

MINNESOTA PLANT PRESS

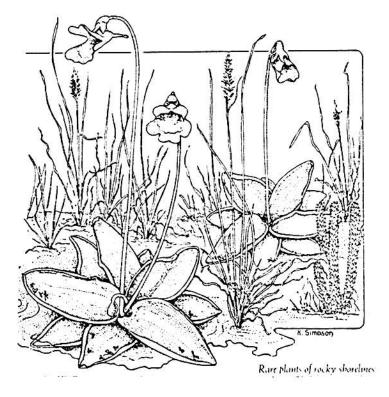
VOLUME 3 NUMBER 1 NEWSLETTER OF THE MINNESOTA NATIVE PLANT SOCIETY WINTER 1984

IVERSNAID

Dogged with dew, dappled with dew Are the groins of the braes that the brooktreads through Wiry heathpacks, flitches of fern And the beadbonny ash that sits over the burn.

What would the world be, once bereft Of wet and wildness? Let them be left, O let them be left, wildness and wet; Long live the weeds and wildness yet.

- Gerard Manley Hopkins



THANK YOU

The Minesota Native Plant Society wishes to thank Horace Chamberlain for his generous contribution for the native seed exchange. We will use the funds from Mr. Chamberlain's gift to print envelopes with the date, place, species, type of growing conditions, and name of the collector for the seed exchange. The envelopes will be available in the spring.

A bouquet of thanks to Dr. May Wright for organizing the 1984 seed exchange held on November 2!

Appreciation is also extended to all those who donated seeds, including Horace Chamberlain, Denis Hahn, Virginia Homme, Merle Kratoske, Don Lawrence, Dianne Plunkett, Jean Sehossow, Chris Soutter; and May Wright.

GERMINATION RECORDS

NEEDED

Those propagating plants from seed are encouraged to record their methods of germination. A future project of the MNPS may be to repoort on results of various methods of seed germination of native species.

If you are interested in contributing your experience to this project, please pick up a gemination report form at the next MNPS meeting, or request one from Chris Soulter, 780 Ottawa Ave., St. Paul, MN, 55107. Minnesota Native Plant Society Membership Registration

Mail	to:	MNPS,	220	Biological	Sciences	Center,	University	of	Minnesota,	St.	Paul,	MN	55108
			New	Member			Renewal						
Memb	ersh	ip Cate	gorie	s:									
\$8.00			Individual				\$6.00			Senior(over 62 and retired)			
\$10.00	D			ily (Two o iduals at		\$15	\$15.00		Institution				
\$6.00				ent (Full-t		\$25.00		Donor					
Name							Ado	dres	s				
City		State			ZIP		Phone						

HAPPY BIRTHDAY TO MNPS

On February 3, 1982, MNPS held its first meeting with a full house and began a year filled with speakers, field trips, and overwhelming support from its new members. It was a strong confirmation of the need for a forum for information and concern for native plants of our state.

September, 1, 1983, marked the beginning of our new fiscal year and the expiration of annual memberships. Please join us for another year! MNPS is young and flexible — how can we serve you better? Give us your comments and criticisms by mail or at the monthly meeting. We need your continued interest and support! Check the back of your newsletter for your membership status. If you have not renewed — fill out the above form.

NOMINATIONS BEING

ACCEPTED

Four slots on the Minnesota Native Plant Society board expired in 1984. Elections will be held at the March Board meeting for the four positions. Deb Brown, who chairs the nominating Committee, would be happy to have any nominations. Feel free to nominate yourself if you'd like to run for office. Deb's phone number is 378-2595.

FIELD TRIP SLIDES

NEEDED!

Please bring your slides of past MNPS field trips (1982-1983) to the May 2nd meeting to give new members an idea of places we will visit in future field trips!

If you have a news item, article or other information that should be included in the next issue of the <u>Minnesota Plant Press</u>, please send it to the editor: Neil Anderson, P.O. Box 80052, St. Paul, MN 55108.

PURPLE LOOSESTRIFE ALERT areas, it occurs primarily as a few

Waves of tall, colorful soldiers, decked in purple and green, are marching up our valleys, streams, lakes, and wetlands. Far ahead of the advancing armies, scouts infiltrate the countryside, carefully selecting suitable invasion areas. The strategy: get established, saturate the area with propogules, and wait. Eventually small patches form. When conditions are just right, a large scale offensive is. launched...

The menacing invader is purple loosestrife. Like so many troublesome species, loosestrife is an exotic plant. It's targets are our native wetland and moist soil habitats. It threatens the quality of our wetlands by crowding out cattails, sedges and other native plants, many of which a vast array of wildlife depend on for their survival. Purple loosestrife is an incredibly resourceful competitor...and its here, in Minnesota.

Responding to increasing concern about the species, the Department of Natural Resources --Scientific and Natural Areas Program conducted a "quick and dirty" survey of its present distribution in the state. The results were alarming! Purple loosestrife was reported from almost half of all Minnesota counties (see map). In most

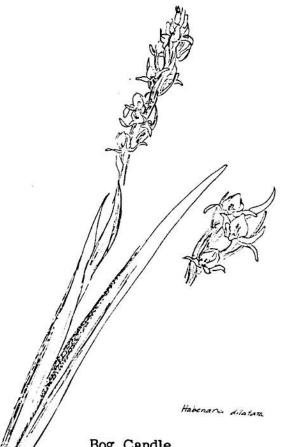


scattered individuals or small patches in only a small number of wetlands. However, in the Metro area and along the Mississippi River Valley in the southeast, loosestrife is more common and abundant.

"ttempts to control the plant in other states has had varying results. The best strategy for local eradication is to remove the plant before it is well established. Long-term, effective control will require the following three initiatives:

- 1. Legislation controlling the commercial and residential use of the species.
- 2. A state coordinated research and control program.
- 3. A federal coordinated research and control program.

To accomplish this, funds must be allocated and legislation passed. In the meantime, when you see purple loosestrife blooming this summer, notify the Scientific and Natural Area Program, Box 6, Centennial Building, St. Paul, Minnesota 55155, (616)-297-3288. Knowing where the plant is and how abundant it is will assist biologists in their efforts to monitor and control this nuisance plant.



Bog Candle

3

SPECIES STATUS SHEET

There are about 2,000 species of plants occurring wild in Minnesota. Thirty-eight of these are legally protected in Minnesota as endangered species. To be given this status, a species must be in danger of extinction in Minnesota and over a significant portion of its range. Beginning with this issue of the Plant Press, and continued in subsequent issues, status reports on selected endangered species will appear.

SCIENTIFIC NAME: <u>Besseya bullii</u> (Eaton) Rydb. (Wulfenia bullii (Eaton) Barnhart)

FAMILY: Scrophulariaceae

COMMON NAME; Kitten Tails

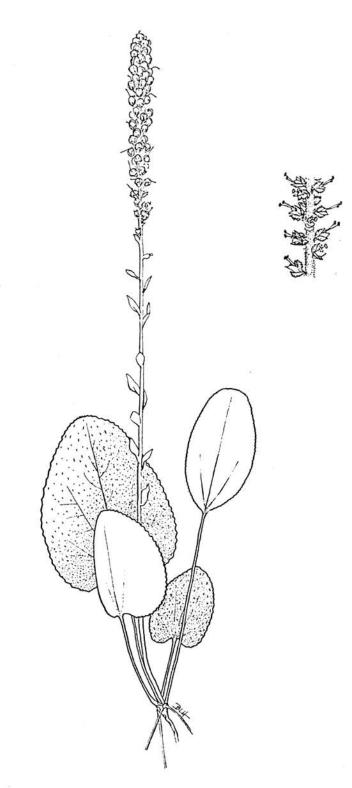
STATE STATUS: Endangered

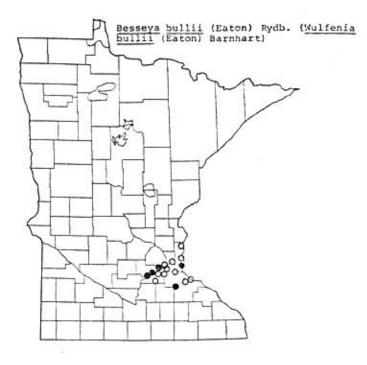
- FEDERAL STATUS: Currently under review by the Department of Interior for listing as a threatened species under the Endangered Species Act of 1973 (Public Law 93-205, enacted December 28, 1973; amended 1978. Federal Register 45(242):82480, December 15, 1980).
- BASIS FOR MINNESOTA STATUS: More than half of the historically known populations of this species in Minnesota were located in what is now the metropolitan area of Minneapolis-St. Pual and surrounding suburbs. The majority of these populations have not been verified since the 1920s and are believed to have been destroyed by the expansion of the metropolitan area. Only 5 of the 21 documented sites are known to survive. The last known poulation in Scott county was destroyed in 1981 by industrial development. This species is a midwestern endemic and is rare or threatened wherever it occurs.

PREFERRED HABITAT IN MINNESOTA: Besseya bullii prefers gravelly soil on dry

prairies, bluffs and high-lime prairies. it may also occur in open woods and savannas.

RECOMMENDATIONS: A search should be made for remnant populations which may survive in the Twin Cities area. Efforts should be directed to bluffs bordering the Mississippi, Minnesota and St. Croix Rivers.







WHAT'S NEW IN BOOKS??

ACID RAIN

By Robert H. Boyle and R. Alexander Boyle New York: Nick Lyons Books, 1983 \$14.95

This book examines the very real and frightening problem of acid rain. Boyle presents the problems associated with acid rain across the country. Acid rain is now falling on sensitive lands and waters in Minnesota, often at levels associated with the onset of lake acidification in Scandinavia. Acid rain poses potential problems not only to agricultural crops but also to native plants.

PLANT EXTINCTION: A GLOBAL CRISIS By Dr. Harold Koopowitz and Hilary Kaye Washington: Stone Wall Press, 1983 \$16.95

Harold Koopowitz and Hilary Kaye have put together the story of the threat to our planet's plant species. This book, highly acclaimed by critics, covers all aspects of plant extinction and conservation and the case history of selected species are cited to substantiate each chapter. This book is written for the laymen, intended to alert the public to the dangers of extinction, the importance of plants to man, what we are currently doing about plant conservation and what must be acomplished in the future.

WHERE HAVE ALL THE WILDFLOWERS GONE? A REGION BY REGION GUIDE TO THREATENED AND ENDANGERED U.S. WILDFLOWERS. By Robert H. Mohlenbrock

New York: MacMillan, 1983 \$15.95

The author examines a selection of endangered wildflowers from all regions of the country. The history and future of these selected species are carefully outlined. This book is written in language for the laymen to understand. While it is by no means exhaustive of the topic, it is designed to increase the awareness of the reader for the preservation of our national treasures.

SELECTED REFERENCES:

Mickelson, C. J. and H. H. Iltis. 1966. Preliminary reports on the flora of Wisconsin #50. Wisc. Acad. Sci. Arts and Letters 55:187-222.

PREPARED BY: Welby Smith, Botanist, Natural Heritage Program.

PROPAGATING ENDANGERED PLANTS

The aim of any conservation program designed to save endangered plant species, should be the protection of a plant's natural habitat. An alternative method of conservation - growing the plant in a botanic garden or other area outside the natural habitat - is generally not as successful, both in terms of maintenance cost and potential genetic change within a species. Moreover, by placing too much emphasis on exsitu conservation (opposed to protection of the plant in its habitat - known as in-situ preservation) botanical gardens, like their zoological counterparts, run the risk of holding the last specimens of a species which no longer exists in the wild - an obviously hollow victory for conservation.

Specimens of endangered species that are grown in botanical gardens, however, may serve many valuable purposes. They may be used as part of living exhibits to educate the public and as reserve stocks for propagation research and replacement of obliterated wild populations. Propagation research can provide important insights into a species' behavior in the wild. Futhermore, should it be deemed prudent to reintroduce a species to its orignal wild habitat, the means will be known for approximating the original genetic type.

Propagation of endangered species is not always succesful or straight-forward. Some species, such as many native terrestrial orchids, are difficult or impossible to cultivate, let alone propagate in a botanical garden. With those species of plants that can be cultivated, the chance exists that propagation information derived from cultivated plants may differ from that of wild plants.

Some endangered species may be readily propated, and for these, propagation can raise useful questions for botatnists who study plants in the wild. For instance, what might account for a species' ease of propagation and cultivation in the controlled environment of a botanical garden while the wild populations continue to decline? Is the decline due solely to habitat destruction or is the species, perhaps, not a good competitor? Maybe its pollination and dispersal mechanisms are not successful or predators are taking their toll. For each species, the answer lies in the long-term study of the species' biology; but, propagation research can supply valuable information regarding the potential success of the species under "ideal" conditions in the wild.

Adapted from an article by Willam Brumback that appeared in the Spring, 1983, issue of <u>Wildflower Notes and News</u>, published by the <u>New England Wild Flower Society</u>, Inc.

NINTH NORTH AMERICAN PRAIRIE CONFERENCE

The Ninth North American Prairie Conference will be held in Moorhead, Minnesota, 29 July through 1 August, 1984. The theme of the Conference, hosted by Concordia College. Moorhead State University, and North Dakota State University, is: The Prairie: Past, Present, and Future. The Conference program includes invited speakers, contributed papers, symposia, workshops, poster sessions, and field trips devoted to various aspects of prairie ecosystems. ecology, management. restoration. The classification, interpretation, utilizaiton, and preservation of prairies are some of the topics scheduled for consideration. Others include prairie wetlands, landscaping with prairie species, and the ecology of pre-European people on the prairie. The latter topic is being given special emphasis at the 1984 meeting. Preconference and post-conference field trips are also planned for those interested.

Previous conferences have been attended by people whose interests in the prairies vary from ecology to range management to restoration and landscaping to prairie conservation and, finally, to prairie poetry and photography. This year, for the first time, we are expanding our audience to include those interested in and working with questions relating to prairie people — including pre-European people and the impact of European settlement on the prairie.

For further information on the Conference contact: Dr. R. H. Pemble Department of Biology Moorhead State University Moorhead, Minnesota 56560 (218)-236-2572

MNPS FINANCIAL

STATEMENT

July 15, 1983 to November 1, 1983

RECEIPTS		
Membership dues	\$122.00	
Draft Dividends	5.44	
Savings Dividends	3.73	\$131.17
EXPENSES		
Lawer fees for		
incorporation	\$118.74	
Postage	20.00	
Supplies and misc.	19.83	\$158.57
BALANCE ON HAND		\$925.59
RECONCILIATION		
Draft Account	\$513.52	
Savings Account	392.07	
Petty Cash	20.00	\$925.59



INVITATION

Members of the Minnesota Native Plant Society are invited by the Minnesota Native Camera Club on their field trip, February 4. It will be held at the Izaak Walton Nature Center, 6601 Auto Club Road, Bloomington, from 10 am to 4 pm. Bring your lunch; coffee and doughnuts Trip leaders are Goodman will be provided. Larson (935-4108) and Aaden Aanestad (929-9071). We should see active birdfeeders, deer, fox, babbling brooks, ice, green plants, and much more. There will be prizes for the best winter shots in botany, zoology, general and scenic. Submit a maximum of two slides per category by March 12, 1984. The judges are: Walter Breckenridge, Wayne Pierce and George Hedrick. Directions for getting to the Nature: From Radison South on Hwy. 100 and 494, go south on Normandale a few miles to Auto Club Road, turnwest and cross the railroad track, the Izaak Walton Nature center is on the south side, just north of the Minnesota River.

-Jim Nelson

Rose pogonia

Sketches done by Vera Ming Wong in the Lost River Peatland

MNPS DIRECTORY

OFFICERS: Peg Kohring, President Welby Smith, Vice-President Deb Brown, Secretary Steve Eggers, Treasurer Evelyn Moyle, Director-at-large May Wright, Director-at-large

COMMITTEES: <u>Publicity:</u> Jan Grew <u>Conservation:</u> Barbara Coffin <u>Newsletter:</u> Neil Anderson

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Minnesota Plant Press is published by the Minnesota Native Plant Society, 220 Biological Sciences Center, 1445 Gortner Avenue, University of Minnesota, St. Paul, Minnesota, University of Minnesota, St. Paul, Minnesota,

CALENDAR OF EVENTS

- Feb. 1 MNPS monthly meeting: John Almendinger presents "The Vegetation Patterns and History of Minnesota's Jack Pine Forests."
- Feb. 4 <u>Winter field trip</u> to Izaak Walton Nature Center, 6601 Auto Club Road, Bloomington. 10 am - 4 pm.
- March 7 MNPS Monthly meeting: Mark McKone presents "What is an individual plant?"
- April 4 MNPS monthly meeting: Norman Aasing from the Division of Minerals, Department of Natural Resouces presents "The Flora and Vegetation of Minnesota Peatlands"
- April 15 next newsletter deadline

May 2 - MNPS monthly meeting:

consisting of two presentations: 1.) Barbara Coffin of the Minnesota Natural Heritage Program, Department of Natural Resources presents: "The Flora and VEgetation of Old Grwoth Northern Hardwood Forests in Minnesota"

2.) A slide show on past field trips of the Native Plant SocietY plus a discussion of upcoming trips.

MNPS monthly meetings are at 7:30 pm in the Palmer Classroom Building, Room 10, University of Minnesota, St. Paul Campus.

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Minnesota Plant Press is published by the Minnesota Native Plant Society, 220 Biological Sciences Center, 1445 Gortner Avenue. University of Minnesota, St. Paul, Minnesota, Peg Kohring, President; Welby Smith, 55108. Vice-President; Deb Brown, Secretary; Steve Eggers, Treasurer; Evelyn Moyle and May Directors-at-large; Neil Anderson, Wright, Editor. Minnesota Plant Press may be obtained through membership in the society: Single-\$8.00, Family-\$10.00, Student-\$6.00.