

ILLINOENSIS, WINTER 1992 Vol 8 (1)

By John Schwegman, Illinois Native Plant Conservation Program
Illinois Department of Conservation

COMMENTS

The crusade to get a national program started to control and counter pest exotic species in America's natural communities and wildlands took a great step forward this fall. The "Biological Pollution" Conference held at Indianapolis October 25-26, 1991 was a major milestone in that effort. The Indiana Academy of Sciences, and conference coordinator Bill McKnight, deserve credit for a job well done. Attached as a special addendum to this edition of Illinoensis is a summary of high points of the conference as I saw them. I am using this summary to advise newspaper editors of the diversity of interesting stories that can be written on this subject, and I urge others to do this with their paper. It is time we started spreading the message to the general public. For those who did not attend the conference, a list of addresses of speakers and attendees is available from Bill McKnight (see last page).

The Department of Biological Sciences at Illinois State University is evaluating establishment of a new Masters Degree program in conservation biology. Lets hope that this program is realized. The need for graduates in conservation biology is strong and growing.

John Schwegman

Personnel News From DOC

Dan Holm has joined the Division of Natural Heritage as District Biologist in the Pekin Office.

Survey Seeking Systematist

The Natural History Survey is seeking a plant Systematist to fill a newly created position. A person with cladistic/evolutionary interests is being sought.

State Museum Herbarium to Move

Dr. Al Koelling reports that shortly after the first of the year the Illinois State Museum Herbarium will be moving from the third floor of the downtown Museum Building. It will relocate to the Museum Collections Center at 1920 South 10 1/2 Street in Springfield.

USFWS to Update List

The U.S. Fish and Wildlife Service plans to update their "Notice of Review" or list of plant candidates for listing as Endangered or Threatened this winter. The revised list will probably be published in the Federal Register this January or February.

Several Illinois plants will probably be removed from the active candidate list.

Minnesota Exotics Report

The Minnesota Department of Natural Resources published the Report and Recommendations of that state's Interagency Exotic Species Task Force this past summer. This important document lists 39 species already in the state which pose a severe future threat and 42 of moderate threat. It documents the great cost to control exotics and recommends steps to deal with the problem. Contact Jay Rendall, Exotic Species Coordinator, Division of Fish and Wildlife (612/297-1464 for a copy.

Purple Loosestrife Biocontrol

Dr. Rich Malecki of the New York Cooperative Wildlife Research Unit at Cornell University is looking for funding to implement release of insects that may control loosestrife. After much of the costly work of selecting and testing insects has been done, funds are not available for completion of the project. It is hoped that various states that would benefit can share the cost.

Pine Hills RNA

Some 2,200 acres of the Pine Hills-La Rue Swamp Ecological Area on the Shawnee National Forest were designated a research natural area this past October. This designation, under an inter-agency federal program, offers added protection and recognizes the unique research values of the site.

Nongame Checkoff

As income tax time rolls around, its time to remember to checkoff on your State Income Tax form and donate to the Nongame Wildlife Conservation Fund. This fund supports many plant conservation and educational projects. Currently it is funding research into the impact of the exotic garlic mustard on native herbs, the effect of fire in controlling garlic mustard and demographics of several endangered plants. Your donations are especially needed in this year of restricted state budgets.

New Streams Poster

The DOC Natural Heritage Division is developing a full color educational poster on Illinois streams. It will depict above and below water views of a typical mid-sized stream. Some 25 fishes and other aquatic fauna and flora that are widely distributed in Illinois will be depicted. All will be keyed for identification. The project is funded by the Nongame Checkoff and will be available next spring.

200th Nature Preserve

Illinois' 200th nature preserve was dedicated October 11 at Mississippi Palisades State Park in the "Driftless area" of northwestern Illinois. With dedication of The Pinnacles area, Illinois now has preserves in 67 of its 102 counties.

Natural Areas Inventory Updated

A task force completed updating the 1978 Illinois Natural Areas Inventory this past December. The two and a half year updating process resulted in the addition of 316 new areas as well as the deletion of many areas. The INAI is the state's primary guide to tracking and protecting undisturbed natural communities.

Stewardship Magazine

The Illinois Steward, a quarterly magazine for private landowners of forest lands, has just been launched. The full color magazine was produced with help from the new federal Forestry Stewardship Program, and is aimed at promoting good forestry and conservation practices on private woodlands. To subscribe make checks for \$10.00 payable to Department of Forestry and send to The Illinois Steward, Circulation Dept., 110 Mumford Hall, 1301 West Gregory, Urbana, IL 61801.

New State Books

The Endangered Species Protection Board recently published "Endangered and Threatened Species of Illinois: Status and Distribution, Volume 1-Plants", a 158 page book updating information on Illinois' 356 E&T plants. The DOCS Natural Heritage Division also published "A Directory of Illinois Nature Preserves" a 382 page book which covers 183 preserves. There is a description of each area, a county road map to show how to reach it and a topographic map marked with the boundaries. The books are available from the Division of Natural Heritage in Springfield for \$3.00 each to cover shipping and handling. Make checks payable to Department of Conservation.

New Northeastern Manual

A "Manual of Vascular Plants of N.E. U.S. and Adjacent Canada" was published this fall by the New York Botanical Garden. This is the first new comprehensive flora for the region in 40 years! While Illinois is within the manual's range, from Cairo to St. Louis the Mississippi River forms its western boundary. Copies are available from the New York Botanical Garden, Bronx, NY 10458-5126 for \$74.60 including shipping.

New Key to Plants

"The Key" by Floyd Swink has been published by Plantsmen's

Publications, Box 1, Flossmoor, IL 60422. It covers the range of Gray's Manual with which it is intended to be used. It is a key to common plants intended for field use. Rare species are kept in a separate checklist. It costs 24.95 postpaid.

Tree Health Book

The Illinois Natural History recently produced Special Publication #12, "A Compendium of Information on Tree Health Care". It is a bibliography of brochures available on tree care arranged by state. Copies are available from the Survey in Champaign.

Land Acquisition

Recent DOC land acquisitions for Natural Heritage programs include 385 acres at Redwing Slough in northern Lake County and 41 acres at Long Run Seep in Will County. The latter area supports several endangered plants.

Corrigan Retires

Robert E. Corrigan of the DOC retired December 31 after 21 years at the head of land acquisition. Bob coordinated purchase of some 2,300 parcels of land valued at over 114 million dollars. These include many of our most cherished natural areas. Many Illinoisans who have never heard his name marvel at the wonders of nature he and his staff helped preserve. Thanks Bob.

Native Plant Society

The Board of the Illinois Native Plant Society met December 7 in Champaign. It was decided that work on the native plant project will concentrate on developing a list of native woody plants before tackling the entire vascular flora. June 6-7 was chosen as the date for their 1992 annual meeting with hopes of holding it in Mason County. There are many field trip opportunities there including the State Nursery, sand prairies and hill prairies. Why not join the Society this year by sending \$15.00 to the Society at Forest Glen Preserve, RR 1, Box 495 A, Westville, IL 61883. Manuscripts are in hand for an issue of their journal *Erigenia* this year.

Dogwood Anthracnose

I discovered some very sick flowering dogwood trees in Pope County in early October. Based on comparisons of leaf and stem infection characters and the location of infections on the lower more shaded parts of the trees, I tentatively identified their disease as dogwood anthracnose. This exotic disease has killed many of the dogwoods in the east. A check of other trees revealed similar infected trees in Johnson County and at the north end of Pine Hills in Union County. Searches in Randolph, Monroe and Schuyler

Counties found no infected trees. Plant specimens provided to plant pathologists in New York and Urbana have yielded no definite diagnosis at press time. Readers willing to help determine if this serious disease is in Illinois can write me for a free brochure.

Nominate A Species

The Endangered Species Protection Board has developed a form for nomination of species to be considered for state Endangered or Threatened Species status. If you know a species you think should be listed, just write to the Board at 524 South 2nd St., Springfield, IL 62701 for a form and nominate it.

Butternut Threatened

In September, botanists from throughout the range of the butternut tree agreed that it is in serious trouble. Most of the trees are already dead and the cause for this does not appear to be known. I would appreciate hearing from persons who know of live butternuts bearing viable nuts in Illinois. I hope to place seed in long-term storage to guard against extinction.

Missouri Discoveries

Reports from Missouri indicate that a population of Meads Milkweed was found this spring in the Taum Sauk Mtn. area of the eastern Ozarks. This population occupies glade-like openings similar to our Saline County plants and is about mid-way between western Missouri prairie populations and Saline County. Richard Carter and Charles Bryson report in Sida that they discovered Cyperus grayioides in southeast Missouri sand areas. These sites are about half way between Louisiana and Texas populations and the Illinois plants.

Meads Milkweed

No progress was made on producing seed of native Meads from hand pollination this year. Only one native plant was found in flower this spring in Saline County and none in Ford County. Cutting studies with surrogate milkweeds failed to produce rooted seedlings but did produce new shoot tissue of potential value in tissue culture. The tissue culture experiments on Saline County material have produced embryoids with both shoots and roots but efforts to transfer these to soil have failed to date. A new native population of 5 stems was found in Saline County. The contractor who discovered the plants reported that 3 of the plants appeared to have flowered this year although no fruits were developing. Material was collected from Saline county and western Missouri plants for comparative genetic studies of these populations. Analysis of the material has not yet been completed. An experimental population of plants of western Missouri origin

was established last spring in Saline County. The recovery team for Meads Milkweed hopes to have a first draft of the recovery plan done this summer.

Meads Theft

Early this spring The Morton Arboretum transplanted mature Meads Milkweeds of Missouri origin from their greenhouses to the Shawnee National Forest. This experimental population was established to test survival of transplanted Meads and for augmentation of the native population if ongoing genetic studies indicate this is appropriate. Care was taken to prevent cross pollination between experimental and native plants. The plants were placed in habitat enhanced by brush removal by an eagle scout troop. In mid-June, of the 7 plants (3 flowering and 4 sterile), 3 were found to have been dug and 4 were picked. Two nearby native stems only 2 and 3 inches tall respectively were also reported missing. These latter plants are so small and inconspicuous that even knowing their coordinates I had difficulty locating them for measurement this spring. I feel that if they were stolen it had to be by someone who had them pointed out to them. The only plant at this same site in 1988 was grazed by animals in spring. This demonstrates the possibility of clipping by animals rather than people. I was unable to visit the site to determine if the cut stem resembled the 1988 clip. The Forest Service offered a \$5,000.00 reward for information leading to the arrest and conviction of the plant thieves. To date no arrests have been made.

New Illinois Species

Bill Summers, collecting for the Missouri Botanical Garden, discovered a population of Calamagrostis insperata at Bell Smith Springs in the Shawnee Hills this fall. This rare sporadic species was represented only by sterile material. Carl Taylor of the Milwaukee Public Museum and I discovered a population of Butler's Quillwort in Will County this spring. This is not only new to Illinois but the most northerly known location for the species.

Leafy Prairie Clover

The DOC, with funding from the USFWS, has contracted with Marcella DeMauro to write a recovery plan for Leafy Prairie Clover (Dalea foliosa). A first draft is scheduled for completion next fall. The USFWS has also funded a search for new populations of this species in Illinois next summer.

E&T Status Report

The 1991 annual report on the status of all federally listed and candidate plants in Illinois is available on request from the Illinois office. A few other monitored plants are also

included.

Written December 20, 1991