

"ILLINOENSIS" NEWSLETTER OF THE ILLINOIS
NATIVE PLANT CONSERVATION PROGRAM
ILLINOIS DEPARTMENT OF CONSERVATION
JOHN SCHWEGMAN, EDITOR AND
BOTANY PROGRAM MANAGER

Vol. 1, No. 2
December, 1985

Illinoensis is issued semi-annually or more frequently by the Botany Program, Illinois Department of Conservation and is free of charge. It includes news of interest to the Illinois plant conservation community. Suggestions of new items for future issues are welcomed. Address correspondence and requests to be put on the mailing list to Botany Program, Illinois Department of Conservation, Division of Forest Resources and Natural Heritage, 524 South 2nd Street, Springfield, Illinois 62706. (Phone 217/782-2361.)

NEW NATURAL HERITAGE DIVISION

Effective January 15, 1986 a new Natural Heritage Division will be operating within the D.O.C. Raising the natural area, non-game wildlife, botanical, and endangered species efforts of the D.O.C from Section status within Forestry to full Divisional Status is a major step forward for nature conservation in Illinois. D.O.C. Director Mike Witte plans a nationwide search, if necessary, to find a suitable person to head up the new Division.

PRAIRIE PLANT PRODUCTION AT D.O.C.

The D.O.C. nursery in Mason County, supplemented by seed collected in the field, is making available 52,800 prairie forb seedlings, 3,124 pounds of prairie grass seed and 445 pounds of forb seed to District Biologists for planting on D.O.C. lands. Twenty one species of seedlings were produced, five species of grass seed are involved and 36 species of forb seeds are available. These Illinois

ecotype plants will go a long way in restoring our decimated prairie flora. Special thanks are due to The Nature Conservancy whose prairie chicken sanctuary yielded over half of the grass seed and The Illinois Natural History Survey which assisted in the grass seed harvest.

GINSENG

Nineteen eighty five saw an increase in enforcement of laws protecting this native herb. A major arrest involved a dealer in possession of ginseng in violation of the law. In this case several hundred pounds of ginseng worth in excess of \$100.00 per pound was confiscated. In another case involving theft of ginseng (digging without permission), the Carroll County states attorney prosecuted the violator who received a \$100.00 fine. These and other prosecutions are leading to greater public adherence to laws protecting ginseng.

PRESCRIBED BURNING STOPPED

The D.O.C. suspended its prescribed burning program on April 12 in response to opposition from wildlife interests. A task force including natural community, wildlife and plant interests is working on a modified policy, acceptable to all, that will allow resumption of this important program next spring. This 13 year old program is critical to maintenance of natural communities on which a wide variety of native plants and animals are dependent.

STATE CAPITOL PLANTING

Native plant enthusiasts will be glad to hear that Illinois governmental leaders are regularly confronted with an attractive planting of prairie wildflowers and grasses. The plot is established between two walkways connecting the Capitol building and the State Office Building to the west. They are on the grounds of the office building where all legislators have their offices and pass them as they go to work in the capitol. The planting features some species in bloom throughout the year. It was designed and installed by D.O.C. District Heritage Biologist Bill McClain and Landscape Architect Larry Kennedy. Judging from comments received, it has been well received by our law makers.

NEWS FROM S.I.U.

Dr. Robert Mohlenbrock was recently appointed Chairman of North American Plant Specialists for Conservation, an arm of the International Union for the Conservation of Nature. Dr. Mohlenbrock also announces that a revised edition of his "Guide to the Vascular Flora of Illinois" will be published by the S.I.U. Press about August 1986. The new edition treats 300 taxa not included in the 1975 edition.

ILLINOIS NATIVE PLANT SOCIETY

The Southern Illinois Native Plant Society reorganized as The Illinois Native Plant Society at its August 23rd meeting. New bylaws allow the creation of local chapters of at least 10 or more members. For more information on joining or forming a Chapter write Illinois Native Plant Society, Dept. of Botany, Southern Illinois University, Carbondale, Illinois 62901. The annual meeting and banquet of the Society will be April 19, 1986 at 7:30 PM at S.I.U. Carbondale. Guest speaker will be Dr. George Folkerts of Auburn University on the "Ecology of Pitcher Plant Bogs".

ILPIN

The Illinois Natural History Survey is developing the Illinois Plant Information Network (ILPIN). It is a computer based system containing taxonomic, distribution, habitat and endangered status information for Illinois vascular plants. Future plans call for adding ecological, reproductive and economic value data. The system supports a variety of environmental review projects at the Survey and is available for use by others on request. For information contact Dr. Louis Iverson or Ms. Jean Karnes at the Survey in Urbana.

D.O.C. BOTANY PROGRAM NEWS

During the 1985 field season vascular plant species lists were completed for Illinois' best cold-air drainage (algific) slope, the sand hill prairies of Jo Daviess County, Langham's (Altorf) Island in the Kankakee River and Shick Shack Nature Preserve in Cass County. The latter area is a large high quality natural sand pond rich in aquatic life. Plans are to publish these flora lists in the future.

A special plants monitoring and information gathering program continues under development. The program will monitor the numbers and vigor of plant populations and will gather life history and reproductive information important to management of the species. It will be implemented by D.O.C. District Heritage Biologists during the 1986 growing season. Equipment developed for the program was demonstrated at the North American Natural Areas Workshop this fall and will be described in a future article in Natural Areas Journal.

Experimental monitoring plots were established for Tennessee milk vetch (*Astragalus tennesseensis*), Mead's milkweed, (*Asclepias meadii*),

Blueharts (Buchnera americana),
Umbrella sedge (Cyperus grayioides),
Kankakee mallow (Iliamna remota),
decurrent false aster (Boltonia
decurrens), heart-leaved plantain
(Plantago cordata), slender
Lespedeza (Lespedeza leptostachya),
and buffalo clover (Trifolium
reflexum) to field test the methods
being developed for special plant
monitoring.

PURPLE LOOSESTRIFE

An aerial survey of wetlands in
northeastern Illinois by District
Natural Heritage Biologists Randy
Heidorn and Bill Glass during late
July revealed that purple
loosestrife (Lythrum salicaria) is
much more widespread than thought.
This aggressive sub-shrub disrupts
natural open wetland communities and
eventually crowds out many native
plants. It is a severe threat to
our natural areas and native plants.
Three nature preserves, Wanconda
Bog, Brandenburg Bog, and Weingart
Road Sedge Meadow, all have severe
infestations of purple loosestrife.
Many other areas have lesser
infestations. Once the plants get
beyond hand treatment with
herbicides, no selective control is
known. Other biologist reports
indicate it has spread down the
Mississippi River as far as Warsaw
and at least 5 populations are known
in central Illinois in Morgan
County.

ENDANGERED SPECIES ACT REVISED

The Illinois Endangered Species
Act was revised by the Legislature
in the 1985 session. The new law is
strengthened as regards endangered
plant protection. It is now illegal
to "take" or collect state listed
endangered plants from the land of
another without the written
permission of the landowner or to
sell or offer for sale plants or
plant products from endangered
plants. The new statute requires
state permits for taking or

possession of Federally listed
endangered plants including
herbarium specimens. Rules
implementing the permit requirements
are yet to be promulgated. The new
Act takes effect July 1, 1986.

DIRECTORY OF SYSTEMATISTS AND ECOLOGISTS

The Illinois Natural History
Survey will be publishing "A
Directory of Illinois Systematists
and Ecologists early in 1986.
Compiled by Ken Robertson, Philip
Burton and Bill McKnight, the
directory will sort workers by a
variety of criteria including
organisms worked with, techniques
used, and ecological interests.

LAND PRESERVATION

The D.O.C. is actively
acquiring natural areas with funds
provided through the "Build
Illinois" program. One area to be
acquired shortly is a prairie which
contains the prairie trout lily
(Erythronium mesochoreum). This is
only one of two known populations of
this plant east of the Mississippi
River. Other recent acquisitions of
interest to botanists are Matanzas
Prairie West (wet sand prairie) in
Mason County, Shick Shack Sand Pond
in Cass County, and Northeast
Meredosia Hill Prairie in Morgan
County.

FALL BURNING EFFECTS

Your editor and Natural
Heritage Biologist Bill McClain
published a paper in Natural Areas
Journal documenting the vegetative
effects of a fall burn on a central
Illinois hill prairie. The fall
burn increased annual plants such as
Gerardia aspera, Linum sulcatum and
Polygala verticillata over the no
burn control and spring burns. It
now appears that fall burns are more
important to annual plant
reproduction and possibly prairie
plant seedling establishment than
spring burns. The fall burn also

caused early germination of white sweet clover seeds facilitating herbicide control of this problem weed. Control of invading rough-leaved dogwood (Cornus drummondii) shrubs was similar to spring burns. Reprints of the entire article are available upon request to the Botany Program. Continuing research into fall burning is under way.

BOLTONIA DECURRENS TAXONOMY

The decurrent false aster (Boltonia decurrens) has sometimes been treated as a valid species but most frequently as a variety of B. asterioides. Your editor and Natural Heritage Biologist Randy Nyboer discovered new evidence that it deserves species status during investigations into its reproduction and biology. These findings were published this summer in the botanical journal "Castanea". Boltonia decurrens was found to lack the long creeping rhizomes which are characteristic of the B. asterioides complex. Decurrent false aster is now restricted to wetlands along the middle Illinois River where habitat alteration threaten it with extinction. Reprints of the paper, which covers observations on taxonomy, reproduction and distribution of the plant, are available on request to the Botany Program.

SPECIES NEWS

The small whorled pogonia orchid (Isotria medeoloides), Illinois only federally listed endangered plant, increased its population to 3 individuals in 1985. Two of these plants flowered and the third was sterile. No seeds were produced.

The Kankakee Mallow (Iliamna remota), the only Illinois endangered plant being managed under a state recovery plan, continued its population expansion under prescribed

burning and control of exotic competing shrubs. An effective prescribed burn was conducted April 3. Mature plants continued to decline from 93 in 1984 to 77 in 1985. However, 30 second year seedlings and 61 first year seedlings were also counted. Seed production was low due to drought and deer browsing.

The narrow-leaved hyacinth (Camassia angusta) has received a reprieve. While searches failed to reveal any live plants at its only known Illinois locality in 1984, Paul Shildneck of Decatur reports finding a dozen plants at this site in 1985. Stu Pequignot of the Mason State Nursery reports the survival of 7 two year old plants in cultivation as well. The D.O.C. will continue to work toward preservation of this plant in the wild and in cultivation.

Mead's milkweed (Asclepias meadii) was checked in Saline County this year but not in Ford County. Hand polination was not attempted since only a single plant in one of the 3 stands flowered this year. The Endangered Species Protection Board contracted with Dr. Julius Swayne to search for additional populations in the Shawnee Hills but no new stands were located. District Heritage Biologist Andy West is working with the Shawnee National Forest to coordinate a prescribed burn of habitat for this plant in the spring of 1986.

The distribution and population status of French's shooting star (Dodecatheon frenchii) was compiled by Dr. Julius Swayne this past summer under a contract through the Endangered Species Protection Board. Dr. Swayne is the states most knowledgable person when it comes to this unique wildflower. This project allowed him to conduct additional field surveys and to pull together all his past notes and observations.

Kitten tails (Wulfenia bullii) is an upper midwest prairie-open forest endemic that is considered an endangered species in some of the states where it occurs. The D.O.C. contracted with the Morton Arboretum for a status survey of this species in Illinois this past summer. The project was at the request of the U.S. Fish and Wildlife Service which is funding a rangewide status survey of the species. The Service will reimburse D.O.C. for its costs. The survey was completed by Marlin Bowles and determined that kitten tails is still relatively abundant and secure in Illinois.

Mohlenbrock's umbrella sedge (Cyperus grayioides) was thought to be an Illinois endemic until it came to light this summer that populations are known from interior dune areas in east Texas and northwest Louisiana. An Illinois status survey, supported by the U.S. Fish and Wildlife Service, was conducted by your editor and District Heritage Biologist Randy Nyboer this summer. Illinois populations are secure but suffer from succession and stabilization of its shifting blow sand habitat.

Your editor discovered a population of the Bullwinkle lichen (Cetraria arenaria) on dunes at Illinois Beach while sampling plots to monitor fire recovery of junipers. This appears to be the first record of this northern species from Illinois.

Gary Colin and Paul Shildneck report finding the grass Digitaria villosa on a sandy roadside in Mason County and the sedge Carex atherodes along a railroad west of Pana. Both species have been very rarely collected in Illinois.

An extant population of the endangered and very beautiful royal catchfly (Silene regia) was discovered in Lawrence County this summer by Mary Kay Solecki and

Eric Ulaszeck of the Illinois Natural History Survey.

A survey of Illinois' "Wisconsin Driftless Division" for cold air (aligific) talus slopes this past summer turned up extant populations of some very rare plants that had not been seen in years. The most notable finds were moschatel (Adoxa moschatellina) and limestone oak fern (Gymnocarpium reobertianum). This survey was funded by the Endangered Species Protection Board.

Control of Amur honeysuckle in conjunction with management of the Kankakee mallow led to the emergence of thousands of the endangered corn salad (Valerianella umbilicata) on Langham's Island. The exotic shrubs were sprayed with herbicide which also killed ground cover vegetation. Many of the spots that were bared of ground cover in 1984 sprouted dense stands of this annual in 1985. Judging from this, a tremendous seed bank of this annual lies suppressed under the bluegrass sod that covers most of the Island. A similar surprise appearance of the annual slender sandwort (Arenaria patula) occurred in prairie on Des Plaines Conservation Area after flood related soil disturbance this year. This is a reminder that in surveying for endangered plants everything is not always visible on the surface.

MEETINGS OF INTEREST

"Plant Conservation Strategies: Options for the Decade" is the title of a conference being held May 16-17, 1986 at Lakeland Community College, Mentor, Ohio. The conference is co-sponsored by the Center for Plant Conservation, The Holden Arboretum and the college.

The Tenth North American Prairie Conference will be held at Texas Woman's University, Denton, Texas 76204 on June 22-26, 1986.

Inquiries should be addressed to P.O. Box 22675 or telephone Arnold Davis at (817)292-5588.

NEW PROGRAM LEADERS

The Illinois Nature Preserves Commission recently employed Brian Anderson as its program Director. Brian comes to Illinois from Kentucky where he worked for the Kentucky Nature Preserves Commission.

The Illinois Endangered Species Protection Board has appointed Susan Lauzon as its new program coordinator. Susan is a native of Illinois but comes to us from her former position as nongame wildlife biologist in Oklahoma.

Both program leaders are headquartered in Springfield in close proximity to the D.O.C. Natural Heritage staff.

NONGAME WILDLIFE CHECKOFF

Be sure to consider checking line 11B on you 1985 IL-1040 state income tax form if you intend to contribute to support of natural heritage programs. Your contribution to the nongame wildlife conservation fund will help plant life as well. Please support it.