

ILLINOIS ENDANGERED SPECIES PROTECTION BOARD

MINUTES OF THE 154<sup>th</sup> MEETING

MIDEWIN NATIONAL TALLGRASS PRAIRIE, WILMINGTON, IL

11 MAY, 2012

(Approved at the 155<sup>th</sup> meeting, August 10, 2012)

BOARD MEMBERS PRESENT: Chair Dan Gooch, Vice-chair Glen Kruse, Secretary John Clemetsen, Dr. Joyce Hofmann, Ms. Susanne Masi, Mr. John Rogner, Ms. Laurel Ross, and Dr. Jeff Walk.

BOARD MEMBERS ABSENT: Dr. John Taft.

BOARD MEMBER VACANCIES: One.

OTHERS PRESENT: Ms. Kim Roman (Illinois Nature Preserves Commission); Ms. Kathi Davis and Ms. Valerie Njapa (Illinois Department of Natural Resources, Office of Realty and Environmental Planning); and, Ms. Anne Mankowski (Endangered Species Protection Board).

154-1 Call to Order Welcome and Introduction of Guests

Chair Gooch called the 154<sup>th</sup> meeting of the ESPB to order at 10:00 A.M. and asked Vice-chair Kruse to call roll. He then noted that there was a quorum and asked meeting attendees to introduce themselves.

154-2 Adoption of Agenda

Chair Gooch asked if there were any changes to the agenda. None were noted and Ms. Ross **moved** to adopt the agenda, Dr. Hofmann seconded the motion, and it was **approved** unanimously.

154-3 Approval of Minutes of Previous Meeting

Chair Gooch asked if there were any corrections to the minutes of the 153<sup>rd</sup> meeting. Ms. Mankowski noted that Dr. Hofmann had prior to the meeting alerted her to a couple of typographic errors, which she indicated she would correct. Dr. Walk **moved** to approve the minutes with those typographic corrections, Dr. Hofmann seconded the motion and it was **approved** unanimously.

154-4 ESPB Staff Report

Ms. Mankowski, Director of the Illinois Endangered Species Protection Board, gave her report (Attachment A).

154-5 IDNR Staff Report

No IDNR staff report was presented.

154-6 INPC Staff Report

Kim Roman, of the Illinois Nature Preserves Commission, gave a report (Attachment B).

154-7 ESPB Budget

Ms. Mankowski reported to the Board an update of spend tracking for the Board's FY2012

budget. The Board then discussed developing a resolution to support the IDNR's sustainability package legislation and agreed to add the item to the agenda for the upcoming special meeting scheduled for May 16, 2012. Mr. Rogner and Ms. Mankowski agreed to work together drafting a proposed resolution prior to the May 16 meeting.

#### 154-8 Board Appointments

Ms. Mankowski reported that there were no updates regarding Board member reappointments or appointments. She then reviewed that terms will end on May 15, 2012 for Chair Gooch, Vice-chair Kruse, and Dr. Hofmann. Chair Gooch asked Vice-chair Kruse and Dr. Hofmann if they wished to continue serving, they indicated they did, and he confirmed that he also wished to continue serving. Ms. Mankowski advised that the respective members needed to complete the required self-nomination process on the [Appointments.Illinois.Gov](http://Appointments.Illinois.Gov) website and that she would send letters to IDNR Director Miller and Governor Quinn recommending each member's reappointment.

#### 154-9 Required Open Meetings Act Training

Ms. Mankowski reviewed that all appointed or elected members are required to complete once, and a designated representative for the body is required to complete annually, online Open Meetings Act training. She reviewed that she had assumed the role of designated representative and that she and all members except Chair Gooch, Ms. Masi, and Mr. Rogner had completed the training to date.

#### 154-10 Annual Self-Evaluation

Chair Gooch reviewed that according to the Board's Policy Manual, each year, preferably at the February meeting, the Board must do a self evaluation for business conducted during the previous 12 months, analyze the results and then set goals for the following year. He asked Ms. Mankowski to review the self-evaluation criteria established by the Board at its 142<sup>nd</sup> and 150<sup>th</sup> meetings and an assessment of performance for each criterion.

#### ESPB Statutory Requirements:

The *Illinois Endangered Species Protection Act (520 ILCS 10/)* requires that the Board:

1. Exist (Accomplished);
2. Update and maintain the List of Illinois Endangered and Threatened Species at least every 5 years (Accomplished/ongoing – began in 2011 the List review process for List revision ending in 2014);
3. Hold a public hearing when making revisions to the List (not applicable during this reporting period);
4. Advise the IDNR on methods of assistance, protection, conservation and management of endangered and threatened species and their habitats, and on related matters (Accomplished/ongoing – duty of staff);
5. Hold quarterly meetings (Accomplished);
6. Produce a report of accomplishments, biennially (not applicable during this reporting period);

7. The Board conducts business under requirements of the *Open Meetings Act (5 ILCS 120/)*. (Accomplished);

8. The *Administrative Rule on Incidental Taking of Endangered or Threatened Species (17 ILL ADM CODE, CH. I, SEC. 1080)* requires that the IDNR seek advice from the Board and provide written response to any Board comments prior to authorizing an incidental taking of a listed species. (Accomplished/ongoing – duty of staff); and,

9. The ESPA (520 ILCS 10/4) requires that rules for the issuance and maintenance of permits shall be promulgated by the Department after consultation with and written approval of the Board. (Not applicable during this reporting period.)

Chair Gooch then reviewed the following measures:

1. Define mission and purpose. (Chair Gooch stated that he felt the Board had accomplished this item and that it would be good for the Board to do so again following completion of the Endangered Species Protection Act at 40 review being conducted by staff.)

2. Select a chief executive. (Not applicable during this reporting period.)

3. Provide support and guidance for, and evaluate, chief executive (Accomplished and ongoing.)

4. Ensure effective planning (No strategic planning exercise was conducted this year, but this item is accomplished via quarterly meetings and ongoing communication between ESPB Chair and Director.)

5. Monitor and strengthen programs and services (Accomplished by ongoing staff functions.)

6. Ensure adequate financial resources are in place for function (Chair Gooch suggested that after upcoming planned review of the ESPA at 40, the Board should evaluate this item again.)

7. Protect and provide oversight of assets and ensure responsible financial reporting (In as much as the Board or its staff have the capacity to do so, since we have limited control over this, accomplished.)

8. Make recommendations to build a competent board (Accomplished and ongoing.)

9. Ensure legal and ethical integrity (Accomplished via annual ethics training for IL Boards and Commissions, review of contracting protocol, Open Meetings Act training.)

10. Enhance organization's public standing (Accomplished via updates to the

website, but it is noted that the Board used to do much more in this capacity with the publication of posters and informational brochures.)

11. Additional member responsibilities (The Board has not identified such.)

Chair Gooch stated that he felt the Board had accomplished a good deal of work and recommended that the Board utilize its next strategic planning process and the 40-year review of the Endangered Species Protection Act that Ms. Mankowski was preparing to further review and refine its goals.

154-11 Review of ESPB functions that require Board approval or action

Ms. Mankowski reviewed that the Board had at its 153<sup>rd</sup> meeting identified the need to review those ESPB business functions that require Board approval or action and those that are staff function. The Board reviewed the list that Ms. Mankowski had prepared and made a few adjustments. Secretary Clemetsen **moved** to approve the list as presented below, Ms. Ross seconded the motion, and it was **approved** unanimously.

Entries for Board, Chair, Director and staff position authorities and responsibilities are taken from:

- A. ESPB policy manual
- B. meeting discussion/minutes
- C. SOP from when the Board previously had staff

Board

Approves preliminary and final List.  
Approves biennial reports.  
Approves annual proposed budget.  
Approves meeting schedule.  
Approves final meeting minutes.  
Approves specific resolutions.  
Approves policy manual.  
Approves strategic plan.

Chair

Supervises Director. Approves time, schedule, etc., performs Director employee performance evaluation, etc. At Chair's discretion, provides any specific direction and suggestions to Director.

Chair

Approves ESPB meeting agendas.

Director

- With approval of Chair, develops ESPB meeting agendas.
- With approval of Chair, decides how to proceed if a business item not included in this current listing needs to be addressed in between regularly scheduled Board meetings.
- Proposes general budget (personnel and operating) and once approved by Board, Director is authorized to execute. In addition to staff discretionary spending allowed in the policy manual, the Board agreed to later identify a dollar limit to authorize staff to move between line items as at staff discretion. Budget proposed annually.
- Proposes research priorities list developed under the established process approved by the Board and once the list is approved by Board, Director is authorized to execute. List proposed annually.
- When the Board has other staff, supervises those staff.

Director/staff

- Reviews and provides to IDNR comments on draft ITA, draft recovery plans, advice on the conservation of endangered and threatened species and related matters, etc. Consults with whichever experts, or none, as necessary and at staff discretion.
- Produces the following documents. Consults with whichever experts, or none, as necessary and at staff discretion to review, edit, etc.
  - Status and distribution volumes
  - Checklist of E&T
  - E&T factsheets and other educational items
- Executes as necessary, in consultation with whichever Board members or experts, or none, as necessary and at staff discretion, all day-to-day operations of Board business, including:
  - Representing and speaking for the Board, when interacting with or responding to IDNR and any other state, local, or federal agency, or the public on all matters related to Illinois endangered and threatened species law, regulation, conservation, the Listing process, and any other Board business.

154-12            ESPB Research and Strategic Funding Program

Ms. Mankowski gave her report and proposed an updated list of priorities. Ms. Ross **moved** to approve the list, Secretary Clemetsen seconded the motion, and it was **approved** unanimously (Attachment C).

154-13            Review of List Review Process for List Revision ending in 2014

Ms. Mankowski reviewed for Board members the information she is compiling for each species review of currently listed species, the nomination form that will be used by ESPB staff and ESPB TECs for recommending adding species to the Illinois List, and the overall List review process and schedule as outlined below.

Process for List review - at least for current review

In order to avoid any potential conflict with the openness requirement of the Open Meetings Act, it is important that individual ESPB TECs do not engage Board staff or Board members in meetings or gatherings (physical, electronic, or telephonic) of several individuals that would comprise what historically would have been called an EPSB technical advisory committee. The Board is deliberately not using committees and expects cooperation from ESPB TECs to do the same.

ESPB TECs may choose to consult with other experts (including other ESPB TECs) in developing their recommendations to the Board. In those instances, an ESPB TEC should seek evidence from the additional expert and present it to Board staff; ESPB TECs should not invite other individuals to participate in communication with Board staff, they should not seek to gain “consensus” among a group of individuals, nor should they copy other individuals on their correspondence with Board staff. Documentation for the names and contact information of any individuals consulted, along with relevant references and citations for the information they provide, should be maintained and submitted by the ESPB TEC to the ESPB Listing and Recovery Coordinator.

The Board's staff will use the Natural Heritage (Biotics 4) Database, published literature and reports, and ESPB TEC input in conducting the List review and compiling revision recommendations for the Board and will confirm that those recommendations are supported by scientific evidence. If staff does not concur with any ESPB TEC recommendation, a staff recommendation will also be provided to the Board, along with supporting evidence.

Review of currently listed species

- 1) ESPB staff will conduct a review of currently listed species using data (predominantly) from the Illinois Natural Heritage (Biotics 4) Database and will develop a draft 1<sup>st</sup> cut list

review report for species (or a subset of species) in a specific taxonomic group that will recommend species for no change in status, species for change from endangered to threatened, species for change from threatened to endangered, and species for delisting (see #2 under “Review of potential new listings” regarding proposed additions). That report will be distributed for review to individual ESPB TECs with expertise in that taxonomic group. If ESPB TECs that receive the report have evidence that supports a recommendation contrary to that of ESPB staff, the ESPB TEC should provide ESPB staff with such recommendation and copies of respective evidence. ESPB staff will amend as appropriate the ESPB 1<sup>st</sup> cut list review report to incorporate information received from ESPB TECs (including nominations for species to add to the list) and a final report will be developed. If ESPB TECs have evidence that they believe supports a recommendation for changing the status of a species already on the list, they can send to ESPB staff the recommendation and copies of respective evidence at the appropriate time in the process or at any time during the schedule outlined below. Note, the earlier in the process the better, and later submissions of evidence will be considered by ESPB staff and the ESPB as time and resources allow.

#### Review of potential new listings

- 1) Using the separate Word document “Form for ESPB Technical Expert Consultant (ESPB TEC) recommendation for adding a species to the Illinois List of Endangered and Threatened Species” ESPB TECs can provide recommendations and evidence for new species listings to ESPB staff according to the timeline identified in the estimated schedule at bottom.
- 2) ESPB staff will communicate as necessary with individual ESPB TECs in evaluating each recommendation and will include in the 1<sup>st</sup> cut list review report for each taxonomic group (see #1 under “Review of currently listed species”) a section for species under consideration for addition to the Illinois List that outlines the ESPB TEC and ESPB staff recommendations.

Board staff recommendations will be presented to the Board (by taxonomic group) at one of its meetings open to the public. Board staff will invite respective ESPB TECs to attend the meeting and participate in discussion with the Board about the specific List review recommendations. The Board will either give preliminary approval to the proposed revisions or request additional information from staff, ESPB TECs, or others. (If after all discussion, ESPB TECs do not agree with the results of the meeting, they can also address the Board in the public comment period of the same meeting, arrange to address the Board under an agenda item or in the public comment period of a subsequent Board meeting, or submit comments during the Board’s List revision public hearing and comment period or the Administrative Rule amendment public comment period offered by the Joint Committee on Administrative Rules.)

When the Board is satisfied with a proposed revision of the List, it will provide preliminary approval of the revision at one of its meetings. Following preliminary approval of the entire List, a public hearing as required by the Act is held to gain public comments. The Board then reviews public comments received and gives final approval for any changes to be made to the List at one of its subsequent meetings. Once adopted by the Board, changes are forwarded to the director of the IDNR for filing as provided in the Illinois Administrative Procedure Act.

#### Estimated schedule

\*Please keep in mind that this is subject to change – depending on how much other ESPB business needs to be addressed, whether the ESPB has a quorum at a meeting, and the amount of discussion or need for additional data collection, etc. that may arise from each taxonomic group list review agenda item. We may have to bump review agenda items to a later ESPB meeting, stack-up more review agenda items in each ESPB meeting, or add additional ESPB special meetings to accommodate. I will communicate with individual ESPB TECs for each taxonomic group about changes to the schedule as we move through the process.

<b>Taxonomic Group</b>	<b>ESPB TEC recs to add new species to Mankowski</b>	<b>Mankowski 1<sup>st</sup> cut report to ESPB TECs</b>	<b>ESPB TECs 1<sup>st</sup> cut report review and info to Mankowski</b>	<b>1<sup>st</sup> cut list review and revision recs to ESPB and expert discussion</b>	<b>If needed, Mankowski 2<sup>nd</sup> cut report to ESPB TECs</b>	<b>If needed, ESPB TECs 2<sup>nd</sup> cut report review and info to Mankowski</b>	<b>If needed, 2<sup>nd</sup> cut list review and revision recs to ESPB and expert discussion</b>
Birds	April 4, 2012	April 13, 2012	April 27, 2012	May 16, 2012 Special Mtg	June 15, 2012	Jun 29, 2012	Aug 10, 2012 Quarterly Mtg
Mammals	Jun 1, 2012	Jun 15, 2012	Jun 29, 2012	Aug 10, 2012 Quarterly Mtg	Sept 14, 2012	Sept 28, 2012	Nov 9, 2012 Quarterly Mtg
Reptiles	Aug 31, 2012	Sept 14, 2012	Sept 28, 2012	Nov 9, 2012 Quarterly Mtg	Dec 14, 2012	Dec 31, 2012	Feb 8, 2013 Quarterly Mtg
Amphibians	Aug 31, 2012	Sept 14, 2012	Sept 28, 2012	Nov 9, 2012 Quarterly Mtg	Dec 14, 2012	Dec 31, 2012	Feb 8, 2013 Quarterly Mtg
Fish	Nov 30, 2012	Dec 14, 2012	Dec 31, 2012	Feb 8, 2013 Quarterly Mtg	Mar 15, 2013	Mar 29, 2013	May 17, 2013 Quarterly Mtg
Mussels	Nov 30, 2012	Dec 14, 2012	Dec 31, 2012	Feb 8, 2013 Quarterly Mtg	Mar 15, 2013	Mar 29, 2013	May 17, 2013 Quarterly Mtg
Other Inverts	Feb 28, 2013	Mar 15, 2013	Mar 29, 2013	May 17, 2013 Quarterly Mtg	July 15, 2013	July 31, 2013	Aug 16, 2013 Quarterly Mtg
Plants 1 <sup>st</sup> half	Feb 28, 2013	Mar 15, 2013	Mar 29, 2013	May 17, 2013 Quarterly Mtg	July 15, 2013	July 31, 2013	Aug 16, 2013 Quarterly Mtg
Plants 2 <sup>nd</sup> half	Jun 28, 2013	July 15, 2013	July 31, 2013	Aug 16, 2013 Quarterly Mtg	Sept 16, 2013	Sept 30, 2013	Nov 15, 2013 Quarterly Mtg
ESPB preliminary approval of List				Nov 15, 2013 Quarterly Mtg			Mid-Feb 2014 Quarterly Mtg
ESPB Public Hearing and Comment				Jan 2014 Public Hearing			then Mar 2014 Public Hearing
ESPB final approval of List				Feb 2014 Quarterly Mtg			May 2014 Quarterly Mtg
ESPB Amend Ad Rules				Feb – Dec 2014			May – Dec 2014

#### 154-14 Next Meeting Information

The Board's next regularly scheduled meeting will be August 10, 2012. The Board will also hold a special meeting on May 16, 2012 to review listing status recommendations for birds as part of the 2014 List review. All meetings begin at 10:00 AM and are at Midewin National Tallgrass Prairie.

The schedule for 2012 quarterly meetings follows:

- February 17, 2012
- May 11, 2012
- August 10, 2012
- November 9, 2012

154-15 Public Comment Period (3 minutes per person)

There were no public comments.

154-16 Other Business

There was none.

154-17 Adjournment

Vice-chair Kruse **moved** to adjourn, Ms. Ross seconded the motion, and the Board **approved** it unanimously. The meeting was adjourned at 12:35 P.M.

**154-4      ESPB Staff Report****Illinois Endangered Species Protection Board staff report  
for the 154<sup>th</sup> Meeting, May 11, 2012**

Submitted by Anne Mankowski, Director

The Board currently only has one staff, its Director; all activities were conducted by the ESPB Director unless otherwise noted. Ms. Mankowski has not been able to complete all required work in the course of a 37.5-hour work week. Since the last staff report, Ms Mankowski has worked the following overtime hours toward ESPB and IDNR duties: February: claimed = 31.5, donated = 66.5; March: claimed = 63.0, donated = 69.5; April: claimed = 76.0, donated = 76.0.

**1. Illinois List of Endangered and Threatened Species Review and Revision ending in 2014**

The Board has begun work on the next review of the List; the process usually takes about two years. The Board is required by law to base its listing decisions on scientific evidence. Ms. Mankowski spent a great deal of time compiling species information, with some assistance from the IDNR Natural Heritage Database staff. She also communicated with the EPSB technical expert consultants about the process and schedule approved by the Board at its February meeting for working through the review of the Illinois List. The process and schedule are reviewed under the agenda item *13. Review of List Review Process for List Revision ending in 2014.*

**2. ESPB/IDNR project to contract surveys to update endangered and threatened animal occurrence records that are greater than 10 years old**

At the November 2011 Board meeting, Ms. Mankowski reported that the Board's FY2012 Wildlife Preservation Fund allocation was being used to partner with the IDNR Natural Heritage Database program to continue an ongoing project to contract with state universities to conduct surveys to update endangered and threatened animal element occurrence records that are greater than 10 years old. In December 2011 Ms. Mankowski was notified by Natural Heritage Division Chief Don McFall that the FY2012 IDNR WPF money that had been approved for the animal EOR update project by the IDNR WPF committee, the citizen WPF committee, and Director Miller, was being withdrawn from the animal EOR update project and allocated toward further funding the INAI update project.

Ms. Mankowski subsequently worked with ORC Director Jim Herkert to develop a committed cooperative project between the ESPB and IDNR to fund the animal EOR update project with a combination of funding from ESPB Wildlife Preservation Funding, IDNR Wildlife Preservation Funding, and USFWS State Wildlife Grant. Since the February meeting, ORC Director Jim Herkert advised Ms. Mankowski that he and IDNR Assistant Director John Rogner had approved a proposal. Ms. Mankowski will serve as project manager and will coordinate with IDNR Natural Heritage Database staff as necessary. The project is described in Attachment C.

**3. Work on the ESPB 2012 Biennial Report and 40 Years of the Illinois Endangered Species Protection Act Publication**

2012 marks the 40<sup>th</sup> anniversary of the enactment of the Illinois Endangered Species Protection Act. As per assignment from Chair Gooch at the ESPB 150<sup>th</sup> meeting held May 13, 2011, Ms. Mankowski continues working on a 40-year review of accomplishments and challenges relative to provisions and requirements of the Endangered Species Protection Act. The biennial report will be submitted to the Board at the August meeting and the ESPA at 40 document may also be completed by that time.

**4. ESPB Website**

Ms. Mankowski spent time working with IDNR web support staff on the conversion of the ESPB's current website to the IDNR's new sharepoint website. The look and feel of the ESPB website has changed a bit with the conversion, but most of the links, references, and publications have remained. The

ESPB website continues to serve as the web portal for both ESPB and IDNR endangered and threatened species program information.

### **5. ESPB Budget**

Ms. Mankowski continues working with IDNR on multiple budget assignments related to FY2012 and FY2013 budgets.

### **6. ESPB Research/Strategic Projects Program**

Ms. Mankowski continues administration of IDNR research projects. An update of the program is included under agenda item 12. *ESPB Research and Strategic Funding Program*.

### **7. Meetings, Presentations, and other Publications**

Ms. Mankowski participates in IDNR ORC twice-monthly administrative meetings.

Ms. Mankowski participated in the 59<sup>th</sup> Natural Areas Evaluation Committee (NAEC) meeting held at IDNR headquarters March 20, 2012. The ESPB is a voting member of the NAEC.

Ms. Mankowski is participating in an IDNR strategic planning process that began in December 2011. The process begun with a two-day workshop hosted by the Association of Fish and Wildlife Agencies Management Assistance Team and has continued with agency-wide and office-specific exercises. The process is intended to help the IDNR identify the means by which to best deliver its mission under current and anticipated budgetary and resource challenges.

Ms. Mankowski gave a March 14, 2012 presentation about the history of the Illinois List of Endangered and Threatened Species to Sangamon River Audubon and Macon County Trails Conservancy

### **8. Coordination with IDNR and INPC:**

Ms. Mankowski coordinated with the Endangered Species Program ORC, Division of Wildlife ORC, Impact Assessment Section OREP, Office of Land Management, Office of Law Enforcement, Office of Legal Counsel, Office of Strategic Services, Media Relations, and Illinois Nature Preserves Commission, on multiple matters, including:

- Met with IDNR ORC Director, Jim Herkert, to review ESPB/IDNR coordination of endangered and threatened species work.
- Met with IDNR ORC Director, Jim Herkert, to review the process for ESPB input regarding IDNR's post-listing management and monitoring plan for the Peregrine Falcon (*Falco peregrinus*).
- At the request of IDNR Director Miller, conducted follow-up with a grade school teacher in Benton, Illinois about a project her class did to develop web glogs (virtual posters) about Illinois endangered and threatened animals and to give presentations about their posters to classes of younger students.
- Provided comments to IDNR ORC Director, Jim Herkert, regarding USFWS CY2011 permit activities and CY2012 proposed permit activities for work involving the Ornate Box Turtle (*Terrapene ornata*) in northwestern Illinois.
- Provided to IDNR Fiscal several documents reviewing the history and scope of the ESPB's budget needs.
- Met with and provided assistance to IDNR Office of Legal Counsel in reviewing the Illinois Endangered Species Protection Act and the administrative rules that support it as they relate to various endangered and threatened species issues.
- Met with IDNR OREP staff to discuss the Illinois Endangered Species Protection Act and the administrative rules that support it as they relate to IDNR endangered and threatened species consultation process.
- Met with IDNR Legal Counsel and Natural Heritage Database staff to discuss the IDNR's data use agreement.

- Provided recommendations to IDNR regarding issues related to authorizations for incidental taking of endangered and threatened species and permits for possession of specimens or products of endangered or threatened species.
- Continued project management of the Illinois Barn Owl (*Tyto alba*) recovery project.
- Continued project management for the development of a Blanding's Turtle (*Emydoidea blandingii*) recovery plan.
- Provided guidance to IDNR Natural Heritage regarding recovery planning for Wild Hyacinth (*Camassia angusta*).
- Provided guidance to IDNR Natural Heritage on the process for IDNR/ESPB coordination of draft incidental take authorization review.
- Provided to IDNR Natural Heritage and OREP information about the endangered and threatened species translocation approval coordination process between IDNR and ESPB that is supposed to precede issuance of an IDNR Endangered and Threatened Species Possession Permit for projects involving translocation.
- Provided review and comments to IDNR Office of Strategic Services on a draft article about rails for IDNR's *OutdoorIllinois* magazine.
- Provided review, comments, and questions to IDNR on two draft incidental take authorizations: Walnut Ridge Windfarm, Lee County, involving Ornate Box Turtle (*Terrapene ornata*); and, Dundee Road Bicycle/Pedestrian Path, Cook County, involving Eastern Massasauga Rattlesnake (*Sistrurus c. catenatus*).
- Handled over 100 phone and email requests for ESPB and E&T information from the public and other state and federal agencies including referring those related to IDNR E&T consultation, incidental take, data, and permit programs, etc.

#### **9. Coordination with other Agencies**

- Ms. Mankowski communicated with Dr. Chuck Knapp of the Shedd Aquarium and Jim Herkert and John Rogner of IDNR, about a partnership between the Board, Shedd Aquarium, and IDNR to work on aquatic endangered and threatened animal species monitoring and research. The Shedd has very generously offered to assist the state agencies in forwarding the shared mission.
- Ms. Mankowski participated in a USFWS Region 3 Threatened and Endangered Species annual coordinator's meeting planning conference call. The annual meeting includes USFWS Region 3 staff and representatives from eight states.
- Ms. Mankowski participated in a USFWS-led conference call to coordinate annual Illinois/USFWS threatened and endangered species activities.
- Ms. Mankowski provided to Elliot Brinkman of the Prairie Rivers Network background information about the Barn Owl (*Tyto alba*) recovery in Illinois as part of a package of information that Mr. Brinkman was preparing for use in meetings on Capitol Hill to discuss successes of the USFWS State Wildlife Grant program.

#### **10. Field Work**

Spent one-half day assisting Randy Nyboer with surveys for *Berberis canadensis* (Allegheny Barberry) in Tazewell County.

#### **11. Other General Administration and Clerical Work**

- Prepared and routed Board member and staff travel vouchers.
- Regularly distributed information to Board members via email and hardcopy mailings.
- Distributed to Board members information regarding required direct deposit forms for reimbursement of travel expenses.
- All aspects of preparation for the May 11, 2012 meeting.

**To:** Endangered Species Protection Board Members  
**From:** Kelly Neal, Jenny Skufca, and Randy Heidorn  
**Date:** April 30, 2012  
**Subject:** Illinois Nature Preserves Commission (INPC) Report to the Endangered Species Protection Board

**I. Protection Program:**

- A. The following sites were protected at the 211<sup>th</sup> meeting of the INPC held at the Jarrett Prairie Center in Byron, Illinois:
1. Parcels approved for registration as an Illinois land and water reserve (LWR):
    - a. Eagles Nest, Jo Daviess County, 119.787 acres owned by the Jo Daviess Conservation Foundation, perennial stream supporting three state threatened species and unusual concentration of 18 mussel species;
    - b. Wise Ridge, Johnson County, 388 acres owned by Illinois Department of Natural Resources (IDNR), high-quality dry and dry-mesic upland forest of the Greater Shawnee Hills Section, of the Shawnee Hills Natural Division.
    - c. Independence Park Woods, Tazewell County, 269.29 acres owned by the Pekin Park District, supporting breeding populations of 17 species of forest interior bird species.
    - d. Fourth addition to Little Vermilion River LWR, Vermilion County, 30 acres owned by the IDNR, provides additional forest buffer habitat for forest interior birds.
  2. Parcel given preliminary approval for dedication as an Illinois nature preserve (NP): buffer addition to Hopewell Hill Prairies NP, Marshall County, 2.2 acres owned by a private individual, buffer for hill prairies.
  3. Parcels given final approval for NP dedication:
    - a. Brewster Creek Marsh, DuPage County, 256.88 acres owned by the Forest Preserve District of DuPage County (FPDDC), habitat for three plant and eight animal species listed as state-endangered or threatened;
    - b. Des Plaines Riverway, DuPage County, 75 acres owned by the FPDDC, habitat for one plant and two animals listed as state-threatened and one state-endangered animal;
    - c. Meacham Grove, DuPage Co., 49 acres owned by the FPDDC, high-quality dry-mesic and mesic upland forest of the Morainal Section of the Northeastern Morainal Natural Division, and provides habitat for a state-threatened plant.
    - d. Swift Prairie, DuPage County, 116 acres owned by the FPDDC, habitat for federally-listed endangered plant species, two state-endangered animal species, two state-threatened animal species, and a state-threatened plant;
    - e. West Chicago Prairie buffer addition to Truitt-Hoff NP, DuPage County, 37 acres owned by the FPDDC, buffer to high-quality prairie;
    - f. McLean Woods and Wetlands, Lake County, 533 acres owned by the Lake County Forest Preserve District, habitat for nine state-endangered and three state-threatened animals;
    - g. Addition and buffer addition to Barber Fen NP, McHenry County, 68.8 acres owned by the McHenry County Conservation District (MCCD), stream habitat and high-quality sedge meadow and graminoid fen of the Morainal Section of the Northeastern Morainal Natural Division supporting a state-threatened plant, a state-endangered plant, three state-threatened animals, and a state-endangered animal.
    - h. Buffer addition to Bystricky Prairie NP, McHenry County, 116.7 acres owned by the MCCD, buffer to the high-quality sedge meadow and wet prairie;
    - i. Addition to Lind Forest NP, McHenry County, 44.1 acres owned by the MCCD, high-quality mesic forest, and seep of the Morainal Section of the Northeastern Morainal Natural Division providing habitat for two state-endangered plants and two state-threatened animals;
    - j. Buffer addition to Colored Sands Bluff NP, Winnebago County, 187 acres owned by the Winnebago County Forest Preserve District (WCFPD), buffer to high-quality stream and other habitats;
    - k. Buffer addition to Sugar River Alder NP, Winnebago County, 317 acres owned by the WCFPD, buffer to high-quality stream and other habitats.
- B. Randy Heidorn and Steven Byers participated in a number of IDNR discussions regarding the Millennium Reserve; a concept for land protection, stewardship, and development in the Lake Calumet region. Mr. Byers is the lead INPC staff person on this effort.

- C. John Nelson:
  - 1. Continued working with The Nature Conservancy (TNC) staff on a draft NP proposal and management plan for Nachusa Grasslands.
  - 2. Completed a registration proposal package for the proposed Johns Mound Group LWR.
  - 3. Met with a landowner regarding an addition to Black-Crown Marsh LWR.
- D. Steven Byers represented the INPC and IDNR on the U. S. Fish and Wildlife Service (USFWS) proposed Hackmatack National Wildlife Refuge feasibility study team. Continued to coordinate with USFWS personnel, the IDNR, and Friends of Hackmatack regarding the proposed refuge. Reviewed a draft environmental assessment for the proposed refuge that recommended protection of approximately 11,000 acres. Mr. Byers also participated in the team planning for public meetings and the scheduled public release of the environmental assessment.
- E. Kim Roman:
  - 1. Participated in Lower Fox River Stakeholder Committee meetings and served as a technical advisor to the group. This group was organized by The Conservation Foundation and is using the Illinois Wildlife Action Plan to promote conservation efforts in the Lower Fox River Conservation Opportunity Area (COA).
  - 2. Met with a Kankakee Sands area private landowner to discuss protection of his Illinois Natural Areas Inventory (INAI) site.
- F. Angella Moorehouse:
  - 1. Maintained contact with the landowners of 23 sites enrolled in INPC programs.
  - 2. Gave a presentation to the City of Geneseo Board on protection options for Geneseo Fen, a high-quality wetland seep in Henry County nominated for inclusion on the INAI.
  - 3. Met with staff from Pheasants Forever to evaluate Forever Fields in Knox County as a potential LWR.
- G. Tom Lerczak:
  - 1. Established landowner contacts for 15 natural areas, NPs, LWRs or Natural Heritage Landmarks (NHL).
  - 2. Provided a letter of support to the Fon du Lac Park District for permanent protection of its Spring Creek Preserve in Tazewell County.
- H. Mary Kay Solecki:
  - 1. Met with Allerton Park staff regarding proposing the Allerton Park INAI site as a LWR.
  - 2. Continued pursuing designation as a LWR for Embarras Ridges (formerly Dolan Woods), owned by the Grand Prairie Friends (GPF), and surveyed the site with a GPF representative.
  - 3. Discussed the designation of the IDNR-owned INAI site known as Rock Cut Botanical Area as a LWR with District Heritage Biologist Roger Jansen.
- I. Debbie Newman met with three landowners of unprotected INAI sites and several landowners of INPC protected sites.
- J. Bob Edgin contacted landowners of two unprotected sites to discuss protection options.

## **II. Inventory and Monitoring:**

- A. Kelly Neal, Jenny Skufca, and Randy Heidorn attended the 59<sup>th</sup> Natural Areas Evaluation Committee meeting. Mr. Heidorn is a voting member representing the INPC on this Committee.
- B. Angella Moorehouse and Ray Geroff assisted Dr. Ken McCravy with plant and bee surveys for a native bee study at Cedar Glen NP.
- C. Kim Roman assisted with a bat banding/research project at Pecumsaugan Creek/Blackball Mines NP.
- D. Ray Geroff:
  - 1. Continued a native bee research project at Harry N. Patterson Savanna LWR and Bald Bluff Hill Prairie INAI Site.
- E. Mary Kay Solecki coordinated with a volunteer eagle nest monitor to continue monitoring nest activity on the Middle Fork of Vermilion River.
- F. Bob Edgin evaluated one privately-owned site to determine eligibility for registration as a LWR.

## **III. Defense Program:**

- A. Jenny Skufca:
  - 1. Responded to three reviews for the IDNR's Comprehensive Environmental Review Program (CERP) and 12 reviews for the IDNR's consultation program.
  - 2. Submitted three Class III Special Resource Groundwater petitions for review to the Illinois Environmental Protection Agency (IEPA). The INPC sites currently petitioned include Searls Park Prairie NP, Sand Ridge NP, and Yonder Prairie NP.
  - 3. Along with the IEPA, Illinois State Geological Survey, and IDNR's Contaminant Assessment Section staff, reviewed and provided comments in response to Addendum I and II of the Enbridge Energy's

Remedial Action Plan/Remedial Objectives Report related to the crude oil pipeline break and subsequent clean-up efforts at Romeoville Prairie NP.

- B. Tom Lerczak:
  - 1. Met with local decision regarding potential threats of erosion and sedimentation to Fon du Lac Seep LWR and Bennett's Terraqueous Gardens NP.
  - 2. As a representative of the INPC, attended an Illinois Department of Transportation (IDOT) public meeting and a meeting with IDOT concerning the Eastern Bypass Study in Tazewell and Woodford counties.
- C. Mary Kay Solecki:
  - 1. Researched and ordered trail cameras to be used in an effort to catch ginseng poachers at a NP.
  - 2. Reviewed plans and attended an on-site meeting regarding hydrotesting of a natural gas pipeline at Upper Sangamon River LWR.
- D. Threats to Sites within INPC programs:
  - 1. **Foley Sand Prairie NP, Lee County – John Nelson, Jenny Skufca**
    - a. Issue: Proposed wind farm construction and operation. Mainstream Power USA proposes to construct a major wind energy generation facility in Lee, Whiteside, and Bureau counties.
    - b. Threat: Wind turbines (up to 520 feet high) are proposed for locations which will result in shadow flicker, noise, ground vibration, and obtrusive visibility within the NP. Flicker, noise, and vibration have the potential to alter animal behaviors which could shift the existing balance of flora and fauna within the NP.
    - c. Status: New. The IDNR is preparing consultation recommendations to Lee County seeking a one-mile setback from the NP boundaries. This would eliminate the three nearest wind turbines (700 feet, 1400 feet, and 4200 feet) from the NP. Some potential for flicker from a fourth turbine may remain, but one mile should greatly reduce noise and vibration impacts. Up to a dozen wind turbines would remain within three miles of the NP and will be clearly visible from within it, but there is no practical setback to address visibility consistent with building the wind farm. Whiteside County and Bureau County are already holding hearings on this wind project, but the nearest Whiteside turbines are already located more than one mile from the NP. Lee County will be holding hearings on this proposal sometime this spring. The wind farm must be operational by December 31, 2012, to qualify for federal energy subsidies. The INPC submitted a letter to the Lee County Zoning Office on December 22, 2011, outlining the INPC's wind project review protocol. The letter also urged a greater setback from high quality natural areas, especially those protected under the Illinois Natural Areas Preservation Act.
  - 2. **Bliss Woods NP, Kane County – Steven Byers, Jenny Skufca**
    - a. Issue: An unknown amount of lead shot has been deposited in the NP by years of trap/skeet shooting at the former Aurora Sportsman's Club.
    - b. Threat: Lead shot poses a threat to humans and the environment.
    - c. Status: Ongoing. INPC staff are working with the NP landowner, Forest Preserve District of Kane County (FPDKC), to minimize impact to the NP. IDNR Contaminant Assessment staff and INPC staff presented the issue to the IEPA's Division of Public Water Supply staff. The FPDKC has informed the INPC that further sampling will be conducted by its consultant. The INPC has recently received additional reports submitted to the IEPA and has been asked to provide comments to Shaw Environmental, the consultant for the current owner of the former Aurora Sportsman's Club property, Sugar Grove Holding Company. The INPC is also working with the U.S. Army Corps of Engineers. The IDNR's Office of Legal Counsel has forwarded a referral to the Office of the Attorney General (OAG).
  - 3. **Trout Park NP, Kane County – Steven Byers**
    - a. Issue: Increased surface runoff from I-90 and the Route 25 interchange.
    - b. Threat: Increased runoff has eroded a channel that allows surface water to enter groundwater-fed streams during high rainfall events.
    - c. Status: INPC staff met with the Tollway Authority and consultants to address the problem.
  - 4. **Bluff Spring Fen NP, Cook County – Steven Byers, Jenny Skufca**
    - a. Issue: The Fen Protection Plan between the INPC and Bluff City Materials, Inc. calls for conveyance of surface water from Gifford Lake to Poplar Creek through proposed stormwater piping.
    - b. Threat: Surface water represents a threat to this groundwater-dependent wetland.
    - c. Status: Permitting is now in place to begin construction of a pipe that will divert water as planned. INPC staff attended a meeting, hosted by the site's landowner, Forest Preserve District of Cook County (FPDCC), regarding the proposed stormwater piping project. At the meeting, Bluff City

Materials, Inc. requested that the landowner and the INPC assist with seeking additional funds before initiating the project.

5. **North Dunes NP, Lake County –**
  - a. Issue 1 (**Randy Heidorn**): Expansion of Lake County Public Water District (LCPWD) facilities.
  - b. Threat: The LCPWD currently owns in-holdings within the NP where it withdraws water from Lake Michigan. The LCPWD also owns pipelines along 17<sup>th</sup> Street. The LCPWD is suggesting that the IDNR transfer eight lots within the NP to the LCPWD to allow for expansion of its facilities and secondary access. The NP is located within a historically platted, but not fully developed, subdivision. The only in-holdings along 17<sup>th</sup> Street not owned by IDNR are the three lots owned by the LCPWD and another owned by the Waukegan Port Authority. Only the IDNR lots are dedicated as NP in this section of the NP. The alleys and streets are not dedicated. Such transfer of land would be considered a taking under the Illinois Natural Areas Preservation Act (Act) and would invoke proceedings prescribed in Section 14 of the Act.
  - c. Status: New: The IDNR is initiating discussions with the LCPWD. Since the alleys and streets are not dedicated as NP, the IDNR should be able to work out a solution for those areas. However, use of dedicated land for this expansion is much less likely. The Act allows taking for another purpose only if “an imperative and unavoidable public necessity” exists. As alternatives exist, such a finding may not be possible.
  - d. Issue 2 (**Steven Byers, Jenny Skufca**): Proposal of shoreline revetment and underwater reef installment just north of the NP.
  - e. Threat: The proposed actions are expected to cause increased erosion of sand, cutting deeper into the natural communities of the NP.
  - f. Status: New. The INPC has solicited and received comments related to the proposed project from a coastal geologist who advised that the project will accomplish the desired outcome but will likely further erode the NP unless sand nourishment occurs at a rate of 80,000 cubic yards per year.
6. **Salt Creek Woods NP, Cook County – Steven Byers, Jenny Skufca**
  - a. Issue: Sewer line construction proposed for an existing right-of-way that lies adjacent to the NP.
  - b. Threat: The proposed construction project could directly impact the NP through construction activities and indirectly by altering the surface hydrology, allowing sedimentation.
  - c. Status: New. INPC staff have coordinated with IDNR Consultation, the NP landowner (FPDCC), and site stewards to ensure that the project will not impact the NP.
7. **Oakwood Hills Fen NP, Bates Fen NP, and multiple INAI sites, McHenry County – Steven Byers**
  - a. Issue: Maintenance of an existing pipeline.
  - b. Threat: Unintended, direct and indirect impact to multiple sites of statewide ecological significance. The maintenance project calls for construction of pits to install equipment and excavation to repair pipelines.
  - c. Status: New. INPC staff is coordinating with the NP landowner (MCCD), pipeline officials, USFWS, and IDNR Consultation to ensure the project will not impact high quality natural areas.
8. **Belmont Prairie NP, DuPage County – Steven Byers, Jenny Skufca**
  - a. Issue: NP landowner, Downers Grove Park District (DGPD), provided the INPC with a proposal to use a portion of the NP buffer for recreational ball fields.
  - b. Threat: Potential to adversely impact the significant features of the NP through changes to groundwater and surface hydrology, including the potential input of chemicals used to maintain ball fields and parking lots, and potential lighting impacts to high-quality natural communities.
  - c. Status: New. An INPC staff assessment was provided to the DGPD on February 27, 2012, outlining potential concerns and defining the proposal’s incompatibility with guidance in the Illinois Natural Areas Preservation Act and its associated administrative rules regarding the use of buffer. Staff found no precedent for the proposed action. A response from the DGPD was received by email on March 8, 2012, stating that it has no intention of proceeding at this time.
9. **Short Fork Seep NP, McDonough County – Angella Moorehouse, Jenny Skufca**
  - a. Issue: The landowner discovered that herbicide associated with power line vegetative maintenance had been used within the NP.
  - b. Threat: Direct impact to flora in the NP causing damage to the vegetation and soils within the high quality portion of the NP.
  - c. Status: Ongoing. The OAG has filed a Complaint for Injunctive and Other Relief in the Circuit Court for the Ninth Judicial Circuit, McDonough County.
10. **White Rock LWR and Salt Lick Point LWR, Monroe County – Debbie Newman, Jenny Skufca**

- a. Issue: Proposed wind farm construction and operation. The developer, Admiral Parkway, has proposed construction of a commercial wind energy generation facility within one mile of the LWRs.
  - b. Threat: Wind turbines may result in shadow flicker, noise, ground vibration, and obtrusive visibility from points within the LWRs. Flicker, noise, and vibration have the potential to alter animal behaviors which could shift the existing balance of flora and fauna within the LWRs.
  - c. Status: New. Monroe County is considering a new wind turbine siting ordinance which is planned for adoption this summer. The Admiral Parkway project is the only pending commercial wind project in Monroe County. It must be completed by the end of the calendar year to qualify for federal subsidies. The IDNR is preparing consultation recommendations to Monroe County which will include the applicant seeking Incidental Take Authorization (ITA) for 14 state-listed endangered or threatened animals, many of which occur within the LWRs, but the “action area” for an ITA cannot include LWRs or NPs. Three of the animal species are also federally-listed under the Endangered Species Act. Should the County approve this project in its current location, and Admiral Parkway not seek ITAs as recommended, legal action by state agencies may be required to defend the protected resources. The INPC submitted correspondence to the Monroe County Board of Commissioners on December 13, 2010, outlining INPC’s wind project review protocol and urged a greater setback from high quality natural areas, especially those protected under the Illinois Natural Areas Preservation Act. On April 4, 2012, the INPC submitted correspondence to the Monroe County Zoning Office making specific recommendations for inclusion in the County’s draft wind ordinance, particularly highlighting a need for the County to fully investigate subterranean geologic conditions prior to development.
11. **Richard R. and Jean W. Graber Grasslands LWR, Jasper County – Bob Edgin, Jenny Skufca**
- a. Issue: Sign theft and unauthorized mowing at the LWR.
  - b. Threat: Recurring violations of the Illinois Natural Areas Preservation Act.
  - c. Status: New. Perpetrator admitted to wrong doing and was issued a citation for unlawful entry by an IDNR Conservation Police Officer. Since this was the suspect’s first charged offense, the Jasper County State’s Attorney used his prosecutorial discretion and opted not to pursue charges.

#### IV. Stewardship Program:

- A. INPC staff participated in several planning efforts related to the conservation of the Hine’s emerald dragonfly (*Somatochlora hineana*) including participation and review of the draft Habitat Conservation Plan (HCP), participating in discussions with the USFWS, Hanson Material Service, and the U.S. Geological Survey to on groundwater information, meeting with partners to address hydrology issues, erosion, and gully in areas of the Hine’s emerald dragonfly habitat at McMahon Woods and Fen NP and railroad issues potentially impacting this species near Lockport Prairie NP. This included Randy Heidorn, Kelly Neal, and Jenny Skufca meeting with IDNR and USFWS staff, consultants, and representatives of the primary partners participating in the development of the HCP for the Hine’s emerald dragonfly.
- B. Randy Heidorn reviewed the proposed Utility Damage Prevention Act (HB3884), and assisted the IDNR in its opposition to this bill. This bill would have banned planting, including natural regeneration of trees, that could reach 25 feet or more within 20 feet of transmission or distribution lines and poles, authorized the utilities to come onto any lands and remove trees, and make it a crime to interfere with the removal. Mr. Heidorn attended a hearing of the House Public Utilities Committee in opposition to said legislation under the direction of the IDNR legislative liaison.
- C. Bob Edgin:
  - 1. Continued to serve on an ecological restoration team for a super fund mitigation site in Lawrence County.
  - 2. Administered a contract for growing and transplanting of a minimum of 2,500 state endangered royal catchfly (*Silene regia*) plants in the Prairie Ridge COA. A minimum of 250 plants were introduced into each of seven sites that are NPs or LWRs.
- D. Stewardship Planning:
  - 1. Kelly Neal:
    - a. Attended the annual Eastern Prairie Fringed Orchid (*Platanthera leucophaea*) Researchers Meeting to determine 2012 protocols for monitoring, cross-pollination, and seed distribution. The orchid occurs at more than 20 INPC sites.
    - b. Reviewed 39 management schedules, five unscheduled management activities, two deer management proposals, and five management related CERPs at INPC sites.
    - c. Developed protocols and coordinated review with the INPC, Division of Natural Heritage, and Office of Realty and Environmental Planning of 85 National Pollution Discharge Eliminations System (NPDES) permit applications and approvals for herbicide/pesticide treatments adjacent to,

- or within, INPC sites. Reviewed initial information for three NPDES utility right-of-way permit applications.
- 2. Russell Heinrichs:
  - a. Met with Unimin Mine representatives concerning an annual charitable donation.
  - b. Prepared management plans for: Colored Sands Bluff NP, Sugar River Alder NP, Hanover Bluff NP, Sentinel NP, Ayers Sand Prairie NP, Wilkinson-Renwick Marsh NP, and Harlem Hills NP.
  - c. Met with staff of Northern Illinois University to discuss stewardship and future use of Pine Rock NP.
- 3. Steven Byers hosted a Wolf Road Prairie meeting to review management needs and take steps to finalize the management schedule for the site.
- 4. Ray Geroff and Angella Moorehouse completed management plan revisions for nine INPC sites.
- 5. Tom Lerczak met with advocates, volunteers, owners, and/or managers to discuss the plan for management or provide material support for management for the following sites: Carpenter Park NP, Dirksen-McNaughton Woods LWR, Black Partridge Park Woods LWR, and Walden West LWR.
- 6. Mary Kay Solecki updated and/or planned stewardship activities with the landowners of Horseshoe Bottom NP and Prospect Cemetery Prairie NP.
- 7. Debbie Newman coordinated a plant survey project between a volunteer and the landowner at a Jersey County LWR.
- 8. Bob Edgin:
  - a. Contacted landowners of 11 protected sites to discuss management issues.
  - b. Met with staff from Vincennes University to discuss trail renovation and relocation at Robeson Hills following storms that felled numerous trees, destroyed two foot bridges, and severely damaged a suspension bridge.
  - c. Updated management plans for: Karcher's Post Oak Woods NP, Lost Creek Marsh NP, Robeson Hills NP, Schulte Woods NP, Lost Creek Marsh LWR, Robeson Hills LWR, Edward V. Price Woods LWR, Culley Barrens LWR, P & E Refuge LWR, Karl Bartel Wildlife Sanctuary LWR, Padgett Pin Oak Woods LWR, Padgett Brothers Sweet Gum Woods LWR, Ping Prairie at Huskey Hollow NHL, Lake Sara Flatwoods NHL, Green Prairie NHL, Allison Gravel Prairie NHL.
- E. Stewardship project implementation: Staff continued to coordinate and administer stewardship projects, including the Hill Prairie Project, funded by the Landowners Incentive Program, State Wildlife Grant, Wildlife Habitat Incentive Program, IEPA 319 Grant, Natural Areas Acquisition Fund, Chicago Wilderness (CW) Grants, and INPC operations fund. These projects involve meeting with landowners, securing landowner agreements, preparation of grant applications, preparing bid packages, supervising contractors, and assisting in conducting restoration activities. Contractor work included prairie reconstruction and seed purchase, exotics and woody species control, dump cleanup, erosion control, boundary survey, fence construction, sign posting, prescribed burn site preparation, and burn crews. Sites where this kind of work occurred include:
  - 1. Area 2 (Byers): Sterne's Fen NP, Wolf Road Prairie NP, Trout Park NP, Bluff Spring Fen NP, Fox River Fen NP, Sleepy Hollow Ravine NP, and McHenry County wetlands phragmites control.
  - 2. Area 3 (Roman): Messenger Woods NP, Superior Street Prairie LWR, Mskoda LWR, and Des Plaines Dolomite Prairies LWR.
  - 3. Area 4 (Moorehouse and Geroff): Stony Hills NP, Cedar Glen NP, Black Hawk Forest NP, Josua Lindahl Hill Prairies NP, Short Fork Seep NP, Harper's Woods NP, Samuel Barnum Mead Savanna NP, Robinson Park Hill Prairies NP, Singing Woods NP, Grubb Hollow Prairie NP, Nenawakwa LWR, Robert A. Evers LWR, Cecil White Prairie LWR, Thistle Hills LWR, McFarland Hill LWR, two sites within the Siloam Springs COA, and three sites within the Upper Mississippi River COA.
  - 4. Area 5 (Lerczak): Black Partridge Park Woods LWR, Chinquapin Bluffs LWR, and Mackinaw River LWR.
  - 5. Area 6 (Solecki): Woodyard Memorial Conservation Area LWR and Riverbend LWR.
  - 6. Area 7 (Newman): Prairie of the Rock NP, Storment Hauss NP, Armin Krueger Speleological NP, Brickey-Gonterman Memorial Hill Prairie NP, DesPain Wetlands LWR, Prairie of the Rock Overlook LWR, White Rock LWR, and Salt Lick Point LWR.
- F. Land management conducted by staff includes site surveillance, prairie reconstruction and seed purchase, exotics and woody species control, dump cleanup, erosion control, boundary survey, fence construction, sign posting, coordinating and working with volunteers, prescribed burn site preparation, and participating in or leading prescribed burns. Sites where this kind of work occurred include:
  - 1. Area 1 (Nelson and Heinrichs): Freeport Prairie NP, Wirth Prairie NP, Boloria Fen and Sedge Meadow NP, Boone Creek Fen NP, Harlem Hills NP, Volo Bog NP, Illinois Beach NP, Sleepy Hollow Ravine NP, Illinois Beach State Park (SP), Rock Cut SP, Chain O' Lakes SP, and Moraine Hills SP.

2. Area 2 (Byers): Volo Bog NP, Hybernia NP, Sterne's Fen NP, Sleepy Hollow Ravine NP, Trout Park NP, Wheeler Fen LWR, and Shaw Woods and Fen NHL.
3. Area 3 (Roman): Short Pioneer Cemetery Prairie NP, Hildy Prairie NP, Yorkville Prairie NP, Wilmington Shrub Prairie NP, Wolf Road Prairie NP, Goose Lake Prairie NP, Long Run Seep NP, Ayers Sand Prairie NP, Voight Pauper Cemetery Prairie LWR, Des Plaines Dolomite Prairies LWR, Sweet Fern Savanna LWR, and Superior Street Prairie LWR.
4. Area 4 (Moorehouse and Geroff): Stony Hills NP, Black Hawk Forest NP, Cedar Glen NP, and assisted DNH staff in Region IV with prescribed burns of 14 additional units.
5. Area 5 (Lerczak): Tomlin Timber NP, Fon du Lac Seep LWR, Cooper Park Wetlands LWR, and Dirksen-McNaughton Woods LWR.
6. Area 6 (Solecki): Barnhart Prairie Restoration NP, Horseshoe Bottom NP, Loda Cemetery Prairie NP, Upper Sangamon River LWR, Embarras Bluffs NHL, and Luke Woods NHL.
7. Area 7 (Newman): Prairie of the Rock NP, Salt Lick Point LWR, Prairie of the Rock Overlook LWR, DesPain Wetlands LWR, Martha and Michelle Prairie LWR, Harry's Prairie NHL, and Pere Marquette SP.
8. Area 8 (Edgin): Beadles Barrens NP, Beall Woods NP, Lost Creek Marsh NP, Robeson Hills NP, Jasper County Prairie Chicken Sanctuary NP, Marion County Prairie Chicken Sanctuary NP, Padgett Pin Oak Woods LWR, P & E Refuge LWR, Karl Bartel Wildlife Sanctuary LWR, Horn Prairie Grove LWR, Chauncey Marsh LWR, Richard R. and Jean W. Graber Grasslands LWR, Lake Sara Flatwoods NHL, Green Prairie NHL and Green Prairie NHL, Pyramid SP, Ramsey Lake SP, Stephen Forbes SP, Ballard Nature Center, Iroquois County Conservation Area, and Crawford County Conservation Area.

**V. Training, Presentations, and Meetings Attended:**

- A. Kelly Neal and Jenny Skufca reviewed Wildlife Preservation Fund (WPF) proposals and represented the INPC at the WPF grant ranking meeting.
- B. Randy Heidorn:
  1. Participated in the spring meeting of the Natural Areas Association (NAA) Board of Directors. Mr. Heidorn serves as the Vice President of the NAA. At this meeting, he also participated in partner meetings with the U.S. Department of Agriculture, Forest Service, and Bureau of Land Management. He also attended educational meetings with staff of members of the U.S. Congress. The latter meetings were conducted with Kay Havens of the Chicago Botanic Gardens. The primary goal of the meetings was to make members aware of the impending shortage of botanical and other field biology professionals within the work force, and the possible impacts on conservation efforts of governmental and non-governmental agencies.
  2. Participated in the Northeast Climate Science Center listening session hosted by the Eastern Tallgrass Prairie and Big Rivers Landscape Conservation Cooperatives in Champaign.
  3. Participated in discussions with CW regarding a potential Chicago area location for the 40<sup>th</sup> Natural Areas Conference in 2013.
- C. Kim Roman, on behalf of the INPC, was awarded Audubon's Grassroots Conservation Leadership Award for work at Old Plank Road Prairie NP.

**Report on the ESPB research/strategic funding program to address the status, conservation, and/or recovery of Illinois endangered or threatened species**

Submitted by Anne Mankowski, Director  
for the 154th Meeting, May 11, 2012

An important effort of the Endangered Species Protection Board is to gather information that will improve our knowledge of various species in Illinois and help lead toward listing decisions for those species. As per the ESPB Policy Manual, “The Board may conduct, sponsor, or administer research in an effort to gather information, which will improve knowledge of various species in Illinois and help lead toward listing decisions for those species. Board philosophy on the conduct of research is that none will be supported or endorsed unless it clearly provides information pertinent to listing, or generates information important to management strategies that can enhance protection or lead to recovery. The Board will not support/endorse any research that poses threat to listed species.” (ESPB Policy Manual, Section 5.2)

At the Board’s February 24, 2011 strategic planning meeting, the Board confirmed that Board staff should develop and maintain a list of potential funding priorities to include research and other strategic operations that best help the Board address its duties. Subsequent to that meeting, Ms. Mankowski met with IDNR Procurement staff to confirm that the prescribed process, which follows, complies with State of Illinois Procurement Law.

- 1) Board staff will develop and maintain a list of priorities based on experience gained during daily operations of Board business and function, using information about needs garnered from multiple sources including, in no particular order, natural resources agencies, research institutions, conservation organizations, conservation working groups, ESPB TECs, and ESPB members.
- 2) Board staff will present a list of recommended priorities for Board review and approval at intervals necessary to accomplish projects or tasks. Once approved, staff are authorized to execute list as funding and time allows and have discretion to modify the list as needed and in consultation with the Chair.
- 3) Board staff will be responsible for scoping project specifications. If a request for proposals is necessary, Board staff will work with IDNR to post the RFP as per IDNR practice. Unless the Board delegates it as staff function, the Board will review proposals, rank, and vote for recommendation for/approval of funding - which may require a special meeting to meet timing requirements of the RFP process and contracting (see also #4 regarding conflict of interest). Once this step is complete, staff are authorized to execute list as funding and time allows.
- 4) Board members who may have a real, or perceived, conflict of interest, as defined under State of Illinois Ethics Law, will acknowledge the conflict and recuse themselves from any aspect of Board business that leads to a procurement action - such as discussion, ranking, and/or voting involved with the development, approval, or contracting of projects. A majority of eligible voting members will constitute approval of Board staff recommendations. Board members need to determine for themselves where conflicts may lie – a general direction provided under State of Illinois Ethics Law includes friends, family members, associates, places of employment.

**Currently Funded, FY11 Research Projects**

Contract #	Title	Researcher/ Institution	Award Amount	Start Date	End Date
RC11E04W	Investigating the role of genetic diversity and pollination biology as potential causes for reproductive failure in <i>Asclepias lanuginosa</i> (wooly milkweed). Since it was amended to a multiyear project, will require a first year report.	Jeremie Fant and David Zaya / CBG and UIC	\$7,632	01/03/2011	02/28/2012 Amended to 02/28/2013

RC11E02W	Gene Flow among Populations of the Four-Toed Salamander, <i>Hemidactylium scutatum</i> . Since it was amended to a multiyear project, will require a first year report.	Abigail J. Maley / INHS/UIUC	\$5,000	03/01/2011	12/31/2011 Amended to 12/31/2012
RC11E01W	Evaluation of Distribution, Movements, and Habitat Use of River Redhorse ( <i>Moxostoma carinatum</i> ) and Greater Redhorse ( <i>Moxostoma valenciennisi</i> ) in the Upper Illinois River Basin.	David H. Wahl / INHS/UIUC	\$8,500	04/01/2011	03/31/2012
RC11E03W	Baseline monitoring and molecular characterization of the state endangered Enigmatic Cavesnail, <i>Fontigens antroecetes</i> (Hubricht 1940) Since it was amended to a multiyear project, will require a first year report.	Steven J. Taylor, Marlis Douglas, Jeremy Tiemann, and Robert Weck / INHS/UIUC and individual	\$2,878	01/03/2011	10/15/2011 Amended to 12/31/2012

## ESPB Director Recommended Research / Strategic Funding Priorities

### **1a) Partner with DNH to fund a shared Natural Heritage Database Data Specialist staff position**

This proposes to investigate the feasibility for the ESPB and DNH to jointly fund a shared Data Specialist position which would be hired through the ESPB. The Natural Heritage Database is the primary source of data used by the ESPB for the revision of the Illinois List of Endangered and Threatened Species and the production of all outreach and technical publications and is used by the IDNR to support its endangered and threatened species consultation, incidental take, and permit programs as well as supporting Illinois Natural Areas Inventory and Illinois Nature Preserves Commission programs. This critical service is not without costs. The Database is supported by the NatureServe network and the annual membership for IDNR is currently \$20,000. The Database only has two staff and ESPB data requests represent a significant portion of their workload. The ESPB need for, and use of data, increases significantly during the several years surrounding a List revision and supporting a staff position will mean that ESPB can “carry” some of the workload and help to increase Database support for all program needs.

### **1b) Species Surveys to Update Natural Heritage Database Animal EORs**

This proposes to add ESPB funding to an ongoing IDNR Illinois Wildlife Preservation Fund project for surveys to update animal element occurrence records that are greater than 10 years old. The multi-year project began in FY10 and is addressing one region each year. WPF funding is insufficient for complete coverage. Below is a listing of historic animal EORs as of 2010. (Plant updates are being covered under a current Phillippe, et al. project.)

E&T animal occurrences that have not been visited/surveyed in > 10 yrs (as of 2010)

Region	Fish	Inverts	Birds	Mammals	Herps	Totals
1	54	54	14	3	36	161
2	55	30	41	1	49	176
3	49	36	11	3	8	107
4	25	25	18	18	34	120
5	27	95	28	58	32	240
<b>Totals</b>	210	240	112	83	159	804

ESPB staff and IDNR staff (Tara Kieninger, Natural Heritage Database Manager) have partnered on WPF proposals in the past to fund one \$34,000 project annually to address each IDNR Region, starting with the region with the most outdated EORs. A project was funded in FY11 for Region 5. A project was approved for FY12 for Region 2, but the IDNR instead directed that year’s \$34,000 to further fund the Illinois Natural Areas Inventory update project.

Ms. Mankowski developed, and Jim Herkert and John Rogner approved, a SWG proposal, to conduct the remaining four regions (IDNR Regions 1-4) in one year. The project calls for \$168,000 total; with \$109,200 from SWG; \$33,800 from ESPB WPF (\$25,000 from ESPB WPF FY12 and \$13,800 from ESPB WPF FY13); and, \$20,000 from IDNR WPF FY13. Ms. Mankowski will act as project manager and coordinate with IDNR Natural Heritage Database staff as necessary.

## **2) Development of Species Recovery Strategies/Recovery Plans**

As per the Board's policy manual, the Board generally only endorses proposed translocations/reintroductions that are a component of an overall species recovery strategy. For many of the efforts mentioned below there is no species recovery strategy - activities are being conducted in somewhat of a piecemeal approach and it would be good to have overarching recovery plans developed so that all partners are on the same page, following the same guidance, and coordinating efforts. It is probably not practical to attempt to develop these for all listed species.

### ESPB/IDNR approved Illinois Recovery Plans:

River Otter  
Eastern Wood Rat  
Greater Prairie-Chicken  
Barn Owl

### Illinois Recovery Plans under development:

Eastern Massasauga Rattlesnake  
Blanding's Turtle

## **3) Development of Species Status Review Triggers**

It would be helpful in List reviews and in the development of recovery documents to have ESPB approved species status review triggers; population status and distribution thresholds that would trigger a species listing status review by the ESPB to consider changes between endangered, threatened and de-listed status. It is probably not practical to attempt to develop these for all listed species.

### ESPB approved Status Review Triggers:

Peregrine Falcon  
Osprey  
Henslow's Sparrow  
Northern Harrier  
Short-eared Owl  
Greater Prairie-Chicken (as part of recovery plan)  
Barn Owl (as part of recovery plan)  
Wood Rat  
Rice Rat  
Golden Mouse

## **4) Establish Eco-toxicological Thresholds for Aquatic Species**

Although general trend data for Illinois suggests that water quality has improved over a decade or two, there have been limited improved status changes for many aquatic species, especially mussels, and far more have been down-graded or de-listed due to extirpation, with water quality is likely a primary factor. It would be informative to establish acute toxicity, LOEL, and NOEL, thresholds for a number of typical water quality constituents for listed mussel species or appropriate surrogate species, if appropriate (in many cases these can be species-specific thresholds). It may also help us refine site selection for reintroductions as part of recovery efforts. The USFWS did this a few years ago for ammonia, which resulted in the USEPA lowering the low-end for allowable ammonia because it was demonstrated that existing levels were actually killing and impairing federally listed mussel species.

## **5) Climate Change Vulnerability Assessment for 2014 List Revision**

This proposes to develop a vulnerability assessment for Illinois endangered and threatened species, that could be used during the List revision ending in 2014. One recently conducted evaluation that can be used by the Board and may provide a good example for conducting further and additional assessments is the IDNR SWG project *Adapting Conservation to a Changing Climate: An Update to the Illinois Wildlife*

*Action Plan (2011)*, by Jeff Walk, Sarah Hagen, and Aaron Lange of the Illinois Chapter of the Nature Conservancy. The authors used the NatureServe *Climate Change Vulnerability Index* and reviewed 162 species by natural division and/or watershed, and including summary descriptions by taxonomic group.

**6) Re-survey to update EORs for *Berberis canadensis* (Allegheny Barberry) and *Euphorbia spathulata* (Spurge)**

*Berberis canadensis* (Allegheny Barberry). Ebinger et al (*Ebinger, et. al. 2010. Vascular plant species extirpated or not vouchered as occurring in Illinois. Erigenia, Number 23, Winter 2010, 3-23*), consider this species to be extirpated in Illinois and note the last observation as 1987. The Illinois Natural Heritage Database indicates the 1987 last observation and last surveyed in 1988. In March 2010, Ms. Mankowski sent query to the ESPB Plant ESTAC regarding the Ebinger et al (2010) conclusions and indicated her intent to recommend de-listing of the species based on the study. In response, some members of the ESPB Plant ESTAC felt that the non-occurrence information needed to be further verified before being considered extirpated.

*Euphorbia spathulata* (Spurge). Ebinger et al (2010), consider this species to be extirpated in Illinois and note the last observation as 1987. The Illinois Natural Heritage Database indicates the 1987 last observation and last surveyed in 2008. In March 2010, Ms. Mankowski sent query to the ESPB Plant ESTAC regarding the Ebinger et al (2010) conclusions and indicated her intent to recommend de-listing of the species based on the study. In response, some members of the ESPB Plant ESTAC felt that the non-occurrence information needed to be further verified before being considered extirpated.

Update - Ms. Mankowski contracted Randy Nyboer to conduct surveys in the Spring of 2012 at each historic locations and submit EORs to the Natural Heritage Database. The project total is \$870. Information from the surveys will be used in the List review for these species.

**Project summaries for FY09 and FY10 ESTAC priorities that were not funded by ESPB and not again recommended as priorities (notes included if subsequently funded otherwise).**

**Nightjar Survey**

Although there are currently no long-term monitoring projects focused exclusively on nightjar populations in Illinois, evidence from other surveys (such as the Breeding Bird Survey) suggest that populations of Whip-poor-wills and Chuck-wills-widows are in steep decline. Proposals are requested to establish or continue systematic nightjar monitoring throughout Illinois.

**Survey and Monitoring of the Smooth Softshell Turtle**

This project aims to determine the present occupancy of historic sites and locate new sites of the Smooth Softshell Turtle (*Apalone mutica*). The survey should initially target historic locations then expand to additional suitable sites as time and money permit. At the best site, a long-term monitoring program should be established.

**Habitat Suitability and Occurrence of Three Reptile Species of Concern**

This project aims to use historic specimen records to develop GIS-based habitat models for three poorly known Smooth Green Snake (*Opheodrys vernalis*), Slender Glass Lizard (*Ophisaurus attenuatus*) and Eastern Hognose Snake (*Heterodon platirhinos*). The GIS model should be able to be used to determine the extent of suitable habitat remaining in the state and to choose future surveying locations.

**Reproduction and Recruitment of the Eastern Narrow-Mouth Toad**

This project aims to determine reproduction in the Eastern Narrow-Mouth Toad (*Gastrophryne carolinensis*). The project should include drift fence techniques on at least two populations. Focal data should include breeding population size, point counts of calling males, and estimates of larval and breeding adult survivorship. In addition, a subset of individuals should have tissue samples taken and those samples should be archived for future genetic studies.

**Status and distribution of the bluntnose darter (*Etheostoma chlorosoma* (Hay) and pugnose minnow (*Opsopoeodus emiliae* Hay) in Illinois.**

The bluntnose darter and pugnose minnow are two species with similar habitat preferences and distributions in Illinois. Both species are found in bottomland lakes, - backwaters of larger rivers and also in smaller, slow flowing creeks in southern Illinois. Smith (Fishes of Illinois, 1979) noted that both species had declined in the State. Since that publication, collection records at the Illinois Natural History Survey and Southern Illinois University at Carbondale suggest a significant decline since 1979. Proposals are requested to assess the status and distribution of both species in the state. Additional habitat information is expected to be collected with status and distributional information. The information will be used to evaluate the need to list each of the species as threatened or endangered in Illinois.

**Status and Distribution of the trout-perch (*Percopsis omiscomaycus*) in Illinois.**

The trout-perch *Percopsis omiscomaycus* (Walbaum) is a small forage fish that occurs sporadically in the Great Lakes and in large rivers and their floodplains. It occurs over sand/gravel and occasionally woody debris, feeds on benthic organisms, and spawns from March to August. The trout-perch appears to be susceptible to environmental disturbances, such as pollution and sedimentation. The fish is rare and its distribution might be declining in Illinois and bordering states. In Illinois, the trout-perch has been collected only a few times in the Lake Michigan and Illinois River basins since 1980, and seems to be extirpated from the Mississippi River. Little is known about the total distribution or habitat requirements for this species in Illinois. This study would define the total distribution, habitat requirements, and status of this fish in Illinois to evaluate it for potential listing and to better understand which streams may need additional protection and restoration.

**Status of *Ammocrypta clarum* (Western Sand Darter) in the Middle Kaskasia River and *Fundulus catenatus* (Northern Studfish) in Southwestern Illinois.**

A review of historical records for both species in the geographic area discussed will be made. Historic sites will be visited for sampling. Records at the Illinois Natural History Survey Fish Collection, at Southern Illinois University at Carbondale, and in IDNR stream survey reports will be consulted to determine historic sites and used to qualitatively determine changes in abundance. In addition, at least ten new sites within the area will be sampled. Methods for sampling should be appropriate for the each of the species and the habitats of the collection sites. Methods include but need not be limited to various types of seines, traps, and electroshocking devices. Specimens will be digitally photographed and vouchered at the Illinois Natural History Survey Fish Collection. Individuals that perish during capture will be preserved and deposited at the Illinois Natural History Survey Fish Collection. We anticipate that this is a one-year study.

**Predacious Diving Beetle Assessment**

Our knowledge of Illinois' Predacious Diving Beetles (Coleoptera: Dytiscidae), one of the dominant families of water beetles (Coleoptera: Dytiscidae) is very limited. In particular, study of the diverse subfamily Colymbetinae, which includes Illinois' largest predacious diving beetles and potentially as many as 120 Illinois species, and the smaller subfamily Dytiscinae (less than 30 species possible in Illinois), which includes taxa with diverse life histories and occurring in a variety of lentic and lotic habitats, could inform management of aquatic resources. There has never been a synthetic Illinois checklist for these beetles in spite of the availability of a large volume of older material in collections (notably large quantities of unsorted material collected by Ross, Sanderson, and Brigham). This older material would be of great historic value in assessing a faunal baseline for the state in comparison to recent collections. An inventory of Illinois museum material supplemented with additional field collections would provide new data on statewide distributions, life history, and ecology of these primarily lentic aquatic organisms. Distributional and biogeographic data suggest that some Illinois species are sensitive to habitat and water quality parameters. A status assessment of Colymbetinae and Dytiscinae is needed. This study should be based both on field collections and examination of museum material, and would allow assessment of the possible need for some taxa to be considered for listing as threatened or endangered at the state level. Because of the large number of species in these two subfamilies, submitted proposals should consider restricting work to one or more ecoregions of the state.

### **Glacial Relict Monitoring**

Ongoing climate changes are predicted to have a dramatic impact on the distribution of forest trees in Illinois (Prasaad et al., 2007, Iverson et al. 2008, Iverson et al. 2009), including a movement of optimal habitat for some species to the north of Illinois. Climate change likely not only effects the potential distribution of trees but also for shrubs and herbaceous species in Illinois. Numerous plant species listed as threatened or endangered by the IESPB reach their southern range limits in the Midwest in northern Illinois (e.g., *Adoxa moschatellina*, *Botrychium multifidum*, *Circaea alpina*, *Clematis occidentalis*, *Cornus canadensis*, *Corydalis aurea*, *Corydalis sempervirens*, *Cyclopteris laurentiana*, *Equisetum sylvaticum*, *Equisetum scirpoides*, *Gymnocarpium dryopteris*, *Gymnocarpium robertianum*, *Lycopodiella inundata*, *Lycopodium clavatum*, *Lycopodium dendroideum*, *Phegopteris connectilis*, *Primula mistassinica*, *Rosa acicularis*, *Thelypteris phegopteris*, *Trientalis borealis*, *Viola canadensis*, *Woodsia ilvensis*, and *Zigadenus elegans*). In some cases, these species occur in Illinois in relict populations, apparently representing remnants following late Pleistocene or early Holocene distributions. Climate change including warming could be expected to reduce habitat suitability for many of these species. **Research Questions:** Is there a general pattern of decline associated with northern relict species? Are particular plant functional groups or physiognomic groups particularly vulnerable to climate changes? If declines are detected, can the general pattern be attributed to climate changes more so than other factors?

### **Experimental Reintroduction of Species Extirpated from Illinois**

About 55 plant species are considered to be extirpated from Illinois (Post 1991) and more have been added to that list in recent years (e.g., *Equisetum palustre*, *Gaultheria procumbens*, *Lactuca ludoviciana*, *Lathyrus japonicus*, *Milium effusum*, *Scheuchzeria palustris*, *Pycnanthemum albescens*, *Triadenum virginicum*). One means of recovery of this loss of Illinois' botanical diversity could include experimental reintroductions. One excellent example of attempts at re-establishing an extirpated species is with *Cirsium pitcheri* (Bowles et al., 1993, Bell et al. 2002). Illinois genotypes are probably lacking for most if not all of these species, so for experimental re-introductions it is recommended to use stock from the nearest available populations to Illinois. **Research Questions:** Can cause of decline be determined for each species? Does apparently suitable habitat remain in Illinois? What propagation methods are viable for each species?

### ***Polygala incarnata* germination ecology**

*Polygala incarnata* is a myrmecochorous species that seems to appear most reliably following fire events. The biology of ant dispersal, which can be considered a fire escape mechanism, and interactions with fire in explaining population trends needs to be understood to better manage this species listed as endangered throughout the eastern tallgrass prairie region (considered secure to the southern portions of its range). While all *Polygala* species are considered to be myrmecochorous, it is not known what ant species are involved with *P. incarnata* or what is the effect of ant-dispersal on germination. **Research Questions:** Do ants place seeds into safe sites avoiding fire-related mortality while exposing seeds to heat-stimulated germination (intermediate soil depth)? Are seeds buried at times too deeply for heat stimulation or too shallow to survive fires? Can recruitment be improved with manipulated seeding at particular soil depth? Can seeds be stimulated to germinate with experimental heating (hot water treatments)? Is recruitment in burned sites limited by competition?