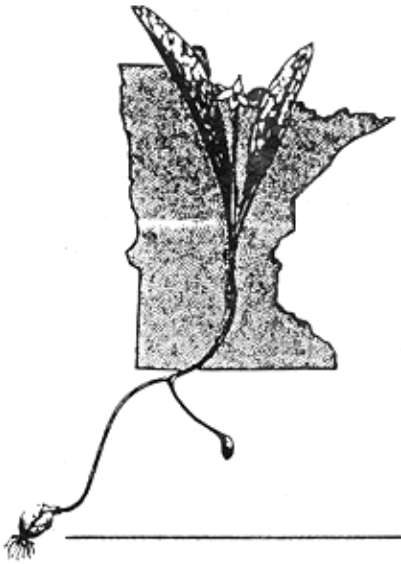

MINNESOTA PLANT PRESS

VOLUME 4 NUMBER 2 NEWSLETTER OF THE MINNESOTA NATIVE PLANT SOCIETY FALL 1985

OCTOBER SEED EXCHANGE

The annual Native Seed Exchange of the Minnesota Native Plant Society will be held on October 2, starting at 7:30 pm in **room 335 Borlaug Hall** on the St. Paul Campus (Note: this is a new meeting place for MNPS. Borlaug Hall is a new building on campus and is right next to Palmer Classroom building. See map under Calendar of Events).

Dr. May Wright will begin the evening with a presentation of methods that are used to germinate various seeds of native plants along with seedlings. Some potting mixtures and containers will be displayed. She will also tell how to find additional information on the subject. We hope to hear from members about some of their experiences in this regard, whether successful or not. Seeds will then be made available to participants. Those people who contribute to the exchange will make their selections first.

COLLECTING SEEDS FOR EXCHANGE

All seeds to be exchanged must be Minnesota natives that are free of pests and disease. Please follow this guideline:

1. Collect only a small percentage of seeds from a plant and plant community.
2. Be sure fruits are fully mature before pickings.
3. Label seeds with scientific and common names, collection site, habitat and date of collection.
4. Store in a cool, dry place and check seeds periodically for insects and mold.

SUBMITTING SEEDS FOR EXCHANGE

To standardize seed identification data and to facilitate distribution, seeds should be packaged before the exchange in printed envelopes furnished by MNPS.

Seeds are packaged and submitted in the following ways:

1. Submit seeds for packaging by mailing before September 25 to:
   Dr. May Wright

   Please add your name, address and phone number to the identification label.
2. Package seeds at home, then mail to Dr. Wright or bring them with you to the exchage. To obtain envelopes, call May Wright or Chris Soutter
3. Seeds that are not submitted before September 25 can be brought in a few minutes early to the exchange and packaged before the workshop begins.

******REMINDER********

The 3rd Annual Minnesota Botany Photographic Salon will be held at the November 6th MNPS monthly meeting. If you have any slides to submit for consideration, the deadline for receipt of slide entries is September 30. Contact Larry Quinn,

Minnesota Native Plant Society Membership Registration

Mail to: MNPS, 220 Biological Sciences Center, Univ. of Minnesota, St. Paul, MN 55108

_____ **New Member** _____ **Renewal**

Membership Categories:

$8.00	_____	Individual	$6.00	_____	Senior (over 62 or retired)
$10.00	_____	Family (Two or more related individuals at same address)	$15.00	_____	Institution
$6.00	_____	Student (Full-time)	$25.00	_____	Donor

Name_____ Address_____

City_____ State_____ Zip_____ Phone_____

U. OF M. CAMPUS ADDRESS:_____

_____

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

If you have a news item, article or other information that should be included in the next issue of the Minnesota Plant Press, please send it to the editor: Neil Anderson, P.O. Box 8052, St. Paul, MN 55108.

MN NATIVE PLANT SOCIETY TREASURER'S REPORT
3/15/85 to 9/15/85

RECEIPTS	
Membership Dues	152.75
Draft Dividends	12.32
Savings Dividends	23.02
Botany Cabinet Contribution	105.00
EXPENSES	
Postage	179.69
Printing	386.72
Supplies & Misc.	42.00
BALANCE ON HAND	
Draft Account	625.65
Savings Account	599.53
Petty Cash	76.00

UPDATE ON MINNESOTA DWARF TROUT LILY AT NERSTRAND WOODS

At our May MNPS monthly meeting the destruction a portion of the population of Erythronium propullans, the Minnesota dwarf trout lily, at Nerstrand Woods State Park was brought to the attention of our members. This incident shocked everyone and it was decided that we should make our views known to the Department of Natural Resources. The following is a summary of the correspondence between the Department of Natural Resources and the Minesota Native Plant Society and events that took place over the summer.

On May 13, a letter went to all our members describing the biological status of the endangered, endemic Minnesota dwarf trout lily, the history of attempts to protect it at Nerstrand Woods, the bulldozing incident that destroyed part of the population there, and our recommendations to the DNR that the park manager and policies regarding protection of such a species be called to task. Our members responded with outraged calls and letters to state and local authorities and also to the media.

On May 22nd the DNR responded to the Board and to the members with a form letter expressing their concern, telling of initial steps being taken to protect the remaining trout lilies but also downplaying the importance of the bulldozing, pointing out that not as many had been destroyed. On June 21 the Board of Directors responded to this letter, pointing out that it was a serious incident regardless of the number of plants destroyed and that the park manager had ample opportunity to prevent its occurrence.

On June 10 a letter was written to the park manager at Nerstrand Woods asking him to tell us his side of the story for distribution to our members. We have not received a response.

MNPS also received a letter from Donald Davision, Director, Division of Parks and Recreation of the DNR, asking us to defend the allegations we made in our May 13th letter to our members. The Board met in early July to formulate a response. We acknowledged that we were glad the DNR recognized that this bulldozing was a deviation of the plan and that some action had been taken to protect the plants. But we restated our belief that this was a serious setback to the survival of the trout lily and that there was no excuse for the park manager not knowing the location of the endangered plants. We supported these statements with enclosures of newspaper articles, announcements of meetings about trout lily management (which the park manager attended) and copies of maps of the exact location of Minnesota dwarf trout lily plants. The DNR responded on 7/18 thanking us for the information.

Through the news media we learned that the park manager was suspended for 3 days without pay. This may seem a small punishment, but it is a major penalty to a DNR employee. Our letters did seem to have an effect on an incident that may have not been taken as seriously as it should. We have some assurances that steps are being taken to further protect the Minnesota dwarf trout lily population at Nerstrand Woods.

HOUSE VOTES ON ESA

On July 29, the US House of Representatives passed the Endangered Species Act (ESA) reauthorization by voice vote. No amendments to the Committee Bill (H.R. 1027) were permitted under the speeded-up vote.

Final Congressional action on the reauthorization of the ESA is not expected until September. The bill contains an important amendment sought by conservationists to require the Secretary of the Interior to monitor the status of candidate species eligible for the ESA's protection, but not yet listed.

Unfortunately, H.R. 1027 does not contain needed amendments to : 1) protect endangered plants from collectors and vandals on non-federal lands and 2) repeal a special 1978 provision that has complicated law enforcement efforts to stem the illegal trade of endangered peregrine falcons.

ELECTION OF MNPS BOARD MEMBERS

At the August 26, 1985, meeting of the MNPS Board of Directors, Harriet Mason was selected chairperson of the Nominating Committee for fall elections. The terms of the following members of the Board of Directors expire this year: (see Fall 1984 Plant Press): Margaret Kohring, Welby Smith, Neil Anderson, May Wright, Evelyn Moyle and Deborah Brown.

Nominations are being solicited to replace the board members and should be submitted by October 5 to Harriet Mason.

SPECIES STATUS SHEET

Montia chamissoi (Ledeb.) Durand & Jackson

No Common Name Portulacaceae

OFFICIAL STATUS: Endangered

SYNONYM: Claytonia chamissoi Esch.

BASIS FOR STATUS: This small perennial has a remarkable history in the midwest and illustrates an extreme case in rare plant biology. It is believed to be a relic of Minnesota's pleistocene flora which survived the most recent glacial advances in the unglaciated region or "Driftless Area" of south eastern Minnesota. When the glaciers retreated, Montia was unable to find suitable habitat in the recently deglaciated territory and remained confined to its isolated refugium.

The legacy of this long history is a single population surviving in the Mississippi Valley near Winona (Winona County). It was discovered there by J. M. Holzinger in 1889. The population occupies a shallow ledge near the base of a steep sandstone outcrop on the bank of an intermittent stream. The plants occur in a thin layer of mud and organic debris that is kept wet by a constant sheet of water seeping from the rock.

The population is currently stable and shows no sign of decline, in spite of a long history of overcollecting and natural disasters. This includes a storm in June 1899 which, according to Holzinger, left a foot of alluvium on the colony and destroyed all but a few plants. The survivors have since expanded to occupy an area of about 160 square feet which includes most of the available habitat. The area is a band 80 feet long, two feet wide and four to five feet above the stream bed. The population consists of several hundred (possible a thousand or more) shoots, or "ramets" that arose vegetatively from annual stolons that root at the nodes and produce tiny tubers or bulblets at their tips. It is this particular mode of reproduction that allows this species to survive in its unstable habitat which is continuously eroding and slipping into the stream below. The ability to quickly replace lost individuals and maintain its precarious position may account for the remarkable longevity of this population.

Most of the potential threats to this species have already been realized, i.e., erosion, siltation, overcollecting. and yet, the singular nature of the population and its tenuous existence continues to make it susceptible to such events. It is also vulnerable to human activities which could disrupt the constant flow of cold spring water that sustains the plants.

PREFERRED HABITAT: The single Minnesota population occurs on the west-facing exposure of a dripping sandstone outcrop. The outcrop forms the east bank of a small intermittent stream in a deciduous forest. The face of the sandstone is nearly vertical, but retains a thin layer of mud in which Montia is shallowly rooted. This is a cool, moist shaded habitat where there is little competition from other species. The few associated species include: Impatiens capensis (spotted touch-me-not), Cystopteris bulbifera (bulblet fern), and hepatics (liverworts).

SELECTED REFERENCES: Holzinger, J. M. 1901. The duration of Claytonia chamissoi Ledeb. Plant World 4:41-43.

Wherry, E. T. 1964. The most disjunct species in Pennsylvania. Bartonia 34:.

MINNESOTA STATUTES CONCERNING SPECIES CONSERVATION

A copy of the official list of endangered, threatened, and special concern plants and animals (Jan. 1984), as well as copies of Minnesota State Statutes regarding rare flora are available for MNPS members to use as reference material (see Neil Anderson).

There are currently 38 endangered, 40 threatened and 86 special concern species of vascular plants. The Plant Group Committee has also deemed 14 lichens and three mosses as worthy of protection.

The following statutes govern the protection of these state treasures:

17.23 Conservation of certain wild flowers

Subdivision 1. Prohibition. No person within the state shall buy, sell, offer or expose for sale, the state flower (Cypripedium reginae), or and species of lady slipper (Cypripedieae), or any member of the orchid family, trillium of any species, lotus (Nelumbolutea), gentian (Gentiana), arbutus (Epigaea repens), or any special of lilies (Lilium), or any thereof, dug cut, plucked, pulled, or gathered in any manner from any public land or from the land of any private owner without the written concent of such owner or other occupant of such land, and then only upon written permission of the commissioner, and for scientific and herbarium purposes; except, that any persons may upon their own lands cultivate for sale and sell these flowers by registering the purpose to do the same with the commissioner.

97.488 Protection of threatened and endangered species.

Subdivison 1. Prohibiton. Notwithstanding any other provision of law, the taking, import, transport, or sale of any endangered species of wild animal, plant or parts thereof, or the sale possession with intent to sell any article made in whole or in part from the skin, hide or any parts of any endangered species of wild animal or plant is prohibited, except as provided in subdivisions 1a and 6.

Subd. 1a. Application. The provisions of subdivion 1 do not apply to plants on land classified for property tax purposes as class 3 or 3b agricultural land pursuant to section 273.13, or on ditches and roadways. The provison of subdivision 1 do not apply to noxious weeds designated pursuant to sections 18.171 to 18.315 or to weeds otherwise designated as troublesome by the department of agriculture. When control of noxious weeds is necessary, it takes priority over the protection of endangered plant species, as long as reasonable effort is taken to preserve the endangered plant species first.

The taking or killing of an endangered plant species on land adjacent to class 3 or 3b agricultural land as a result of the applicaiton of pesticides or other agricultural chemical on the class 3 or 3b land shall not be a violation of subdivision 1, as long as reasonable care is taken in the pesticide of other chemical applicaiton to avoid impact on adjacent lands.

The accidental taking of an endangered plant where the existance of the plant is not known at the time of the taking, shall not be a violation of subdivision 1.

For the purpose of this subdivision, class 3 or 3b agricultural land does not include timber land, waste land, or any land for which the owner receives a state paid wetlands or native prairies tax credit.

Subd. 2. Designation. The commissioner of natural resources, not later than January 1, 1984, by adoption of rules pursuant to chapter 14, shall designate any species of wild animal or plant as:

(1) Endangered, upon a showing that such species is threatened with extinction throughout all or a significant portion of its range; or

(2) Threatened, upon a showing that such species is likely to become endangered within the foreseeable future throughout all of a significant portion of its range; or

(3) Species of special concern, upon a showing that while a species is not endangered or threatened, it is extremely uncommon in Minnesota, or has unique or highly specific habitat requirements and deserves careful monitoring of its status. Species on the periphery of their range which are not listed at threatened my be included in this category along with those species which were once threatened or endangered by not have increasing or protected, stable populations.

BOOK REVIEWS

Chronological phenomena in plant communites: Proceedings of the 26th Int. Symposium of the Int. Association for Vegetation Science. Edited by R. Neuhasl, H. Dierschke, and J. Barkman. 1985. Hingham, MA: Kluwer Academic Publishers.

The aim of this symposium was to contribute to the special and general knowlege of spatial relations in the plant cover. In spite of being the oldest branch of the vegetation science, synchorology still does not have a consistent theroetical bsis. The broad spectrum of the presented papers indicates the idea of vegetation scientists on the contents of this branch of geobotany. Because of the limited publication facilities it was necessary to select the papers and publish only those which were concentrated on one of the following problems;
- Chorological influences in the formation and differentiation of natural, semi-natural and anthropogenous plant communites.
- Syntaxonomic evaluation of chorological phenomena; vicarious and corresponding syntaxa; transitions between plant communites.
- Diagnostic value and distribution of species and chorological groups in plant communiteis.
- Distribution areas of syntaxa and their changes.

A complete list of lectures presented at this symposium and their discussions and a list of participants complete the book.

Land Saving Action: a written symposium on private land conservation in the 1980s. Edited by Russell Brenneman and Sarah Bates. 1985. Washington, DC; Island Press. $24.95 (paper).

Twenty-nine outstanding authorities on land conservation collaborated together to make a definitive statement on the subject. The written symposium covers the following areas: 1) case studies on preserving three geographically diverse areas and the innovative solutions that have applicability to other lands; 20 land-saving organizations — includes local and nationally-active groups which all share educational functions and land management responsibilites; 3) conservation transactions — how to accomplish formal land protection through legal channels; 4) articles on federal taxation — how the tax code affects land-saving programs; and 5) land-saving and the individual landowner. In essence, it is an up-to-date guide for land-conservationists.

Plant conservation in the mediterranean area. Edited by C. Gomex-Campo. 1985. Hingham, MA: Kluwer Academic Publishers. $67.50

The mediterranean basin was one of the first to suffer the effects of massive deforestation and the need for conservation was voiced as long ago as the 6th century BC by Plato and a graphic account is given in J. V. Thurgood's "Man and the Mediterranean Forest: A history of resource depletion."

This present volume, which has been organized and edited by Professor Cesar Gomez-Campo, is particularly timely as it focuses attention on the serious problems facing us in this area, giving case histories of plants for many of the countries concerned, and suggesting possible solutions.

Contents: Part One - General: 1. The conservation of mediterranean plants: principles and problems. 2. Definition of the Mediterranean region and the origin of its flora. 3. The history of flora and vegetation and past and present human disturbance in the Mediterranean region. Part Two - Conservation problems in the different sub-areas. Case histories: 4. The Iberian Pennisula. 5. The Italian Peninsular and Alpine regions. 6. The Greek Mountains. 7. The Anatolian Peninsula, 8. The arid Eastern and Southeastern Mediterranean Regions. 9. The Maghreb countries. 10. The Mediterrranean Islands. Part Three - Actions and solutions: 11. The value of information in saving threatened Mediterranean plants. 12. Conservation of plant species within their native ecosystems. 13. The role of botanical gardens in the maintenance of living conservation-oriented collections. 14. Seed banks as an emergency conservation strategy.

AHS PRESENTS FIRST WILDFLOWER REDISCOVERY AWARDS

The American Horticultural Society (AHS) announced the presentation of its first Wildflower Rediscovery Awards to five individuals who have discovered new populations of exteremely rare species of wildflowers.

New populations of the plant, sandplain gerardia, Agalinis acuta, were discovered on long Island by Bob Zaremba, a botanist for the New York Natural Heritage Program. Although sandplain gerardia was once found in Connecticut, Rhode Island, New York, and Massachusetts, by 1978 botanists feared that he species had become extinct. Apparently, fire control and development were responsible for the decline of the species, which was once found in the open, grassy habitat characteristic of areas that are periodically cleared by natural fires. Two very small populations were discovered in cemeteries in Massachusetts, where regular, intermittent mowing has preserved the open conditions required by fire dependent species.

Running Buffalo clover, Trifoium stoloniferum, was rediscovered in West Virginia by Rodney Bartgis, a botanist the The Nature Concervancy West Virginia Field Office. This species had not been seen anywhere in the wild since 1940, although it once had been found in the Ohio and Missouri River Basins. The U.S. Fish and Wildflife Service Office had ranked the species as possibly extinct until Bartgis discovered four plants which were located in two sites in West Virginia. Today, 25 plants are known from two sites.

The rare aquatic plant, Bacopa stragula, mat-forming water hyssop, was found in Virginia by Larry Morse, National Research Associate at The Nature Conservancy (and MNPS member!), and Steve Croy from the Virginia Natural Diversity Program. These plants occurred in Maryland and Virginia at one time, but had not been seen since 1941. Two other populations, located after the initial discovery, bring the total known population of the species to about 100 plants. Arrangements are being made by The Nature Conservancy to protect these plants.

Several significant discoveries have been made in recent years by the staff of the Oregon Natural Heritage Program. Jimmy Kagan rediscovered three species in Oregon, none of which had been seen in the wild for many years: Oregon semaphore grass, Pleuropogon oregonus; Applegate's milkvetch, Astragalus applegatii; and rough allocarya, Plagiobothrys hirtus.

All the recipients received certificates and rewards from the American Horticultural Society's Wildflower Rediscovery Project Fund.

AHS, a national non-profit organization for gardeners, is vitally interested in the conservation of plants. Experts estimate that one-tenth of the species and varieties of plants native to the continental United States are in jeopardy. To increase awareness of endangered plants and to promote plant conservation, the Society instituted its Wildflower Rediscovery Project and published its 1985 Endangered Wildflowers Calendar. Funds from the calendar sales are being used to support conservation projects. Public response to the Wildflower Resdiscovery project and to the calendar has been overwhelming. The 1986 Endangered Wildflower Calendar will be available in the late summer at the retail price of $6.95. AHS members may purchase the calendar at the discounted price of $6.25. Both include postage and handling.

For information about membership in the Society or the 1986 Endandgered Wildflower Calendar, please write to: AHS, P.O. Box 0105, Mount Vernon, VA, or call (703) 768-5700.

MNPS DIRECTORY

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CALENDER OF EVENTS

Oct. 2 MNPS monthly meeting: Annual Seed Exchange; Dr. May Wright and Chris Soutter.

Nov. 6: MNPS monthly meeting: Third Annual Minnesota Botany Photographic Salon; co-sponspred by the Minnesota Nature Photography Club and MNPS. Shown by Ken Olson.

Dec. 4 MNPS monthly meeting: Clifford Ahlgren, author of Lob Trees in the Wilderness, a history of the forests of the Boundary Waters Canoe Area.

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CHANGE OF MEETING ROOM FOR MONTHLY MEETINGS

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Palmer Classroom is not available this quarter, so we have been rescheduled to 335 Borlaug Hall. We still meet on the first Wednesday of the month from 7:30 - 9:30.

Borlaug Hall is a brand new building at the University of Minnesota on the St. Paul Campus. It is nextto to Palmer Classroom, a bit higher on the hill. Please note on the map below that you can still park in the same places as you did for Palmer Classroom.

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