# ILLINOENSIS SUMMER 1991 Vol 7 (2) By John Schwegman, Illinois Native Plant Conservation Program

## Personnel News From DOC

Deanna Glosser has been employed as a new Endangered Species Program Manager. Glen Kruse has left the Endangered Species Project Protection Board staff and is the new Endangered Species Project Manager. Bill McClain has been promoted from District Heritage Biologist to Natural Area Stewardship Project Manager. Celine D'Onofrio is a new Database Project Manager with the Heritage Database. Randy Nyboer has been promoted from District Heritage Biologist to Regional Administrator of Region 1 at Sterling. District Heritage Biologist Todd Strole has transferred from District 3 at Pekin to District 9 at Sangchris Lake.

New Staff at Nature Preserves Commission Joel Greenberg has departed the Commission and has been replaced at the Moraine Hills State Park Office in northeastern Illinois by Steve Byers.

New Botanist at Shawnee Forest Mr. Raymond Smith as been employed as a botanist by the Shawnee National Forest. He works out of the Jonesboro Ranger Office.

New Conservation Biologist to Join Survey Dr. Mark Schwartz has accepted the position of Conservation Biologist in the Center for Biodiversity of the Illinois Natural History Survey. Schwartz received his doctorate at Florida State University. His interests include determination of presettlement vegetation conditions, fire ecology and vegetative community composition. He has served as a land steward for the Nature Conservancy. He will join the Survey staff by January 1, 1991.

## Mohlenbrock Retires

Dr. Robert Mohlenbrock retired from the Botany Department at SIU Carbondale at the end of the Spring Semester. In over 30 years with the University he served in many capacities. These included Chairman of the Botany Department, faculty member and adviser to many graduate students. His botanical publications are literally too numerous to mention; but his Guide to the Vascular Flora of Illinois and many volumes of the Illustrated Flora of Illinois stand out. Many of his students gathered in Carbondale on June 28 to honor him at a symposium and banquet. Dr. Mohlenbrock continues to hold a 10% appointment with the University which will be devoted to his endangered and threatened species work and continuation of the Illustrated Flora project. He underwent emergency surgery in June and is already back in the field.

#### Dr. John Voigt Dies

Dr. John Voigt, recently retired from the Botany Department at SIU Carbondale, died of a heart attack July 17, 1990. Trained as a grassland ecologist, Dr. Voigt came to SIU in 1950 and retired in the summer of 1989. John served in many capacities as teacher and administrator, his last assignment being chairman of the Botany Department. In addition to his professional achievements, his popular nature writings aided nature conservation by raising public awareness of its beauty and diversity.

## New Faculty at SIU Carbondale

The Plant Biology Department at SIU Carbondale is adding 2 faculty members of interest to the plant conservation community this fall. Dr. Daniel Nickrent joins the staff as a molecular plant taxonomist and Dr. Beth Middleton as wetland plant ecologist.

#### Morton Arboretum Director Retiring

Dr. Marion T. Hall has announced that he is retiring as Director of the Morton Arboretum this summer. A search committee has been interviewing candidates for the position but no replacement has been selected as this goes to press.

#### New Checklist of E & T Species

A revised "Checklist of Endangered and Threatened Animals and Plants of Illinois" is now available. It includes the Illinois listed species as of April, 1990. Copies are available free upon request to the Endangered Species Protection Board in Springfield or your local District Heritage Biologist.

# Wetlands Poster Available

A new, full color "Southern Illinois Wetlands" poster is available from the DOC Natural Heritage Division. This "habitat" poster is the latest in the Division's nature appreciation series and is ideal for classroom and personal use. It illustrates and identifies 23 plants and 20 animals of southern Illinois wetlands. Copies are available by written request to the Natural Heritage Division in Springfield for a \$3.00 donation which covers shipping. They are also available from your District Heritage Biologist.

# Plant Monitoring Reprint Available

The Proceedings of the 1988 Natural Areas Conference have now been published as Bulletin 471 of the New York State Museum. This publication includes "Preliminary Results of a Program to Monitor Plant Species for Management Purposes" by John Schwegman. The paper summarizes the procedures and findings for 15 species, and makes a case for inexpensive staff monitoring as opposed to detailed scientific studies as an aid in plant management and recovery. Copies of the paper are available free on request to the DOC Botany Program.

## Native Plant Society News

The Illinois Native Plant Society board of directors has appointed a committee to plan goals and objectives for the Society. The first goal proposed by the committee is the development of a society accepted list of the native and native extant flora of Illinois. This will build on the fine work of Dr. Mohlenbrock but will require "official" acceptance of questionable taxa by a committee appointed by the Society. The computerized Illinois Plant Information Network of the Natural History Survey will be helpful in the selection process and its maintenance.

U. S. Fish and Wildlife Service News The Service has listed leafy prairie clover (<u>Dalea foliosa</u>) as a threatened species. They also revised their list of plants under review for listing as federally endangered or threatened on February 21. The list now includes 21 plants presently or formerly occurring in Illinois that are considered possibly qualifying for listing. A copy of the revised list is available from the Illinoensis office upon request.

Mead's Milkweed Propagation Project The Morton Arboretum, with support from the U. S. Forest Service, the DOC Nongame Wildlife Conservation Fund and the U. S. Fish and Wildlife Service has begun a project to propagate Illinois Mead's Milkweed which has failed to produce seed in the wild for decades. Marlin Bowles is principal investigator on the project whose goal is to produce seed through hand pollination and new plants through tissue culture and other vegetative propagation means.

Decurrent False Aster Study Dr. Marian Smith of SIU Edwardsville is undertaking a study to determine specific habitat requirements of this federally threatened species. The project scope also includes determination of the significance of a seed bank to the species. The project includes elements of the draft recovery plan for the species and is being funded by the U. S. Fish and Wildlife Service and coordinated by the DOC.

Price's Potato Bean Search

A search for Price's Potato Bean (<u>Apios priceana</u>) in southern Illinois is being conducted by Max Hutchison of The Natural Land Institute this summer. The search area includes the LaRue-Pine Hills area in Union County and river bluffs along the Ohio River in southeastern Illinois. The project is funded by the DOC and the U. S. Fish and Wildlife Service.

## Garlic Mustard Research Continues

The nongame wildlife conservation fund is continuing to support studies of the rate of spread, impact on native plants and species biology of this weed which threatens our woodland flora. Victoria Nuzzo of Rockford is conducting the spread and impact studies and Roger Anderson of Illinois State University is directing the species biology studies. Nuzzo will also pull together its current distribution in Illinois and the history of its appearance and spread in the state as reflected by herbarium specimens.

Exotic Weed Legislation in Congress Senator Tom Daschle's Subcommittee on Agricultural Research held a hearing on revision of the federal noxious weed act on March 28. As a result of this hearing, two bills were introduced that would expand the federal law to control weeds of natural lands but these have made little progress toward passage. On July 17 the House Subcommittee on Department Operations, Research, and Foreign Agriculture of the Committee on Agriculture held hearings on revision of the Plant Protection Act and the need to control invasive exotic or alien plant species. No action is known to have resulted from this hearing. The testimony of Dr. Faith Campbell of the Natural Resources Defense Council and the written testimony of the DOC submitted to the March hearing outline the needs and issues that Congress needs to address if federal law is to aid nature conservation in this important area. Copies of each is available from the DOC Botany Program upon request.

## Lake Michigan Beach Survey

During the last week of June, DOC staff surveyed the shore of Lake Michigan by boat from the Wisconsin Line to Winnetka for dune thistle and beach pea. No extant populations of these species were found, however two new populations of the endangered <u>Shepherdia canadensis</u> and many new localities for threatened plants were discovered. The method proved a fruitful way to survey for some plant species.

Dogwood Blight Correction The last Illinoensis reported that Dogwood Anthracnose disease had been discovered in southeast Missouri in 1989. The verbal report upon which this notice was based has turned out to be erroneous and there is no confirmed occurrence of this disease thus far in the Midwest. Lets hope this condition continues.

## Multiflora Rose Disease

Many multiflora roses throughout Illinois are dead this summer from the viral rose rosette disease. The early stages of this disease were widespread last summer and many of those infected pest plants are apparently now dead.

## Natural Areas Inventory Update

The Illinois Natural Areas Inventory is undergoing an update by staff of the DOC, Nature Preserves Commission and Endangered Species Protection Board. With the recent updating of Lake, McHenry, Hancock, Adams, Schuyler, Brown, Pike and Calhoun Counties some 55 counties have now been updated. The inventory helps protect many of our native plants through a variety of programs. The Natural Areas Program of the DOC Heritage Division welcomes nominations for additions to the Inventory.

#### Prairie Restoration News

The DOC (Mason Nursery) produced/collected 1,501 pounds of grass seed of 7 species, 1,145 pounds of forb seed of 30 species and 138,300 bare rooted seedlings of 23 species for establishment and restoration of prairie in 1990 plantings. All of these materials were planted on DOC lands and that of public agency cooperators. Some 45,200 seedlings were provided to DOT for plantings along highways. One new cooperative project involved provision of forb seed to the Corps of Engineers for a major planting they are making in the American Bottoms of Madison County.

# Mason Nursery Improvements

Construction projects and improvements underway at Forestry's Mason State Nursery will greatly enhance the DOC prairie seed and plant production effort. A new greenhouse will allow propagation of potted plants and a new irrigation system will assure high grass seed production .

# Deer Impact Endangered Plants

DOC monitoring thus far this summer reveals increased browsing impact by deer on endangered and threatened plants. Impacted plants include trillium (<u>Trillium cueneatum</u>) in southern Illinois, hart-leaf plantain (<u>Plantago cordata</u>) in central Illinois, buffalo clover (<u>Trifolium reflexum</u>) in western Illinois, showy lady's slipper (<u>Cypripedium reginae</u>) in central Illinois and Kankakee Mallow (<u>Iliamna remota</u>) in northern Illinois.

#### Species News

Heartleaf plantain is down in numbers at Mackinaw River Conservation Area due to heavy rains but one population is still healthy. The west population is down to just 2 native plants (also a few experimental planted ones) but apparently this site is no longer suitable habitat for the species due to development in the upper watershed. Seed has been collected for long term seed storage this year.

Tennessee Milk Vetch is at an all-time high for flowering plants (157) at Manito Prairie this year following a low of 14 last summer. This is in spite of the continued drought in 1989. Indications are that the species produces generations based upon unknown factors controlling seed dormancy and germination in spite of summer drought which inhibits seedling survival.

Yellowwood and big leaf snowbell bush both failed to flower this year for the first time since monitoring began on them. This seems in response to the extreme cold (-20 F) last December or more likely to a late freeze. Yellowwood tissue in decline was collected and sent to the Natural History Survey for identification of the fungal pathogen which kills older specimens of this species.

No stems of small whorled pogonia orchid were found this year for its second consecutive year of absence.

Mead's Milkweed flowered at two Saline County stations and cross pollination by hand was attempted by Marlin Bowles of the Morton Arboretum. Saline County pollen was used to pollinate plants at the Morton Arboretum of Missouri origin. One of the Saline County plants failed to set a seed pod and the other has not been checked. Some of the Morton Arboretum plants have initiated pod formation. One of two tissue samples from Saline County is growing in a tissue culture lab under Bowles direction. A Saline County population that disappeared in 1989 reappeared with two stems this year.

Buffalo clover flowered abundantly this year and revealed that it functions as a biennial at Siloam Springs in western Illinois. It appeared in far greater numbers in the area fall burned in 1988 than in the unburned area indicating that fall burning of open woodland and savanna benefits this species. Mohlenbrock's umbrella sedge (<u>Cyperus grayioides</u>) suffered severe drought mortality at Gleason Nature Preserve in central Illinois. Thirty six of 40 marked plants in the plot died after appearing drought stressed when monitored last summer. Small seedlings are abundant in the plot following recent heavy rains.

Written July 19, 1991