



A Sedge in Your Stocking

by William R. Norris

'Tis nearly the season to be suspending mistletoe above narrow doorways, putting out bowls of mixed nuts on the coffee table and lighting perfumery Yankee candles with "evergreen" and "holly berry" fragrances. Many of us will soon decorate our front door with wreaths bearing pine cones collected in far-off places (certainly not Iowa). And of course, how many of us will soon receive a beloved fruit cake from a loved one, to be eaten quickly or quietly offered to your pet?

Make no mistake, plants are an important part of our Xmas culture. And if your loved ones are native plant enthusiasts, what a range of botanically-themed gifts there are to choose from! Who among them would be unhappy to receive a 20X hand-lens, a shiny new pith helmet or a life-time membership in the Iowa Native Plant Society? And what botanist would turn down the gift of a new wildflower field guide to replace the old, battered version under his/her car seat (you know, the one with a missing

cover and three mosquitoes smashed between pages 254 and 255)?

Which brings us to the point of this article. Suppose your botanically-inclined friend or loved one already possesses all of the above equipment and field guides. What are your options? Well, take heart, friend, because this yuletide season you have an opportunity to stuff your loved one's stocking with a very special gift, a gift that anticipates the botanical revolution about to shake Iowa to the very bottom of its corn stalks. Of course, I'm talking about the *sedge revolution*.

Sedge revolution? Yes, you read right. Iowa's botanists are now waking up to the fact that sedges are a dominant and conspicuous component of this state's flora. In case you didn't know, approximately 5% of all plant species known to occur in Iowa belong to the genus *Carex*. Furthermore, sedges in the genus *Carex* are the dominant vegetation in many native vegetation remnants in Iowa. If you don't believe this, just visit the sedge meadows at Engeldinger Marsh (Polk County) and Doolittle Prairie (Story County), or the wet swales at Cedar Hills Sand Prairie (Black Hawk County) or just about any other wetland habitat in the state. Sedges are also very good indicators of plant community types in Iowa; the discovery of *Carex muskingumensis* indicates mature floodplain forest habitat just as *Carex umbellata* announces that you are standing on a hill prairie in northeast Iowa.

It is my observation that any botanist professing even a little knowledge of sedge identification is revered as a god in botanical circles. So, what references exist that would set your botanically inclined friends on the path to attaining this revered status? Below I briefly describe four options in order of increasing cost. Each of these volumes includes line drawings of virtually all sedge species described therein.

continued on page 8

Inside this issue:

A Sedge in Your Stocking	1
Invasive Species Conference	2
Clay Prairie State Preserve	3
The Rowley Fen Field Trip	3
Reed Canary Grass	4
Making Quality Herbarium Specimens: La-	5
Eddyville Dunes Update	7
AIV's Along the Turkey	7
The Practice of Restoring	9
Ideas Needed for INPS Field Trips	10
Membership Directory available	10

Invasive Species Conference Held in Iowa

by John Walkowiak

President: Tom Rosburg
P.O. Box 234
Colo, IA 50056
515-377-2930
thomas.rosburg@drake.edu

Vice President:
Mary Jane Hatfield
2505 Tullamore Lane,
Ames, IA 50010
515-232-7555

Secretary: Linda Scarth
1630 Wildwood Dr. NE
Cedar Rapids, IA 52402
lscarth@mmc.mtmercy.edu

Treasurer: Diana Horton
720 Sandusky Drive
Iowa City, IA 52240
319-337-5430
diana-horton@uiowa.edu

Issues/Action Committee:
Jane Clark
9871 Lincoln Ave
Clive, IA 50325
515-232-5047
jrclark@radiks.net

Program Committee:
Chairman: Mark Leoshke
2212 East Rose Ave #13
Des Moines, IA 50320-2613
mark.leoshke@dnr.state.ia.us

Mary Brown
330 Windsor Dr.
Iowa City, IA 52245
319-338-3875
mbrown@blue.weeg.uiowa.edu

Judy Felder
335 Beldon Ave
Iowa City, IA 52246
319-351-7718
rfelder@blue.weeg.uiowa.edu

Tom Rosburg (see above)

William C. Watson
P.O. Box 281
Cedar Falls, IA 50613

Historian:
Deborah Q. Lewis
Dept. of Botany, ISU
Ames, IA 50011-1020
515-294-9499



Printed on recycled paper

Friday and Saturday, October 6th and 7th, over 100 Iowans and supporters from neighboring states met at Iowa State University to attend and participate in the first ever Invasive Plants and Animals In Iowa conference. The conference, sponsored by the Iowa Academy of Science and many others, was organized by Dr. Jim Dinsmore of the ISU Dept. of Animal Ecology and Dr. Neil Bernstein of the Biology Dept. at Mt. Mercy College in Cedar Rapids.

Its efforts were to open discussion and increase awareness of the serious nature of invasive plants, animals, insects, aquatic species, etc. on the native ecosystems of Iowa's forests, prairies, wetlands, waterways, and other natural areas of the state. Wonderful presentations were given by both in-state and out-of-state professionals on specific invasive species issues, with examples including invasive and exotic fish, trees/shrubs (buckthorn, honeysuckle), to purple loosestrife and Eurasian watermilfoil, etc. Kelly Kearns, Endangered species coordinator from Wisconsin discussed WI efforts and Jerry Asher of the BLM out of Portland, OR discussed efforts on federal lands in the West. In addition, model concepts for control and management were presented and discussed.

During the last session, the participants worked on what the next steps should be to address the Invasive species issues in Iowa. It was pointed out that Governor Tom Vilsack is the ranking chair of the Natural Resources Committee of the National Governors Association and has requested information from several of the program participants on this issue. It was also pointed out that funding for invasive and exotic species management is limited - unless it has to do with agriculture protection.

So it was decided that an ad hoc group of participants would develop some strategic suggestions/directions to increasing awareness, education, funding and management efforts on invasive species. This ad hoc group was proposed to draft recommendations on how best to achieve these strategic needs of invasive species. In conjunction, the papers presented at the Invasive Species Conference would be prepared and edited in cooperation with Jim Dinsmore and Neil Bernstein for publication in the Iowa Academy of Science quarterly journal by June 2001.

Volunteers who agreed to be on this ad hoc invasive species group are composed of John Walkowiak, Chief - Forestry Services with the Iowa DNR (who will handle logistics of the ad hoc group), Dr. John Haanstad - State Entomologist with Iowa DALS, Bruce Ehresman, DNR-Diversity program, Carol Schutte, Biology Dept. at Northern Iowa CC, Gary Phillips, Environmental Studies Program at Iowa Lakes CC and Pauline Drobney of the USFWS at the Neil Smith Wildlife Refuge. This ad hoc committee was planned to be small - in order to be a working group that could develop and draft future directions. Plans are for the ad hoc group to meet in the near future. Members of the ad hoc group agreed that they will be open to any comments or concerns that you may have. So feel free to send comments directly to any of them at their email addresses listed below:

john.walkowiak@dnr.state.ia.us (forests trees/shrubs/insects/disease issues)

john.haanstad@idals.state.ia.us (insects/plant disease issues, agriculture)

gphillips@ilcc.cc.ia.us (aquatic plants/animal wetland issues)

schutcar@niacc.cc.ia.us (education issues)

bruce.ehresman@dnr.state.ia.us (birds/mammal issues)

pauline_drobney@fws.gov (prairies issues)

Clay Prairie State Preserve

by Ed L. Freese, submitted October 2000

Clay Prairie is a little island in a sea of crops. At only two acres it is indeed small. The preserve is surrounded by cropland and rural cemetery. The rolling countryside is part of the Iowa Erosional Landform.

The preserve was purchased in 1961 by the university of Northern Iowa with funds provided by the late UNI alumnus Joseph B. Clay. The tract became a state preserve December 28, 1976. The prairie is located near the center of Butler County.

I first visited the reserve during a field trip in 1966 led by UNI Professor Cyrus W. Lantz. Lantz later published the first plant list of the reserve in 1969 of 98 species. During the growing seasons of 1997 to 2000 the list was updated to a current total of 164 species. Several previously reported species were not recently found.

A visit during the spring season will be rewarded with a pleasant splash of color. Shooting stars add shades of pink to the yellow of golden Alexander. Here and there are the yellows of lousewort, Indian paintbrush, and cream wild indigo. So far eleven species of sedge have been found, including *Carex haydeni*, *C. buxbaumii*, *C. sartwellii* and *Scleria triglomerata* which are described as rare to infrequent in Iowa.

Through the mid-summer period, more prairie plants bloom. Ox-eye, tickseed, butterfly weed, and wood lily provide the yellows and oranges, and horsemint, pale compass plant, wild quinine, white wild indigo, and New Jersey tea contrast with white, pink and lavender. Downy and bottle gentians add the blues. Big blue stem and Indian grass reach for the sky in August. Also present are little blue stem, prairie dropseed, and slough grass. Missouri goldenrod leads the forb parade, followed by stiff goldenrod and finally New England aster.

Several high quality prairie forbs are present which are not as showy and harder to find. Green milkweed, prairie Indian plantain, marsh bellflower, marsh vetchling, violet wood sorrel, and prairie violet can be found with a little searching through the vegetation. *continued on page 6*

The Rowley Fen Field Trip

by Mark I. Leoschke

September 9th turned out to be a wonderful day for a walk in the muck. Fourteen people showed up to see the Rowley Fen, a two acre rich fen on the Iowan Surface just north of the town of Rowley. This fen is owned and managed by the Buchanan County Conservation Board.

One of the main reasons to visit fens at this time of year is to admire the beautiful blue flowers of the fringed gentian, *Gentianopsis crinita*. The gentians put on quite a show, with dots of blue scattered within the fen. Although most of the flowers were past peak, we also enjoyed the creamy flowers of Grass of Parnassus, *Parnassia glauca*. Sage willow, *Salix candida*, a short shrub, looked showy with its white leaves that resemble prairie sage. All three of these species in Iowa today are primarily found in fens, though fringed gentian and Grass of Parnassus are found infrequently on prairies. These species were once considered very rare in Iowa (sage willow was thought to be extirpated as recently as the 1970's), but fen inventories have found dozens of sites for all three species.

In addition to the uncommon species, we also saw some more common wetland plants. These included the purple of New England aster, *Aster novae-angliae*; the purple-red of Joe-pye weed, *Eupatorium maculatum* and marsh milkweed, *Asclepias incarnata*; the yellow of swamp lousewort, *Pedicularis lanceolata* and Riddell's goldenrod, *Solidago riddellii*; and the white of boneset, *Eupatorium perfoliatum* and mountain mint, *Pycnanthemum virginianum*.

Reed Canary Grass

From a report by Kelliann Dykstra and Jeremy Duehr

Introduction

Reed canary grass (*Phalaris arundinacea*) is an invasive plant species which commonly dominates wetland habitats, crowding out other native vegetation important to wildlife. Certain physiological characteristics of the plant promote accelerated growth allowing it to out-compete other plant species. Typically, reed canary grass inhibits the growth of other plant species for 3-5 months after its establishment and eventually eliminates them.

Adaptations for Invasion

The physiological characteristics that enhance its ability to out-compete other vegetation include the shoots, rhizomes, and the associated nutrient uptake. There are two generations of shoots in each season. The first occurs during flooding. Adventitious roots are produced which allow the shoots to **uptake** nutrients. When the soil dries, nutrients are translocated to the rhizomes. Then, before being submerged again, another generation of shoots form which again enable the plant to uptake nutrients even when the water level is above the soil surface. This ability to utilize the most advantageous method of nutrient uptake allows the plant to be very efficient. This may be one of the primary reasons that this plant can dominate areas that are often flooded.

Another reason that reed canary grass is so invasive is its very early floral development. The triggering mechanism for the stages of floral initiation and development is more specific for high nitrogen fertility rather than a long photoperiod. The plant is said to have the ability to fix nitrogen; having this ability at a time when others are limited by nitrogen will give it a definite advantage for growth.

In addition to physiological factors that allow the plant to out-compete other species in aquatic habitats, reed canary grass is successful because of its resistance to injury from fire and the ability to grow in dense mats. By forming dense mats through rhizomes and roots, the plant will create an intricate network that will even allow it to grow over the surface of water without implanting roots into the soil. These dense mats are a major contribution to its dominance and fire resistance.

Control Methods

Methods of physical/mechanical control include total excavation of an area, shearing, and pulling. Hand chopping the culms at flowering time may kill small clones; however, it is a very labor intensive technique and not commonly used. Hand pulling is also very labor intensive and unsuccessful unless the rhizomes are completely removed. Any stems left to flower can also re-seed the site. This technique can only be used in small plots.

Use of herbicides can be another management technique to control this invasive plant species. It can be effective at killing the reed canary grass, but will also destroy the other native plant vegetation. Most herbicides are not selective enough to be used in high quality areas. But in areas where there is not a concern for harming other native plants, herbicides are often used. Glyphosate will kill reed canary grass, but should be applied in early spring when other native wetland species are still dormant.

Applications of aphids for biological control of reed canary grass have not been verified. Rapid reestablishment from seeds makes control of reed canary grass difficult using any control method.

Reed Canary Grass in Iowa

Reed canary grass is common in wetlands throughout Iowa. One "genotype" of the species is thought possibly to have been native here, but this native form may now be totally replaced by much more aggressive forms that have been introduced from Europe for pasture and erosion control.

Making Quality Herbarium Specimens: Labels

by Diana Horton and Deb Lewis

Herbarium specimens are the best way to accurately and permanently document the record of an occurrence of a plant or fungus species. But herbarium specimens are also used in many other ways besides serving as the "voucher specimen" for documentation -

-- Research: in taxonomy and floristics, plant distribution and biogeographical research, ecology, plant identification, pollen and seed studies, plant comparative morphology and anatomy, botanical history, etc.

-- Teaching: illustrating the magnificent diversity of plants, demonstrating the variation in characteristics of a single species, showing changes in species composition in an area, providing examples of variation of structure and form, etc.

For herbarium specimens to be useful in these and many other ways, it is imperative that the specimen be carefully collected, pressed, and labeled. Collecting (including "collecting ethics"), pressing, and drying the plant material will be discussed in the next newsletter. But since the field season has just ended, perhaps you have pressed specimens to be deposited in a herbarium, but haven't yet made the labels for them. Check with the herbarium where you wish to deposit your specimens to determine their preferred label format, and if they request completed labels or will prepare the labels for you. Diana Horton, Curator of the University of Iowa Herbarium, has prepared the following guidelines for making high quality labels:

HERBARIUM SPECIMEN LABELS

Name of Repository PLANTS OF COUNTRY	
Name of plant (genus & species) Author of name Name of person who determined (if other than collector)	
STATE/PROVINCE. County: Specific information on how to reach locality.	
Quarter section, Section, Township, Range Latitude, Longitude	Elevation
Habitat Information.	
Collector's Name & Number (Person(s) Who Accompanied Collector)	Date of Collection

What information should be included on specimen labels?

Location

Locality data are crucial; a specimen without locality data is worthless.

Collectors must provide adequate information on locality if the specimens are to have lasting value. The following information is essential:

- country; state/province; and county
- specific information on how the locality can be reached (distance to nearest town, river crossing, highway intersection or other landmark and number of the road/highway along which locality is situated)
- township, range, section, quarter-section
- latitude and longitude
- elevation

The above can be extracted from state/provincial road maps, county road maps, odometer readings and topographic maps (the latter are available from Geological Survey offices and in the libraries of most major universities).

continued on page 6

Habitat

Information on habitat is useful. This can include a general description of the type of habitat (eg. forest, rock outcrop, prairie, wetland, etc.); substrate type (eg. calcareous, siliceous rock, soil type), if pertinent; names of associated species; and specific notes on the microhabitat in which the plant was collected (eg. on exposed soil, on trunk of *Quercus macrocarpa* 1.5 m from ground, etc.).

Collector and Date of Collection

The name of the collector and collection number, if any, and the date of collection (do not abbreviate; write out name of month and include the century) should be clearly indicated. The names of persons who accompanied the collector may be included in parentheses.

Identification

If the specimen has been identified, the name of the species and the person who identified it (if other than the collector) should be included. If the collection is a voucher for a research report or publication, this should be noted (eg. Voucher for Survey of Iowa Fen Bryoflora).

Label Format

The above information, in hand printed (legible!) or typed form, should be given to the herbarium where the specimen(s) will be deposited. The University of Iowa Herbarium is happy to prepare labels for you (we have a computer program for this purpose) if the appropriate information is provided; however, if you wish to prepare labels yourself, acid-free or bond paper with high rag content (at least 50% cotton rag) and a typewriter or spinwriter with a carbon ribbon should be used (to ensure that the ink is permanent). The format should be as per the following sample:

Herbarium-University of Iowa (IA) PLANTS OF U.S.A.	
<i>He/odium pa/udosum</i> (Sui!) Aust. var. <i>pa/udosum</i>	
IOWA Mahaska Co.: Hull State Game Management Area, ca. .5 mi W of Beacon on G49 and ca. .5 mi S. of G49 along road through reclamation site, on E side of road through fen.	
SW 1/4 of NE 1/4, Sec. 30, T75N, R16W	Elevation: 750'
41° 15'N, 92° 43'W	
Fen-wet prairie with patches of <i>Spartina pectinata</i> and <i>Ca/amagrostis canadensis</i> , and scattered <i>Bidens</i> and <i>Lactuca scario/a</i> . Scattered low hummocks of <i>Sphagnum fimbriatum</i> and <i>S. palustre</i> mainly associated with <i>Spartina</i> .	
Diana G. Horton 30816 (With Lon Drake and Carol Thompson)	October 19, 1990

Clay Prairie State Preserve continued from page 3

Management by the University of Northern Iowa has helped maintain the prairie. Workers have removed trees and brush over the years. Spring burns have also helped control woody plants. Several non-native plants reported by Lantz were not recently found and may have been eliminated by workers (e.g. *Carduus sp.*, *Euphorbia cyparissias*). The result of good management of this high quality remnant is a showy display of prairie flowers.

Clay Prairie is easy to find and very accessible from state highway 14 and county blacktop C45. Just stop at the Butler Center Cemetery and walk a few feet east to the preserve gate. If you are ever in the area stop for some fresh air and beautiful flowers.

Eddyville Dunes Update

by Glenda Buenger and Pat McAdams

The IDOT did some mowing at the 182nd St. area and at Teno's this past summer to knock back thistles, Queen-Anne's lace, sweet clover and brush. I called to request the work on the thistles but the IDOT did more than I asked, which is greatly appreciated. Pat has been a demon on the wild parsnip. The tenant at Teno's did a little dozer work on trees this fall, but keep in mind that sand prairie is by nature subject to disturbances. All in all the Dunes are mostly holding their own while the environmental clearance process drags on. The ponds are recharged after the early summer drought, when they dried completely. Mahaska County's roadside manager, whose parents live in the Dunes east of the orchid site on 182nd St., found an Ornate box turtle (male) browsing in the garden last summer.

The current design of the south interchange requires the closing of 182nd St. east of the interchange. Because of this and other impacts of the proposed route, the IDOT has acquired all the properties on either side of 240th Ave., the gravel road which runs north-south just west of the orchid site. After use as a haul road, the IDOT proposes to permanently close 182nd St. from the south interchange to some point east. Since the IDOT will own all of the property from the proposed 4-lane east to at least the east boundary of the original alignment, 182nd St. can be closed through the entire area to be set aside. Closing and perhaps removing 182nd St. would significantly enhance the "preserve," so we hope that the Wapello Co. Board of Supervisors consents.

A sedge species collected on the dune north of the orchids by INPS member Laura McCormick in July 1999 has been identified as a new state record. It is *Cyperus X mesochorus Geise* (= *C. schweinitzii* X *C. lupulinus*). A discussion can be found under *Cyperus lupulinus* (Spreng.) Marcks [= *C. filiculmis Vahl*] on p. 374 of Steyermark's Flora of Missouri (1999).

Thank you, Laura! and thank you all, INPS members, for your faithfulness in helping the Eddyville Dunes and Wetlands.

ATVs Along the Turkey

By Larry Stone

The Iowa Department of Natural Resources has proposed developing a park for all-terrain vehicles (aka off-highway vehicles or four-wheelers) on parts of a 400-acre tract that borders the Turkey River for about two miles downstream from the Highway 13 bridge near Elkader.

Money to buy the land would come from a \$200,000 Federal Recreational Trails grant, along with \$35,000 from ATV registrations administered by the DNR. The Northeast Iowa Action Trail Riders, an ATV club based in Dubuque, has volunteered to operate the park.

There already has been considerable local controversy, and a public meeting is planned for the Elkader area. The DNR also is seeking input on the proposal.

Some issues are:

Noise impacts on Turkey River canoeists, on users of the county-owned Pony Hollow Trail across the river, on residents of Elkader, and on adjoining land-owners.

Erosion and damage to the land. The DNR has proposed trails that avoid many sensitive areas, such as a steep bluff with rare plants. But is that adequate to protect the resource?

ATV owners say they need more legal places to ride. Should one place be *here*? Will this reduce problems of illegal riding and damage elsewhere?

Economics. The Clayton County Supervisors have endorsed the ATV park as good for the county. Will ATV riders bring money - or drive away tourists seeking scenery and solitude?

Please make your feelings known to:

Arnie Sohn

Iowa Department of Natural Resources

Wallace Building

Des Moines, IA 50319

Phone (515) 281-5814

arnie.sohn@dnr.state.ia.us

Larry Stone would appreciate copies of correspondence.



About the Newsletter Editor Sandra Gossman, 2506 Northwestern Ave, Ames, IA 50010 (srgossman@aol.com) I am a native Iowan (NE IA), and farmer's daughter, I grew up loving the woods and woodland flora. In the past few years my interest in gardening has not only led me to learning more about new plant cultivars, but also a renewed interest in learning about and the preservation of native plants. As a new member of INPS I am happy to find a small niche that offers me the opportunity to serve the organization, and increase my knowledge. Please bare with me on these first few newsletters as I get used to a new computer program, Latin names and deadlines. *Sandy*

A Sedge in Your Stocking continued from page 1

1) Steyermark's Flora of Missouri, vol. 1. (1999) by George Yatskiyevych, published by The Missouri Department of Conservation, Jefferson City, MO, 991 p. This volume treats not only sedges but all conifers, ferns, and monocots documented to occur in the Show-Me State. As such, this volume is 991 pages long, making it too thick to fit under your car seat and too heavy to carry in the field. However, with beautiful line drawings by Paul Nelson of every sedge species (including most Iowa species) as well as well-crafted species descriptions and dichotomous keys to aid in sedge identification, this book is a real bargain. Sedge identification, even by the experts, often takes place in the lab, so this book should sit comfortably next to your dissecting scope at home. Cost: \$38.

2) Sedges: Carex (1999) by Robert H. Mohlenbrock, Southern Illinois University Press, Carbondale IL, 328 p. This book is part of the "Illustrated Flora of Illinois" series with illustrations also provided by Paul Nelson. In fact, many (if not most) illustrations in this volume are the same as those used in Steyermark's Flora of Missouri. Nonetheless, illustrations for each species receive their own page in this book (as opposed to plates illustrating multiple species in the Missouri book) and are thus easier on the eye. Descriptions and dichotomous keys for identification of Illinois sedge species (many of which occur in Iowa) are very well written. This book is the only one of the four described in this article that would fit easily under your car seat or in a conventional Xmas stocking. However, it is a bit pricey (\$59.95).

3) The Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada (1998) by Noel H. Holmgren, New York Botanical Garden, Bronx, New York, 937 pp. As suggested by the title, this volume contains illustrations of virtually all vascular plants known to occur in the northeastern U.S. (including most of Iowa). This book is intended to be a companion volume to Gleason and Cronquist's 1991 technical manual of the northeast flora; as such, species descriptions and keys are omitted from this volume. Holmgren's book is a veritable feast for the eyes with its 900+ pages of beautiful line drawings of a vast flora. I suspect that this comprehensive volume would be a bit overwhelming to a newcomer in sedge identification; 230 *Carex* species are illustrated here (about twice the number of species than are known from Iowa). However, for the advanced *Carex* student in search of new additions to the Iowa flora, this volume offers ready access to illustrations of

virtually all possibilities from the northeastern U.S. Cost: \$125.

4) North American Cariceae (1940), volumes I and II, by Kenneth K. MacKenzie, The New York Botanical Garden, New York, NY. MacKenzie was born in New York, grew up in Muscatine, IA, and studied law and botany in Kansas City, MO. Although he earned a living as a lawyer in New York City, he devoted his spare time to botany, particularly sedges. This amateur made a huge contribution to our knowledge of North American sedges with the publication of these two over-sized volumes. Contained within their covers are beautiful line drawings and descriptions of over 500 *Carex* species, including virtually all Iowa species. Unfortunately, these volumes are out of print. One might look for them in bookstores specializing in rare and out-of-print books; indeed, my good friend Mark Leoschke encountered these two books out of the blue at a used book sale several years ago. I'm envious; I have never seen these classic volumes for sale anywhere, despite several Internet searches. Be forewarned: if you do find these books you will need a very large stocking to stuff them in.

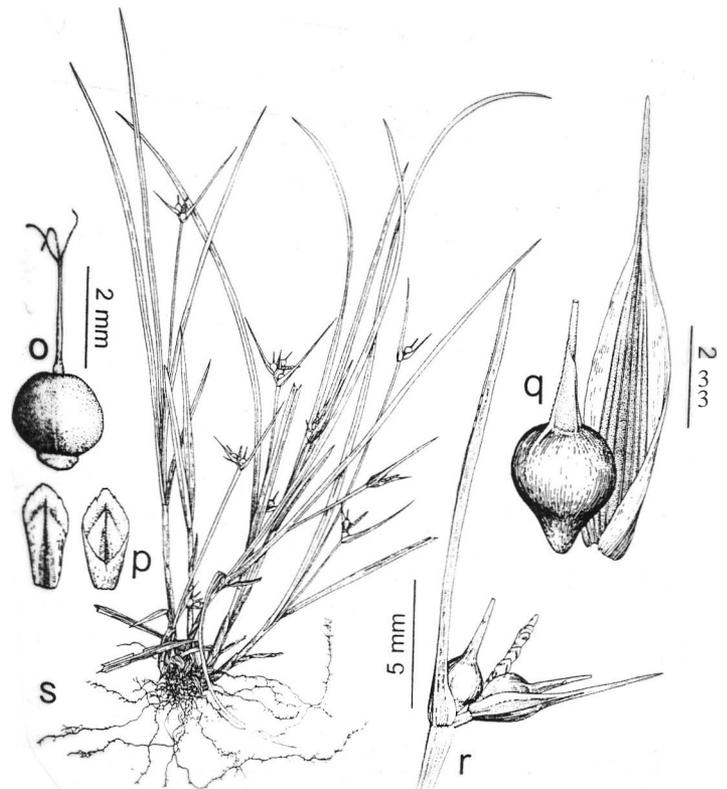


Illustration of *Carex jamesii* from Steyermark's Flora of Missouri

The Practice of Restoring
Native Ecosystems: A One-day Regional Seminar

Des Moines February 22, 2001 at the Botanical Center
Sponsored by The National Arbor Day Foundation

Topic Outline

Natural Landscaping vs. ecological restoration:
defining key elements and terminology
Ecological health assessment and planning
The elements of good design
The science of wetland ecology
Stream bank restoration
Best Management Practices: (BMPs)
Prairie ecosystems
Woodland and savanna systems
Pond edge aquascaping
Maintenance needs for long-term success
Role of storm water management
Urban corridors and greenway restoration
Bioengineering
Discussion
Conclusion

Instructors

Steven Aplebaum - a leading research and consulting ecologist in the U.S. involved with ecosystem restoration

William Young - manager of restoration projects with The Dawson Corporation, a design-build landscape restoration contracting firm located in New Jersey.

Costs

The all-day seminar is \$125 per person (\$150 if registration is received within 7 days of the seminar)

For additional information regarding registration and lodging, please email:

Steven Pearson, Conference Coordinator at:
spearson@arborday.org

INPS Membership/Change of Address Form and Survey

Send with your 2001 dues of \$10.00 to Diana Horton, 720 Sandusky Drive, Iowa City, IA 52240.

Name: _____

Address: _____

Phone: _____

Email Address: _____

Additional information or special interests for member directory entry _____

D Mark this box if you do not wish to have this information published in the INPS member directory. The INPS mailing list is never distributed to other organizations or companies. Dues are payable on a calendar year basis from 1 January to 31 December. Use this form for change of address.

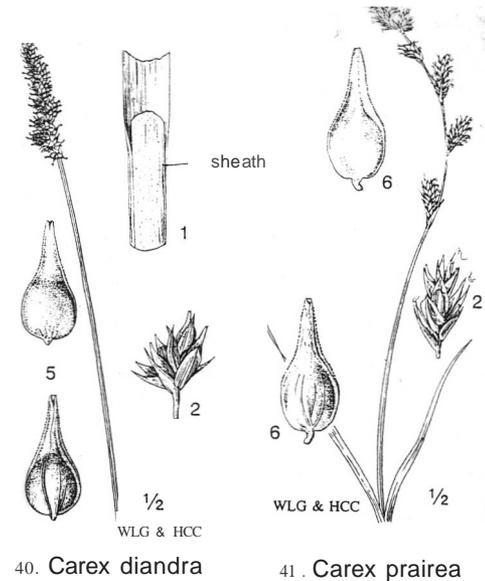
Ideas Needed For
Iowa Native Plant Society
Field Trips
by Mark J. Leoschke

I need ideas for INPS field trips during the 2001 field season. Please feel free to suggest places to go (if you suggest private sites, please check with the landowner first to make sure they are open to the idea), what month (April through September) and who might be an appropriate field trip leader (feel free to volunteer yourself. Field trips are informal and other members frequently help with identifications, etc.). Please submit your ideas to me by December 31, 2000. I will review ideas with the field trip committee and produce a final list. You can reach me via mail (2212 East Rose Avenue #13, Des Moines, Iowa 50320-2613), e-mail mark.leoschke@dnr.state.ia.us, or phone (515-244-5908). Thanks in advance for your ideas.

Illustrations from The Illustrated Companion to Gleason and Cronquist's Manual

Membership Directory Available

The 2000-01 directory has been compiled and is available on the iowa-native-plants-listserve. If you are unable to access the directory, please let Rosanne Healy know, and she will send you a hard copy. Rosanne's address is 2427 Waterford Drive, Ames, IA 50010; phone number 515-233-5914; and email: rhealy@iastate.edu.



Newsletter

Iowa Native Plant Society
c/o Deb Lewis
Department of Botany
Iowa State University
Ames, IA 50011-1020