Lectures

Programs: Andrés Morantes Postcards: Ron, Cathy Huber Refreshments: Ken Arndt

Audio-Visual: Scott Milburn, Ken

Arndt

Meeting site open/close:Ken Arndt Seed Exchange: Dave Crawford, Ken Arndt. Scott Milburn

Plant Sale: Dave Crawford, Ken

Arndt, Gerry Drewry

Membership and Outreach

Membership roster, directory, name tags: Ron, Cathy Huber
Mailing labels: Ron, Cathy Huber
New Member Packets: Cathy
Huber

Technical assistance: David

Johnson

Telephone contact: Linda Huhn Brochures and Stationery: Andrés Morantes, Elizabeth Heck Display Board: Vacant

Publications

Newsletter Editor: Gerry Drewry Newsletter assistant: Vacant Newsletter mailing: Ron, Cathy Huber

Website updates

Elizabeth Heck, Scott Milburn

Facebook, Blog

Michael Bourdaghs, Angela Hanson

Conservation, Education

Chair: Beth Nixon

Field Trips

Identify options: Ken Arndt, Scott 2

Milburn

Logistics: Ken Arndt

Leading Trips: Varies with trip

Symposium

Theme, Site: Scott Milburn, Erika

Rowe

Speakers: Scott Milburn, Angela

Hanson, Erika Rowe

Registration: Shirley Mah

Kooyman

Brochures: Scott Milburn, Jeanne

Schacht

Catering: Shirley Mah Kooyman, Angela Hanson

Historian

Conservation/storage Roy Robison

Post Office Box

Pickup, distribution: Ron, Cathy

Huber

MNNPS welcomes new members

The Society gives a warm welcome to new members who joined during the fourth quarter of 2009. Listed alphabetically, they are:

Christina and David Bellert, Dallas, OR.

Don Degue, Roseville
Katie Frerker, Rochester
Elna Goodspeed, Fridley
*Chris Gronewold, Lauderdale
David Julson, Stillwater
Mark Leipairtz, Farmington
Mary Jo Moltzen, Fairmont
Rebecca Montgomery, St. Paul
Karen Nyhus, Mendota Heights
Glen Olson, North St. Paul
*Rebecca Stone, Lauderdale
Denise and Robert Wolff, Lakeville
(*family membership)

MNNPS finances

by Ron, Cathy Huber, treasurers

At the end of calendar year 2009, the Society had total assets of \$24,743.23.

Income for the year totaled \$13,238.52, mostly from dues and the symposium. Expenses came to \$13,824.77, mostly for the symposium, Dakota Lodge rental, and a donation to the DNR for the upcoming book by Welby Smith.

MNNPS Board of Directors

President: Scott Milburn, scott.milburn@mnnps.org

Vice President: Shirley Mah Kooyman, shirley.mah.kooyman@ mnnps.org

Secretary, program coordinator:
Andrés Morantes, andres.
morantes@mnnps.org

Treasurer, membership data base: Ron and Cathy Huber, ron. huber@mnnps.org

DerekAnderson, board member, derek.anderson@mnnps.org

Ken Arndt, board member, field trip chair, ken.arndt@mnnps.org

Michael Bourdaghs, board member, michael.bourdaghs@mnnps.org

Angela Hanson, board member, angela.hanson@mnnps.org

Elizabeth Heck, board member, webmaster, elizabeth.heck@mnnps. org

Dylan Lueth, board member, dylan.lueth@mnnps.org

Elizabeth Nixon, board member, conservation committee chair, beth. nixon@mnnps.org

Erika Rowe, board member, erika.rowe@mnnps.org

Russ Schaffenberg, board member, russ.schaffenberg@mnnps.org

Field Trips: fieldtrips.mnnps@mnnps.org

Memberships: memberships. mnnps@mnnps.org

Historian-Archives: Roy Robison, historian-archives. mnnps@mnnps.org

Technical or membership inquiries: contact.mnnps@mnnps. org

Minnesota Plant Press Editor: Gerry Drewry, 651-463-8006; plantpress.mnnps@mnnps.org

Harvesting of spruce tops is damaging bogs

by Norm Aaseng, plant ecologist, Minnesota County Biological Survey. This is a summary of his talk at the Nov. 5, 2009, MNNPS meeting.

Decorative tree harvesting is the cutting of the top two to four feet of stunted (six- to 15-foot) black spruce trees. These spruce tops are shipped to garden stores and other outlets where they are sold as decorations during the winter holiday season. In the mid-1990s, the harvesting of spruce tops in Minnesota began to expand, and today an estimated one-half million to one million tree tops are harvested per year. Surveys indicate that there is a market for three times that number of spruce tops. Harvesting occurs primarily on state and county lands in northwest Aitkin, southwest St. Louis, northwest Carlton, and southwest Itasca counties from mid-September to mid-December. This activity provides income to local harvesters from lands that typically do not generate any revenue.

Although black spruce trees are found in a variety of peatland and upland native plant community classes, almost all decorative tops come from the Northern Spruce Bogs (APn80 in the DNR's Field Guide to the Native Plant Communities of Minnesota). The Northern Spruce Bog is the most nutrient poor as well as the most acidic native plant community occurring in Minnesota. These conditions create a very inhospitable environment in which only 25 vascular plant species are adapted to survive. Typical species found in bogs include carnivorous plants, such as pitcher plant (Sarracenia purpurea), ericaceous shrubs, such as bog rosemary (Andromeda glaucophylla) bog laurel (Kalmia polifolia), and graminoids such as cotton grasses

(Eriophorum spissum) and bog wiregrass sedge (Carex oligosperma). Hummocks of sphagnum moss cover the ground surface. The severe conditions are responsible for the stunted size and shape of black spruce trees desired by harvesters.

As tree-top harvesting operations increased in size, environmental impacts from harvesting became apparent. DNR Forestry assembled a field team to determine the impacts of tree-top harvesting and the factors contributing to the damage. The team found that the cutting of the spruce tops did not appear to have a significant impact. Tree tops were reported to grow back and be harvested in 10 - 20 years.

significant However, very impacts occurred from rutting on allterrain vehicles (ATV) access trails. Initial passes by ATVs create a trail by compressing the sphagnum peat, but repeated traversing of trails, especially with heavy vehicles, resulted in cutting through the live root mat that occurs in the upper six inches of the peat. Once this mat is cut, the weight-bearing capacity of the peat is severely reduced, resulting in increasing size and depth of pools with every pass of an ATV. The deeper the ruts are, the longer it takes the vegetation to recover. If damage is significant, there can be a conversion of vegetation to marsh or even exotic plant species. Water tracks and laggs (shrubby wet moats occurring between the interface of peatland and upland) were found to be particularly susceptible to damage from ATVs. The creation of deep pools and the elimination of existing vegetation easily occurred along the ATV trails in these areas.

To minimize these impacts, the DNR instituted regulations that

limited the depth and length of rutting allowed on trails as well as imposing restrictions on the access of harvest areas through laggs and water tracks.

Despite the regulations, some impacts continued to occur, primarily through "rogue" or inexperienced harvesters. Because public auction requires that the sale of tree tops go to the highest bidder regardless of competence of the harvesters, the DNR no longer offers this option for decorative harvesting. Instead, private sales are negotiated with proven operators that possess the appropriate equipment, such as low pressure-tired vehicles. Because these private sales are much smaller in size than public auctions, the DNR sales are now limited to a total of 200,000 tree tops per year. With increasing demand for spruce tops it may be that operations will be shifting to lands that are less regulated.

\$3.7 million in legacy conservation grants are awarded

\$3,740,000 in 2010 Conservation Partners Legacy grants have been awarded, the DNR has announced. The funds are from the Outdoor Heritage Fund created by voters who approved the constitutional amendment in 2008.

Grants range from \$5,000 to \$400,000. The 35 projects include seven for fish, game and wildlife (\$874,754); eight for forests (\$789,814); 12 for prairies (\$933,206); and eight for wetlands (\$1,142,226).

By activity, 11 are for land acquisition (\$1,860,300); 12 for enhancement (\$701,398); and 12 for restoration (\$1,178,302).

127 applications totaling \$16.5 million were received. "The volume of applications we received and the energy around these efforts has been impressive," said DNR Commissioner Mark Holsten.

MNNPS opposes proposed copper mine in Superior National Forest

PolyMet Mining Corp. is seeking permission to open its proposed NorthMet open pit mine south of Babbitt and northeast of Hoyt Lakes in the Superior National Forest. According to their website, the company "will mine and process metals used in daily life." These metals include copper, nickel, cobalt, platinum, palladium, and gold. PolyMet is working to complete the environmental review and permitting in 2010 and expects to begin construction in 2010.

The MNNPS Board sent the following Draft Environmental Impact Statement response letter on Dec. 21, 2009, to Stuart Arkley, EIS project manager, Environmental Review Unit, Division of Ecological Resources, Minnesota DNR. Dylan Lueth and Elizabeth Heck were the primary authors. It was signed by Scott Milburn, Society president. The entire board supports the response, and they want members to know the action they have taken.

Subject: Comments on the Draft Environmental Impact Statement (DEIS) for the PolyMet Mining Inc./NorthMet Project

Dear Mr. Arkley,

The Minnesota Native Plant Society (MNNPS) has reviewed the draft environmental impact statement (DEIS) for the proposed PolyMet Mining Inc./NorthMet Project and would like to address potential problems that were noted during the review process.

1. The Use of Non-native, Invasive Species to Stabilize Disturbed Areas

The MNNPS has serious concerns with respect to the use of non-native, and potentially, invasive species to "temporarily vegetatively stabilize disturbed areas during operation and permanently reclaim 4

during Closure, by applying seeds or planting seedlings." The proposed species include sweet clover, redtop, alsike clover, Canada bluegrass, Cicer milkvetch, birdsfoot trefoil, perennial ryegrass, smooth brome grass, and red fescue. These species are very aggressive and have the potential to completely change the existing landscape, especially considering the amount of disturbance that will be coupled with the plantings.

Many of the these species have already established themselves around the state, and the introduction of these invasive plants to the project area has the potential to extend well beyond, most notably, the Boundary Waters Canoe Area Wilderness (BWCAW), an area that is already facing problems with invasive introductions. The draft EIS also indicates that Class 1 and 2 invasive species currently exist within three miles of the plant and mine sites. A diverse mix of ecologically appropriate native species is recommended for any permanent revegetation during mining operations and during reclamation. Any temporary stabilization should be done with non-invasive, annual plant species, or other erosion control measures.

It also appears counterproductive to propose removing non-native and invasive vegetation through mechanical means or herbicide application at the Aitkin and Hinckley mitigation sites, while planting them in an area commonly referred to as the 100-mile-swamp.

2. Endangered, Threatened and Special Concern Species

The MNNPS would like to address the very likely potential impact on Endangered, Threatened, and Special Concern species within

the project area. The species of most concern is the aquatic floating marsh marigold (Caltha natans), a State Endangered species. It is generally rare throughout its range and has suffered recent extirpations, largely from habitat loss or alteration, a welldocumented problem for aquatic species statewide (MN DNR, Rare *Species Guide*, http://www.dnr.state. mn.us/rsg/index.html). There are only 12 known populations of this species in Minnesota. Of those 12 populations, nine populations have been reconfirmed within the last 20 years, including the population found on the PolyMet site.

This would not be the first time that Caltha natans would be affected by mining. Evidence of the effects of mining practices on Caltha natans were first noted by Olga Lakela in 1953 when she reported that nearby mining activities had lowered the water level, thereby stranding and decimating the population. Any loss of Minnesota's rare flora would be a major disappointment to the MNNPS, and it is recommended that more specific data be required regarding impacts to populations, and that surveys for additional populations of Caltha natans be conducted.

3. Peatland Destruction and Carbon Sequestration

While peatlands cover only 3 percent of the Earth's surface, they store 550 gigatons of carbon, which is equivalent to 30 percent of all global soil carbon. The amount of wetlands projected to be impacted by PolyMet at this time does not accurately represent the total amount of wetland impacts that would occur. This is due to the fact that no initial area of influence (AOI) on the wetlands was made. This means that wetland impacts to communities such as cedar

swamps, northern wet ash swamps, forested rich peatlands, northern alder swamps, and poor fens have not been accurately accounted for. These communities rely on a steady influx of groundwater flow for nutrients and soil moisture. If the hydrology around them is changed, they too will be affected. The Army Corps is developing a work plan to assess impacts to these additional wetlands, but this work plan has not been finalized or implemented. As the PolyMet project currently stands, there would be both direct and indirect impacts to over 1,500 acres of wetland. The destruction of just 1,000 acres of peatland correlates into a 2 percent increase in the total output of carbon dioxide emissions in Minnesota

4. Impacts to Water Resources

Aside from direct impacts on native plants and plant communities, impacts on water resources need to be addressed further. Hydrologic conditions form the basis of entire ecosystems, and hydrologic forces and characteristics shape entire landscapes. As such, impacts to water resources have a much broader and longer-lasting environmental impact. NorthMet Project Draft EIS does not recommend commensurate actions and/or alternatives such serious impacts. The type of mining proposed would leave behind sulfide-containing waste rock and may result in acid mine drainage. Stockpiled material also poses a significant threat to surface water and groundwater, beginning with the Partridge River and the entire St. Louis River Basin. The project would involve direct and indirect impacts to about 1,522 acres of wetlands, most of them ranked as high quality. This is one of the largest wetland impacts in Minnesota history.

5. Economic Impacts

This project is focused on shortterm economic gains and does not adequately address the long-term negative impacts, for which the state and the USFS will ultimately be responsible. Furthermore, the job benefits of this project are unsustainable and short sighted. The natural communities in the project area also provide habitat for native plants and animals and promote long-term economic tourism benefits, including tourism-related jobs. Minnesotans, as well as people from all over the country, have long been attracted to and enjoyed the relatively unspoiled beauty of northeastern Minnesota, and they will continue to value the integrity of their natural landscapes.

Please do not compromise Minnesota's natural heritage by allowing PolyMet to circumvent their responsibility by minimizing the negative environmental impacts of this project.

Sincerely, Scott Milburn, Minnesota Native Plant Society president

Moss launches spores in vortex rings

Low-growing sphagnum moss shoots its spores 10 to 20 times higher than expected by using a vortex ring, previously known only from animals, Plant Ecologist Joan Edwards of Williams College in Williamstown, Mass. said at a Jan. 4 meeting of biologists.

The spores form a mushroom-like cloud that has a better chance of rising into turbulent air and being dispersed. For more infomation, go to www.sciencenews.org/view/generic/id/52884

Series of rain-garden workshops planned

Four rain-garden workshops are being sponsored by Ramsey-Washington Metro Watershed District and Maplewood City on March 24, April 15, April 29 and May 6. The fee for each session is \$5, and pre-registration is required. For details, go to News and Events, Workshops, at www.rwmwd.org

President's Column

by Scott Milburn

At our quarterly board meeting this past December, the board unanimously supported a motion to donate \$2,000 to the Minnesota Department of Natural Resources. This money is specifically earmarked for future writing efforts by State Botanist Welby Smith. In total, the Society has now donated \$5,000 to Welby, which is an excellent way for the Society to contribute back and fulfill our educational mission. This donation provides important funding that allows book projects to move forward.

In other Society news, our past December monthly program marked the end of Linda Huhn's tenure as monthly program chair. Linda has served in this position for the past seven years and has done a tremendous job lining up speakers throughout this time. Our secretary, Andrés Morantes, will be taking over for Linda, and I look forward to his efforts.

I would also like to remind our members that board member elections will take place at our March annual meeting. We have three open positions, so please contact Vice President Shirley Mah Kooyman if you are interested.

We also have our upcoming symposium in late March. In the past few years, we have held the symposium during the first week of April. However, the first weekend of April is Easter weekend, and it was decided to push the event forward one week, to March 27. We will be working with our friends at the Bell Museum once again. The committee is actively lining up speakers on the topic, "Sand Dunes of Minnesota." More information will be provided as planning proceeds.

Conservation Corner

by Beth Nixon

Reminder to Blog

The mission of the Conservation Committee is promotion of the use of native plant species, preservation of native plant species and communities, and conservation of rare and endangered species. We are asking all members to join this effort through participation in the Society Blog posts.

You can contribute comments to posted issues, information which can in turn be used for preparation of Society letters. You can also contribute by following through on Blog post requests to contact your legislative representatives. Comments are requested for the following posted topics: regulated harvesting of black spruce tips, no child left inside, state or federal environmental review of proposed actions in Minnesota, funding for the environment managed by the Lessard Outdoor Council, prairie grass for biofuel, and off-road vehicle effects on native plants.

Contact any board member with your ideas for additional postings that you would like to add to the Blog.

Facebook Fans

You can also contribute to the Society mission by participating on Facebook. The fanclub is growing, with over 80 viewers and contributors.

PolyMet Mining proposal

For the past couple of years, the Society has commented on how proposed actions in the State of Minnesota might affect native plant populations and communities. Most recently, comments were submitted regarding the proposed PolyMet Mining project in northern Minnesota near Hoyt Lakes. [See letter on page 4.] The Society requested consideration be given to:

•Avoiding the use of nonnative invasive species to stabilize disturbed areas;

•Suitable mitigation to include further site investigation;

•A plan to aid in stabilizing current known populations of *Caltha natans*, a rare species at the site;

•More accurate accounting of the presence of and impacts to cedar swamps, northern wet ash swamps, forested rich peatlands, northern alder swamps, and poor fens, including their contribution to carbon sequestration;

•An overall approach to mitigation for water resource impacts in an interconnected manner for both ground and surface water, commensurate with the indirect impact to over 1,500 acres of high quality wetlands within the Partridge River system; and

•Short-term versus long-term economic value to the State of Minnesota, including long-term sustainability of the near-term job benefits and potential long-term losses to tourism-related jobs.

Honorary Member Evelyn Moyle dies

Lifetime MNNPS honorary member Evelyn Moyle, co-producer and photographer of the first edition of *Northland Wildflowers:* the Comprehensive Guide to the Minnesota Region, died of a heart attack Jan. 3 at the age of 95. Her late husband, John, supplied the text for the best-selling book, which was printed in 1977.

A second, enlarged edition was published in 2001, with photographs by John Gregor and text by Evelyn Moyle. She was honored at a booksigning reception before the June 7, 2001, MNNPS meeting and was presented with a certificate of appreciation for her work.

Minnesota sand dunes will be topic of symposium

"Sand Dunes of Minnesota" is the title of this year's MNNPS symposium. Learn about dune biology and natural history, the plants and animals that inhabit dunes, and current issues and threats to these special places.

The symposium will be held Saturday, March 27, at the Bell Museum of Natural History on the University of Minnesota campus, Minneapolis. Watch for a brochure with details.



Grey Cloud Dunes Scientific and Natural Area, Washington County, photo by Scott Milburn

Where is the Blog?

The MNNPS Blog is entitled "Conversations on Conservation." To read and respond to the Blog, go to the Society's website at www. mnnps.org and click on Blog in the left-hand column. You can read the messages and comments and reply to them. All members are encouraged to participate in this exchange of ideas.

Plant Lore

by Thor Kommedahl What is sweet gale?

Sweet gale is *Myrica gale* in the wax-myrtle family, growing as a native plant in northeast Minnesota.

How did it get its names?

Myrica comes from a Greek word myrike referring to fragrance. Gale is derived from an old English word for bog myrtle, taken from the word Gagel, which is the German word for sweet gale. It is sometime called bog myrtle because it often inhabits peat bogs.

What does the plant look like?

It is a shrub that grows from two to six feet tall with many stems and branches. The grayish leaves are dotted with yellow glands visible with a hand lens; leaves emit a fragrant odor when crushed. Sexes are usually on separate plants, but sometimes on the same plant but different flowers. Flowers appear in compact catkins with two wing-like bracts, and the fruit is nutlike (small drupe).

Where does the plant grow?

Sweet gale, often seen in colonies because of the layering of lower branches, grows on edges of streams and lakes or in acidic peat bogs, and grows best in direct sunlight. Roots can fix nitrogen.

Is the plant edible?

Dried leaves have been used for making tea, and the leaves and nutlets have been added to meats for sage-like seasoning.

Is it medicinal or poisonous?

A branch tea has been consumed as a diuretic for gonorrhea, and Myrigalone-B is an extract from fruit exudates that is a potent antioxidant to inhibit free radical damage in liver. It is generally not regarded as poisonous, although an essential oil has been reported as toxic. It is listed as an arbortifacient.

Has it any economic uses?

Leaves have been a source of

yellow dye and have also been used to improve the flavor and foam of beer before replacement by hops. Leaves are also insecticidal (campers have placed plants in tents for bug control). Varieties have been developed for gardens.



Sweet gale, Myrica gale, plant. Photo by Russ Schaffengerg.



Myrica Gale leaves, photo by Scott Milburn.

Wild Ones Conference

"Design with Nature: Creating healthy communities above and below ground" is the title of the Wild Ones Feb. 27 conference at the Radisson Hotel, Roseville. Advance registration is required. Search at www.eventbrite.com or go to http://for-wild.org/chapters/twincities/conference.html

Scientific names

Continued from page 1

into two or more, brand new names may be generated (again there are rules on the formation of names). But when two or more species are combined, then previous names must be examined and the oldest validly published (and yes, there are rules on valid publication) must be the one that is retained, even if it is a more obscure name. So Botrvchium rugulosum (ternate grape fern) was confused with B. dissectum or B. multifidum but is now recognized as a separate species. Aster azureus (skyblue aster) was merged into Aster oolentangiensis and now is Symphyotrichum oolentangiensis. Vaccinium macrocarpum (large cranberry) changed to Oxycoccus macrocarpus but is now back as Vaccinium macrocarpum.

And to make life even more complicated, the shocking truth is not all taxonomists agree with each other (especially true in some of the difficult genera such as *Rubus*), and some plant groups simply have not yet received thorough examination (such as *Potentilla* or *Viola*).

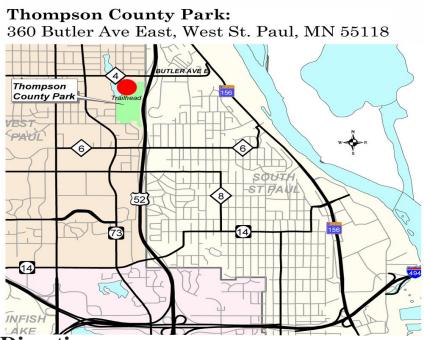
So what's a person to do? Accept that nature is ever-changing and live with it by consulting major reference websites such as the *Flora of North America*, the *Angiosperm Phylogeny Group*, or the *Integrated Taxonomic Information System*. For a current (but, yes, changing) account of the nomenclature of Minnesota's vascular plants see my *Comprehensively Annotated Checklist of the Flora of Minnesota* at http://www.bellmuseum.org/plants/checklist2009-1.pdf

Book describes outdoor experiences in state

Our Neck of the Woods, a new book published by the University of Minnesota Press, contains articles about Minnesota wild areas that were printed in Minnesota Conservation Volunteer in the last 70 years.

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

Winter 2010



Directions:

Take MN Hwy. 52 to the Butler Ave. E. exit in West St. Paul. Go west on Butler 0.2 mile to Stassen Lane.

Go south on Stassen Lane to Thompson County Park.