Wildflowers of Southern Illinois Poster and Plant Identification Workshops

Project Final Report (#12-009W)

Submitted to IDNR by Chris Benda, INPS Southern Chapter President

January 2, 2013

RECEIVED
JAN 1 0 2013
Dept. of Natural Resources

Illinois Department of Natural Resources Wildlife Preservation Fund –Project Final Report

Project Title
Wildflowers of Southern Illinois Poster and Plant Identification Workshops

Grant Agreement Number
#12-009W

Grantee
Illinois Native Plant Society – Southern Chapter
P.O. Box 271
Carbondale, IL 62903
217-417-4145

Project Time Frame
June 16, 2011 – December 31, 2012

Grantee Representative
Chris Benda, southernillinoisplants@gmail.com or 217-417-4145

Funding Summary
WPF Funds awarded - $2,000.00
WPF funds expended - $2,000.00
Total funds expended - $2494.43

Project Objectives (as stated in Grant Proposal)

1. The objective of this poster is to instill appreciation and circulate knowledge about the beauty and value of native plants in their natural habitats. These places are increasingly under threat from development activities and non-native invasive species. Placing these posters in schools and conservation agencies offices, as well making them available to the general public, will create support for protecting and enhancing Natural Areas now and in the future.

2. The objective of the plant identification workshops is to train potential field biologists and other community members with the ability to correctly recognize and identify sedges, a diverse group of plants that are well distributed across a variety of habitats.

Project Description
The southern portion of Illinois, particularly the Shawnee Hills and Coastal Plain Natural Divisions, represent a very special part of the heritage of the state. The rolling hills and rock outcrops juxtaposed with *ancient Cypress* Swamps and "prairie-like" glade communities make this area truly unique. The natural beauty and wonder of these habitats are illustrated on the "Wildflowers of Southern Illinois" poster produced by the Illinois Native Plant Society – Southern Chapter (SINPS) that contains 16 species of native wildflowers.

These posters were produced and printed (a total of 500) by the SINPS are being made widely available for free to a variety of individuals, schools, and agencies in the southern half of the state. Visitors and students will see the beautiful native wildflowers on the poster on display at schools and visitor centers and become inspired to care, protect, and support the natural areas and native communities that are crucial remnants of Illinois' heritage.

Additionally, it was apparent to the board of the SINPS that technical plant knowledge is becoming increasingly rare in the current pool of field biologists. Students often graduate with degrees earned in plant biology without the ability to identify common plants indicative of the area. The identification of sedges is particularly technical and daunting for the amateur botanist. Therefore, we hosted two sedge identification workshops, attended by 22 people) that focused on correct identification of sedges in the field and in the lab, as well as techniques for collecting and preserving plant specimens.

Summary of Project Activities

Introduction

This project had two sections. The first section involved organizing and conducting two sedge ID workshops and the second involved developing, printing, and disseminating a poster of the Wildflowers of Southern Illinois. Both sections of this project were designed to educate the public about native plants (sedges and wildflowers specifically) and increase their knowledge about these species.

Materials and Methods

The SINPS utilized members to help organize and advertise the sedge workshops. Announcements were sent out electronically to SINPS members, Facebook Fans, and various other listservs. Additionally, flyers were given out at SINPS meetings, posted at SIU and other relevant areas, and included in SINPS newsletters. Southern Illinois University - Department of Plant Biology partnered with the SINPS to host these workshops at the SIU-Carbondale campus. This increased the quality of the workshops because of access to dissecting scopes, herbarium specimens, and a classroom setting for the attendees. In field portions of the workshops were held at a SINPS members property and on SIUC property. In addition, attendees brought in fresh samples to identify in the classroom.

The SINPS poster was designed and produced by SINPS President, Chris Benda. Species chosen all were native to southern Illinois and have Coefficient of Conservatism values of 5 or greater (meaning that although they vary some, these species are limited to undisturbed habitats, Taft *et al.* 1997). These posters were printed (500 in total). Posters are being disseminated at local nature centers, agency offices, and at SINPS meetings. Additionally, poster will be on display at nature centers, schools, rest areas, etc.

Results

The first sedge workshop was held on June 2-3, 2012 and was led by Mike Murphy of the Illinois Natural History Survey. This first workshop focused on sedges in the genus *Carex*. The 10 attendees of this workshop got both classroom and field experience collecting and identifying 25 Carex species. The second workshop was help on August, 3-4, 2012 and was led by Dr. Gordon Tucker of Eastern Illinois

University. This workshop focused mainly on species in the *Cyperus, Eleocharis, Scirpus*, and *Rhyncospora* genera. The 12 attendees of this workshop viewed nearly all of the species native to Illinois in herbarium specimens, freshly collected specimens, photographs, and field collections.

A total of 500 posters were successfully printed and dissemination has begun.

Native plants in general benefitted greatly from this project through heightened awareness, knowledge, and appreciation by the public. Specifically members of the sedge (Cyperaceae) family benefitted from the workshops. The species featured on the wildflower poster were:

- Rhododendron prinophyllum (Wild Azalea)
- Stylosanthes biflora (Pencil flower)
- Trichostema dichotomum (Blue curls)
- Hymenocallis carolinana (Spider lily)
- Asclepias perennis (White swamp milkweed)
- Aesculus pavia (Red buckeye)
- Delphinium tricorne (Dwarf larkspur)
- Spigelia marilandica (Indian pink)
- Chelone oblique (Pink turtlehead)
- Hypericum denticulatum (Coppery St. John's wort)
- Tradescantia subaspera (Broad-leaved spiderwort)
- Iris fulva (Coppery iris)
- Sedum pulchellum (Widow's cross)
- Clitoria mariana (Butterfly pea)
- Stylophorum duphyllum (Celandine poppy)
- Nothoscordum bivalve (False garlic)

The specific audience addressed in this workshop section of this project included attendees of the two sedge workshops. Attendees varied in age and expertise. Some were amateur botanists while some were professionals within the land management community. Ages ranged from college students to retired persons. Overall, 22 people attended the workshops.

The audience targeted in the poster section of this project includes school children, visitors to local nature centers, attendees of Native Plant Society meetings, and other interested persons. While many of the posters have already been disseminated, this is an ongoing effort so this specific audience will continue to expand over time.

Measureable outcomes for the project includes attendance at sedge workshops (22 attendees) and posters printed (500) and disseminated (still in progress).

Discussion

Results and deliverables were as expected with this grant. The SINPS was very pleased with the turn out for the sedge workshops and is considering continuing this type of program in future. The poster also is very popular and we fully expect demand to be high enough to require a future reprint once the initial supplies have been given out. The WPF grant has aided the SINPS greatly in our efforts to educate the public about native plant species in southern Illinois.

Budget Details

Budget Summary/Category	Funds Expended	Grant Funds Requested	Cost Share
Personnel	$600.00	$600.00	
Travel	$400.00	$400.00	
Equipment			
Materials/Supplies	$1494.43	$1000.00	$494.43
Contractual Services			
Other			
Subtotals		$2000.00	$494.43
Total	**$2494.43**		

The project went slightly over budget due to the increased cost of printing the posters. The SINPS made up this extra cost by increasing their cost share cash contributions to the project (increased from an estimate of $281.00 to an actual expenditure of $494.43). Actual WPF grant funds expended match the amount requested form WPF.

Total Project Expenditures

Travel reimbursement -
$200.00
August 3, 2012

Gordon Tucker (Workshop #2 presenter)
Department of Biological Sciences
Eastern Illinois University
Charleston, IL 61920

Speaker Fee -
$300.00
August, 3, 2012

Gordon Tucker (Workshop #2 presenter)
Department of Biological Sciences
Eastern Illinois University
Charleston, IL 61920

Travel reimbursement -
$200.00
June, 3, 2012

Mike Murphy (Workshop #1 presenter)
1816 S Oak Street
Champaign, IL 62820

Speaker Fee -
$300.00
June, 3, 2012

Mike Murphy (Workshop #1 presenter)
1816 S Oak Street
Champaign, IL 62820

Poster print fee ($2.99/copy for 500 copies) $1494.43 November 15, 2012	PsPrint LLC 2861 Mandela Parkway Oakland, CA 94608

Project expenditures paid by funds other than WPF – $494.43 of the poster printing costs was paid by the SINPS general funds

Project Advertisement / Press Release

This project was advertised during SINPS monthly meetings, in our monthly newsletters, through various email listservs, on the SINPS Facebook Page and through a press release sent out to area newspapers. The Money Stretcher published our press release in their December 17-23, 2012 edition (see Appendix 4)

Summary

The Southern Chapter of the Illinois Native Plant Society, through funds from the Wildlife Preservation Fund Program, implemented a very successful project that helped educate local citizens about native plant species and conservation. This education and heightened awareness resulting from this project will have long term benefits to southern Illinois. The SINPS is also planning on continuing efforts such as these and is planning on helping additional workshops in the future.

Illinois Native Plant Society

The Shooting Star NEWSLETTER

of the

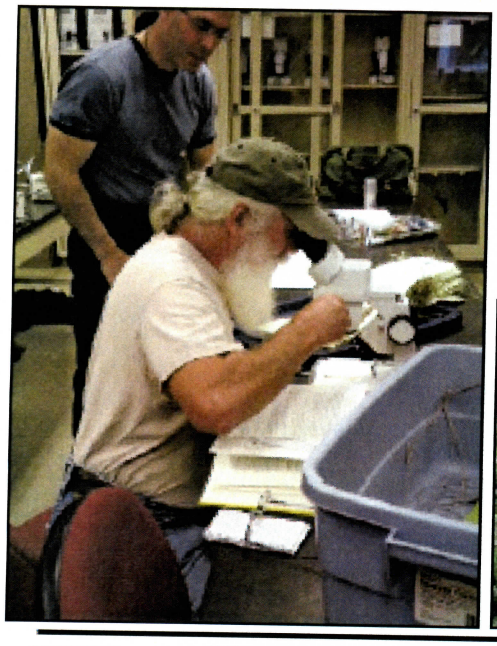
Illinois Native Plant Society – Southern Chapter

"…dedicated to the preservation, conservation, and study of native plants and vegetation in Illinois."

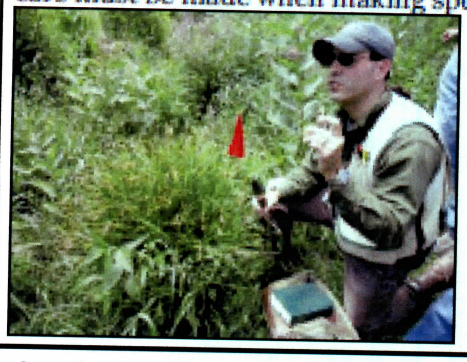
June 2012

SEDGE ID WORKSHOP A GREAT SUCCESS!

At long last we were able to organize a sedge identification workshop, with focus on the genus *Carex*. Ten plant enthusiasts gathered in the plant systematics room at Southern Illinois University on a Saturday morning for a presentation about sedges by Mike Murphy, a botanist with the Illinois Natural History Survey in Champaign, Illinois. After the presentation, we drove to Rhonda and Rob Rothrock's residence for the field portion of the class. After a nice lunch provided by the Rothrock's, we proceeded about the property, looking at various sedges that had been flagged the day before. We collected about 25 species of sedges at this site and learned a great deal about the importance of voucher specimens as well as how to properly collect plants for deposition in herbaria.



The next day we met again at Southern Illinois University to dissect the sedge specimens under microscopes. With the help of our instructor, we worked through the dichotomous keys as a class, learning the meaning of terms like trigonous, lenticular, androgynous, and gynecandrous. We teased apart the minute differences between *Carex retroflexa, C. texensis, C. radiata* and *C. rosea*. We debated the shape of the achenes of *Carex lupilina*, which looks very similar to *C. lupuliformis*. In fact, Mike taught us that nearly every sedge has a look-alike species so great care must be made when making species identifications.



The sedge identification workshop was organized by the southern chapter of the Illinois Native Plant Society and made possible by the Department of Plant Biology at Southern Illinois University in Carbondale and a grant from the Illinois Wildlife Preservation Fund.

Illinois Native Plant Society

The Shooting Star NEWSLETTER

of the

Illinois Native Plant Society – Southern Chapter

"…dedicated to the preservation, conservation, and study of native plants and vegetation in Illinois."

August 2012

Sedge Identification Workshop part II

Last weekend was part two of our series of workshops focused on sedges. Sedges are grass-like plants in the *Cyperaceae* family, yet they are more closely related to rushes than grasses. This family contains many species that are difficult to identify. Sedges are underappreciated and often overlooked yet one in every five species of plants in Illinois is in this family. While the last workshop focused on the largest genus in this family (*Carex*), this workshop focused on the many other genera of plants in this diverse family such as *Cyperus, Eleocharis, Rhynchospora,* and *Scirpus*.

The workshop proved to be a very humbling experience for the professional and amateur botanists in attendance. We learned that not all species of sedges have edges (triangular stems) although general characteristics include having tristichous leaves and floral scales that are distichous or spiraled. Sedges can be distinguished from grasses (*Poaceae*) by the closed sheath margins on the leaves and they can be distinguished from rushes (*Juncaceae*) by the presence of achenes instead of capsules. Special thanks to Dr. Gordon Tucker of Eastern Illinois University for leading the workshop.

The sedge identification workshop was organized by the southern chapter of the Illinois Native Plant Society and made possible by the Department of Plant Biology at Southern Illinois University in Carbondale and a grant from the Illinois Wildlife Preservation Fund.

Appendix 2 – Photos from Workshops

Appendix 3 – Poster Thumbnail

Local group receives state grant for educational wildflower poster and workshops

The Southern Chapter of the Illinois Native Plant Society (INPS) received an award from the Illinois Wildlife Preservation Fund to develop and print large format poster titled "Wildflowers of Southern Illinois" and distribute it to the public. The poster features high-quality, color photographs of 16 wildflowers native to southern Illinois taken by INPS Southern Chapter President, Chris Benda. It provides a visual gateway to a sample of the wonderful wildflowers that grow in our local nature. The "Wildflowers of Southern Illinois" poster will be available free of charge to anyone interested in learning more about the native flora of southern Illinois at monthly meetings of the Southern Chapter INPS and at many local nature centers. Please visit the INPS website (http://www.ill-inps.org/Events) for more information regarding time and locations of our upcoming meetings and events.

In addition, the Illinois Wildlife Preservation Fund grant allowed the Southern Chapter of INPS to partner with the Southern Illinois University at Carbondale (SIUC) Department of Plant Biology to offer two sedge identification workshops. Sedges are grass-like plants and are important because they are abundant in the herbaceous layer of every terrestrial ecosystem in Illinois. Out of 3300 species of plants in Illinois, twenty percent belong to the sedge family (Cyperaceae). Sedges are notoriously difficult to identify because of their small specialized flowers, which lack the colorful petals of many plants. The first workshop was taught by Mike Murphy, botanist with the Illinois Natural History Survey in Champaign, Illinois, and the second was taught by, Dr. Gordon Tucker, curator of the Stover-Ebinger Herbarium and Professor at Eastern Illinois University. The local professionals and amateurs trained in these workshops will help improve plant conservation efforts locally.

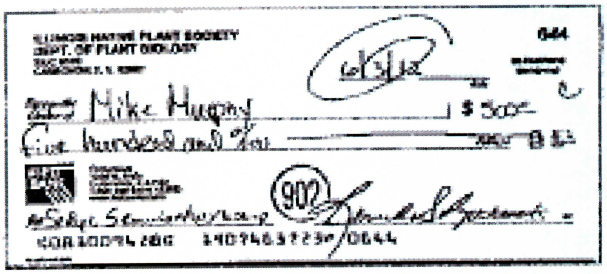
To learn more about native plants or the Southern Chapter of INPS, anyone can visit our Facebook page: http://www.facebook.com/southernillinois-plants or our website: http://www.ill-inps.org. The Illinois Native Plant Society (INPS) is a non-profit organization whose purpose is to promote the preservation, understanding, and appreciation of the native flora and natural communities of Illinois.

The Illinois Wildlife Preservation Fund Grant Program is designed to preserve, protect, perpetuate and enhance non-game wildlife and native plant resources of this state through preservation of a satisfactory environment and an ecological balance. The Southern Chapter INPS thanks everyone who contributes to the Illinois Wildlife Preservation Fund Program!

Appendix 4 – Press Release

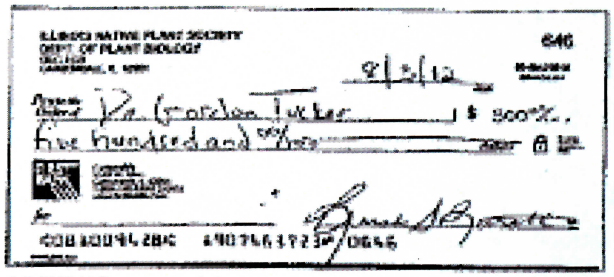
Appendix 5 – Receipts

Account: 1907463723



06/11/12 644 500.00

Account: 1907463723



08/07/12 646 500.00

PsPrint LLC
2861 Mandela Parkway
Oakland, CA 94608, United States
Voice: 800.511.2009
Fax: 510.444.5369

Invoice

Invoice Number: 1279968
Date: 11/15/2012 11:31:59 AM
Print this page | eMail

Billing Information	
Customer ID:	683417
Name:	Chris Benda
Company:	Illinois Native Plant Society
Title:	President
Address:	32 Terrier Lane Apt. 7A
City/State/Zip:	Carbondale, IL 62901
Country:	United States
Business phone:	2174174145
Email:	southernillinoisplants@gmail.com
PO:	9999

Shipping Information	
Name:	Chris Benda
Title:	President
Company:	Illinois Native Plant Society
Address:	32 Terrier Lane Apt. 7A
City:	BOSKYDELL
State:	IL
Zip:	62901
Country:	United States
Business phone:	217 417 4145
Email:	southernillinoisplants@gmail.com

Qty.	Part No.	Description	Price	Extended
500	Posters (24x36) (1599152)	**Posters** Shipping: UPS Ground Stock: 100lb Gloss Text Size: 36.00x24.00 Proof: Standard Hardcopy Proof Turnaround: 5 Quantity: 500 (Offset Printing) Colors: 4/0 Coating: STND	3.4997	$1,749.88

Printing	$1,749.88
Shipping	$156.64
Mailing	$0.00
Discount	-$500.00
Subtotal	$1,406.52
Tax	$87.91
Order Total	$1,494.43