

ILLINOIS ENDANGERED SPECIES PROTECTION BOARD

MINUTES OF THE 144th MEETING

MIDEWIN NATIONAL TALLGRASS PRAIRIE, WILMINGTON, IL

13 NOVEMBER 2009

(Approved at the 145th meeting, February 19, 2010)

BOARD MEMBERS PRESENT: Vice-Chair Marilyn Campbell, Secretary Chris Phillips, Dr. Mike Retzer, Ms. Susanne Masi, Dr. John Taft, Mr. John Clemetsen, Dr. James Herkert

BOARD MEMBERS ABSENT: Chairman Dan Gooch

OTHERS PRESENT: Mr. Bill Byrns (The Daily Journal, Kankakee); Ms. Amy Enchelmeyer (Medill News Service); Mr. Ed Britton, Mr. Jeramie Strickland, and Mr. Mike Redmer (U.S. Fish and Wildlife Service); Ms. Susan Dees (Illinois Department of Transportation); Dr. Mike Dreslik (University of Illinois Urbana-Champaign - Illinois Natural History Survey); Ms. Kelly Neal (Illinois Nature Preserves Commission); Mr. Don McFall, Ms. Maggie Cole, Ms. Jeannie Barnes, Mr. Bob Bluett, Mr. Ed Anderson, and Mr. Joe Kath (Illinois Department of Natural Resources – Office of Resource Conservation); Ms. Tracy Evans, Ms. Kathi Davis, Mr. Zachary Rasche, and Mr. Justin Ramey (Illinois Department of Natural Resources – Office of Realty and Environmental Planning); Mr. Glen Kruse; and, Ms. Anne Mankowski (Endangered Species Protection Board).

144-1 Call to Order, Welcome and Introduction of Guests

Vice-Chair Campbell called the 144th meeting of the ESPB to order at 10:00 A.M. Secretary Phillips called the roll call of Board Members and Vice-Chair Campbell noted that there was a quorum. Meeting attendees introduced themselves.

144-2 Adoption of Agenda

Vice-Chair Campbell asked if there were any changes to the agenda. None were noted and Mr. Clemetsen moved to approve the agenda, Dr. Herkert seconded the motion, and it was approved unanimously.

144-3 Approval of the Minutes of Previous Meeting

Vice-Chair Campbell asked if there were any corrections to the draft minutes of the 143rd meeting. Dr. Taft indicated that he had a few copy edit corrections and would forward those to Ms. Mankowski via email. Dr. Phillips moved to approve the minutes as final with those forthcoming edits, Ms. Masi seconded the motion and it was approved unanimously.

144-4 ESPB Staff Report

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

144-5 IDNR Staff Report

Mr. Don McFall, Chief of the Division of Natural Heritage, gave his report (Attachment B).

144-6 INPC Staff Report

Ms. Kelly Neal, Stewardship Project Manager of the Illinois Nature Preserves Commission, gave her report (Attachment C).

144-7 ESPB Budget

Ms. Mankowski reviewed the status of the Board's budget, noting that the Board has been without a budget since 2002. The current DNR-funded contract with the Illinois Natural History Survey that solely covers the personnel services expenses to employ the Board's Director has been renewed for FY10. At its 143rd meeting, the Board approved a FY11 Budget request that was subsequently sent to DNR Director Marc Miller. That request is for \$329,800 to reinstate the full staffing and performance of the Board by funding three staff (including operating expenses), reestablishing the Board's research program that currently relies solely on an annual allocation of \$25,000 from the Wildlife Preservation Fund, and reimbursing member expenses incurred in the performance of their duties.

144-8 ESPB Member Appointments

Ms. Mankowski provided an update of the status of member appointments and reappointments. The Board currently has one vacancy, five members serving on expired terms, and one member who wished not to be reappointed and is serving until replaced. Following the Board's 142nd meeting, a package of letters of recommendation for the reappointments and appointment listed below, was sent to DNR Director Marc Miller who approved and forwarded his recommendation of all, to the Governor's Office on June 3, 2009. By forwarding these letters, the Board is continuing its traditional practice for making recommendation for Board Member appointments, and that practice is now in addition to the process required via the Appointments.Illinois.Gov website.

Ms. Marilyn Campbell – reappointment with a term ending May 15, 2010.

Dr. Mike Retzer – reappointment with a term ending May 15, 2011.

Ms. Susanne Masi – reappointment with a term ending May 15, 2011.

Mr. R. Dan Gooch – reappointment with a term ending May 15, 2012.

Dr. James Herkert – reappointment with a term ending May 15, 2012.

Dr. Joyce Hofmann – new appointment with a term ending May 15, 2010 (this is an abbreviated term in order to restore the rotation of three members being appointed each year).

Ms. Mankowski explained that, at its 143rd meeting, the Board approved a recommendation, and a letter was subsequently sent, to DNR Director Marc Miller and Governor Pat Quinn recommending the appointment of Mr. Glen W. Kruse to the Board (to replace Dr. Chris Phillips). Ms. Mankowski stated that all of these appointments and reappointments were still pending and that she would continue checking on the status. Dr. Herkert then addressed the Board to advise that he would be resigning his membership effective at the close of the 144th meeting to avoid conflict with his appointment as the IDNR Office of Resource Conservation Director, set to begin in December, 2009. Vice-chair Campbell asked to identify a subcommittee to nominate a new Board member to replace Dr. Herkert's position. Mr. Clemetsen and Dr. Retzer agreed to join Vice-chair Campbell on the subcommittee and the group stated their intention of nominating a candidate at the 145th meeting to be held in February, 2010.

144-9 Endangered Species Technical Advisory Committee (ESTAC) Composition Review, ESPB Policy Manual / ESTAC Manual Discussion

Ms. Mankowski reviewed that the Board has established and authorized six Endangered Species Technical Advisory Committees to advise the Board and that the Board has a policy to review ESTAC composition prior to each list review and revision effort. She indicated that she was working on an ESTAC Manual to help ESTAC members understand the roles, functions, and responsibilities of the ESTACs and the Board and planned to wait until that document was ready for distribution before beginning the ESTAC review process. She added that updating and revising the Board's Policy Manual would be necessary before finalizing an ESTAC Manual so

that both documents were current and compatible. Ms. Mankowski distributed to Board members CD copies of her draft proposed revisions to the Policy Manual and the Board agreed to further discuss and review the document during its strategic planning meeting to be held in February, 2010.

144-10 Species Updates

Ms. Mankowski, ESPB, reported on items #1-11

1. The Plant ESTAC is still working to verify information about voucher specimens for *Penstemon brevisepalus* (**short-sepaed beard tongue**) in order to possibly make a delisting recommendation to the Board. The ESTAC was not able to verify information about voucher specimens in time for the November meeting. Listing recommendation discussion will be deferred until the February meeting.

2. Ms. Mankowski visited a site in Alexander County to verify a recent re-discovery of *Thalia dealbata* (**powdery thalia**). The species was deemed extirpated and removed from the List in the 2004 revision, and if re-discovered could be considered for re-listing. Ms. Mankowski visited the site with District Natural Heritage Biologist Bob Lindsay and Regional Administrator Jody Shimp, to find that the plant had been dug-up from the site. Bob Lindsay will visit the site again in 2010.

3. **Barn Owl (*Tyto alba*)** recovery planning and implementation State Wildlife Grant project - Ms. Mankowski and Dr. Jeff Walk met with other members of the recovery team (Terry Esker and Maggie Cole, IDNR Natural Heritage) and other staff from IDNR to review the proposed schedule and workload for this project (below). The schedule includes plans for coordinating review with the Board and Bird ESTAC.

T-35-P1 Illinois Barn Owl Recovery Plan & Implementation

TIME	Jeff's Tasks	Team Tasks	Other Tasks
Fall 2009	Start-up Status review, EORs Literature review Review DuPage Co project Compile 1 st draft	Initial meeting Review DuPage Co project Suggest content, recovery criteria, strategies	Notice to DNR, ESTAC
Winter 2010	Complete 1 st draft → → Site evaluations --- Evaluate, recommend nest box/nest structure designs ---	Review 1 st draft → → Site evaluations	Opportunity for DNR, ESTAC comments [Erect nest boxes/structures]
Spring 2010	Review DNR, ESTAC feedback Site evaluations Revise, complete final draft → Edit as necessary	Review DNR, ESTAC feedback Site evaluations Review final draft → →	DNR, ESTAC final review Present to ESPB for approval
Summer 2010	(Final Plan to USFWS by 30 June 2010) Prepare Annual Progress report to USFWS -----Implementation, nest box/structure deployment, monitoring-----		
Spring/Summer 2011 (through June 2011)		Team meeting, progress evaluation -----Implementation, nest box/structure deployment, monitoring-----	

4. Ms. Mankowski began working with Kim Roman, Natural Areas Preservation Specialist with the Illinois Nature Preserves Commission, on developing a recovery outline for *Platanthera ciliaris* (**orange fringed orchid**) and evaluating possible recovery actions of nine associated listed plant species in the Kankakee Sands

area. If the outline and planning process proceed to developing a statewide plan, Ms. Mankowski will contact the Plant ESTAC about review.

5. Ms. Mankowski is working with the Invertebrate ESTAC and other experts to assist the USFWS Rock Island Field Office in compiling status and distribution data for four invertebrate species that are currently being considered for candidate status: **Bluff Vertigo** (*Vertigo meramecensis*), **Frigid Ambersnail** (*Catinella gelida*), **Minnesota Pleistocene Succineid** (*Novisuccinea n. sp. minnesota a*), and **Iowa Pleistocene Succineid** (*Novisuccinea b*).

6. Ms. Mankowski is working with the USFWS Rock Island Field Office, IDNR, and several other partners in developing a **Decurrent False Aster** (*Boltonia decurrens*) Conservation Agreement for Managed Lands in the Illinois River and Mississippi River Floodplains.

7. IDNR Division of Fisheries copied Ms. Mankowski on their letter dated October 7, 2009 providing comments on proposed Federal Incidental Take Permit for **Higgins' eye pearly mussel** and **sheepnose mussel** requested by Exelon Inc. associated with the Quad Cities Nuclear Station near Cordova, Illinois. The application addressed three items: (1) implementation of an alternate thermal standard for discharge waters associated with operation of the Quad Cities Nuclear Station, (2) maintenance dredging associated with water intake structures, and (3) removal of a pier. The IDNR supported the issuance of an incidental take permit for both the maintenance dredging and pier removal. The IDNR expressed considerable concern regarding the proposal to implement and alternate thermal standard for discharge waters and disagreed with the applicant's conclusion that an estimated take resulting in the loss of one year class of federally endangered mussels every 5 years due to "vulnerabilities of juveniles and host fish to warm water stresses" won't be detectable beyond existing recruitment variation and is therefore insignificant.

8. Board staff and ESTACs reviewed and provided comment on 5 incidental take authorization conservation plans during the last quarter: ITA CP for the City of Grafton (water and sewer utility work), Jersey County (**Great Plains Ratsnake** - *Elaphe emoryi*; **Timber Rattlesnake** - *Crotalus horridus*); ITA Conservation Plan for the Exelon Nuclear Braidwood Diffuser, Will County (**Purple wartyback mussel** - *Cyclonaias tuberculata*; **Spike mussel** - *Elliptio dilatata*; **Sheepnose mussel** - *Plethobasus cyphus*; **Pallid shiner** - *Notropis amnis*; and, **River redhorse** - *Moxostoma carinatum*); ITA Conservation Plan for the City of Winchester Water Treatment Facility and Well, Scott County (**Illinois chorus frog** - *Pseudacris streckeri*); ITA Conservation Plan for Wal-Mart construction in Johnsbury - McHenry County (**Blanding's turtle** - *Emydoidea blandingii*; **sandhill crane** - *Grus canadensis*); and, ITA CP for T.R. 427 (1270E) project over Fayette Creek, BDE Seq. No. 15251, Vermilion County (**Slippershell** - *Alasmidonta viridis*; **Little Spectaclecase** - *Villosa lienosa*).

9. At the 143rd meeting of the Board on August 14, 2009, Dr. Mike Dreslik presented proposed **Eastern Massasauga Rattlesnake** de-listing criteria for the Board to consider approving. Dr. Dreslik was notified that the Board could not review such material without the requested 30-day advance notice and request to address the Board as an agenda item. Dr. Dreslik subsequently submitted the proposed de-listing criteria below for review at the Board's 144th meeting. Ms. Mankowski made recommendation to the Board that since the criteria are out of context as presented (as a stand-alone list and without the supporting documentation and reference material from the recovery plan), there isn't enough information to evaluate at this time and that the Board should wait for the draft recovery plan or more supplemental information. The Board agreed with Ms. Mankowski's recommendation.

Eastern Massassauga Rattlesnake – proposed de-listing criteria presented by Dr. Mike Dreslik

SECTION III OBJECTIVES

- 1) Move from Endangered to Threatened
 - i) Have at least one viable population in IL
 - ii) Have an initial breeding colony
- 2) Move from Threatened to Secure
 - i) Have two viable populations in each of the following Illinois Natural Divisions:
 - (a) Grand Prairie
 - (b) Southern Till Plain
 - (c) Western Forest Prairie
 - (d) Northeast Morainal
 - ii) Have two captive breeding colonies from natural stock for
 - (a) Reintroductions
 - (b) Assurance

10. Proposed Project - Reestablishing a Viable Population of **Ornate Box Turtles** (*Terrepenne ornata*) on the Lost Mound Unit of the Upper Mississippi River National Wildlife Refuge.

Ms. Mankowski met with IDNR Natural Heritage and INPC staff to discuss the proposed project (see also, agenda item 144-15) and ESPB recommendations to the IDNR and INPC about respective permits.

Mankowski comments: The presenters' interest and work to-date is greatly appreciated, the proposal has merit and indeed, Lost Mound will likely be a logical place for any restoration projects that may be considered in the future. However, the current proposal does not satisfy some of the basic criteria for translocation of a listed species as per the ESPB Translocation of Endangered and Threatened Animal Policy - demonstration that the project will not harm the proposed donor populations, whether genetics warrant action and/or are compatible, that the project has high probability of success (based on other species-specific or surrogate examples), and there needs to be more rigorous data and evidence presentation and citation, etc. Even if the whole project is not approved, Mr. Britton is still seeking approval from the ESPB and permit from the IDNR to continue conducting translocation work between USFWS property (Thomson Prairie) to USFWS property (Lost Mound).

Mankowski recommendations: 1) Because the proposal does not satisfy the criteria of the Translocation Policy, it is recommended that the Board make recommendation to IDNR and INPC to not issue permits for this project as proposed. Based on discussion with IDNR and INPC, those agencies are in agreement; 2) Because there is insufficient data to demonstrate that harvest of adults or eggs will not harm the Thomson Prairie population, and it is uncertain whether animals that might be harvested from Thomson Prairie may actually be originating from Thomson-Fulton Prairie NP and/or moving between the sites, it is recommended that the Board make recommendation to the IDNR to not issue permit for that project either until data demonstrates the need for such actions or that such actions will not harm either population; and, 3) while not necessarily the responsibility of the applicant, there is likely need for a formal State Recovery Plan, approved by the IDNR and ESPB, for this species and it might be best to have this overall project developed and evaluated in the context of a State Recovery Plan. If the Board funds the "Surveys for the ornate box turtle in Illinois" FY10 project, we may know more about how and where to proceed with conservation efforts for this species.

11. Iowa State University Turtle Camp - An Iowa State University webpage promotes an ISU sponsored Turtle Camp that highlights various field activities involving multiple listed species at an Illinois Department of Natural Resources owned and managed Nature Preserve. Ms. Mankowski met with IDNR Natural Heritage and INPC staff to discuss the status of permits for the subject event identified on an ISU webpage as taking place at

Thomson-Fulton Sand Prairie Nature Preserve. The IDNR and INPC indicated they would contact the lead researcher to notify him that permits are required for such event and have never been issued and advise of potential penalties. They will also request that all listed species location information be removed from the webpage.

12. Dr. Herkert provided an update on the Bird ESTAC review of the **peregrine falcon**. He stated he had obtained the 2009 breeding season data, it appeared to be a relatively good year for the species in Illinois, and that the entire ESTAC had not yet convened to discuss the data. Dr. Herkert indicated that he would try to convene the ESTAC prior to the 145th Board meeting to review the data, including running the population viability assessment model, and prepare recommendations for the Board to consider. Vice-chair Campbell asked if any of the nesting locations were on natural substrate. Dr. Herkert explained that there are reports of birds in natural locations although details are often limited, but the data with the best information about nest success and number of young, for example, is predominantly from the Chicago area and dominated by unnatural substrate.

13. Ms. Masi reported that at one location for *Asclepias lanuginosa* (**wooly milkweed**) a plant produced a pod for the first time since 1983, but subsequently the pod follicle has gone missing and it was unclear whether it is a result of herbivory or some other reason. She also reported that *Utricularia subulata* (**hair bladderwort**), which received preliminary recommendation for listing in May 2009, was found again this year. Ms. Masi went on to report that the Chicago Botanic Garden's Plants of Concern program had a productive field season and they were still working on reports to submit to the Illinois Natural Heritage Database.

Mr. Kath, IDNR Natural Heritage, reported on items #14 – 26 (text presented as submitted)

14. 11/13/09: De-listing criteria presentation by Bob Bluett/J.Kath - Mammal ESTAC - for **Golden Mouse, Rice Rat, and Eastern Woodrat**:

-First "nuisance" woodrat reports received in October, 2009: From Shawnee NF, near Vienna: animals chewing on homeowner's electric wiring for hot tub and main wiring underneath home - FS/IDNR/SIUC working with landowner to trap and remove animals.

15. **Alligator Snapping Turtle**: Recovery Team conference call held on 10/19/09.

-Pilot Release Study #2: Southern Illinois Creek - Alexander/Union County

-Goal: March, 2010: Recover at least 6 live ASTs

-30 released - with RadioTags and PIT tags - team expect 46% loss due to transmitter failure, movement, etc.

-As of 10/26/09: Tracking 17 signals; 6 found predated by river otters (desperately need a regulated RO trapping season!); 7 unaccounted for

-Average monthly movement = 0.1 - 0.2 mile/Maximum movement recorded = 0.9 mile

-Attempt aircraft tracking this winter via waterfowl counts to track 7 lost signals

EGGS: As of September, 2009: Breeder pond in Springfield contains

-14 Females (9 adults); 5 Males (4 adults); 10 Unknown sex = 29 total in pond

-See attached "Hatch Success" table (*not attached*)

-Approval by to purchase professional incubator granted - to be purchased this winter

-Presentation by Kath at Midwest Fish & Wildlife Conference (12/08/09)

16. **Eastern Massasauga Rattlesnake**: Recovery Team (EMRT) met in Springfield on 11/03/09 -ESPB present: Anne Mankowski

-Draft Recovery Plan to be available for review January, 2010 (to ESPB, IDNR, etc.)

-Human Dimensions Subcommittee: Will put together materials to gauge public perception of snake in Illinois

and lay the ground work for possible releases

-EMRT: Needs to nominate 2 new team members - Plans on inviting Joe Smothers with the US Army Corps of Engineers (Carlyle Lake); also discussion of asking Anne with the ESPB to join to have official ESPB representation

-Knox County Workshop and Surveys (Simone et al.) being planned for Spring 2010

-2 Section 6 projects officially submitted this year for Massasauga:

*Lincoln Park Zoo: "Care and Propagation of EMRs captured from NE Illinois as a service to species recovery efforts" (\$12,220).

*INHS: "Feasibility of reintroduction and translocation of neonate EMRs as a tool for population recovery" (\$15,000)

17. **Peregrine Falcon:** Nest box placement on ADM sites along Illinois River

-Greg Septon (Wisconsin Birder): Contacted Scott Simpson and Joe Kath - spoke with Kath via telephone on 11/09/09.

-Septon has worked with ADM and other corporate sponsors to place nest boxes throughout WI - has had great success

-All boxes are monitored via web-cam; greater than 90% fledge success

-Seeking permission to place nest boxes on ADM owned sites along the IL. River Corridor

-Excerpts from recent e-mails from Mr. Septon (Kath has full documents):

WISCONSIN FALCONWATCH

2009 NESTING SEASON REPORT - © Greg Septon 2009

In Wisconsin this year there was a known total of 82 young produced at 30 successful (young produced) peregrine falcon nest sites. Twelve nests were located along the Lake Michigan shoreline, 5 along the Fox River, 2 along the Wisconsin River, 2 on the shores of Lake Superior, 7 along the Mississippi River (4 on cliffs) (*source RRP web site*), and 2 inland at Madison and Jefferson.

Recent WI Public TV peregrine segment (Link):

*<http://www.wpt2.org/NPA/IW802peregrinebanding.cfm>

"We" Energies Peregrine Falcon Web Site: Click on "Web Cams" for links to all their web cams at nest boxes =

*http://www.we-energies.com/environmental/peregrine_falcons.htm

NOTE: There are also downloadable nesting season reports available here.

18. **Indiana bat/WNS:** White Nose Syndrome:

-WNS educational link posted on the main IDNR web page on 11/05/09 - see attached

-J. Kath/Tim Carter-Ball State University/SIUC staff: To enter Unimin Magazine Mine hibernacula in December, 2009 to obtain video footage for historic purposes before WNS arrives in IL.

-Recent collaboration between IDNR/FS-Shawnee: Vaughn Cave (Pope County) (thought to be connected with Ellis - MYSO hibernacula) did not pan out. The guano was quite old the passages were warm (62 F); Rich's Cave (has small but stable numbers of MYSO) measured and funding sought by FS for gating; Harp-trapping and banding performed at Ava Cave and Cave Spring Cave (Union County)

-Additional Coordination between IDNR/FS-Shawnee:

Visiting several of the MYSO hibernacula in early January to take fungal tape samples to serve as an early warning sign for WNS. To collect samples from Magazine Mine, Ellis Cave, Griffith Cave, Rich's Cave, and several smaller Unimin Mine hibernacula (Mine #30, etc.). Would perform this in the first two weeks in January when bats are in deep torpor. We could take care of this in a couple of days.

-Kath/Shimp/Lindsay working with new FS Biologist, Rod McClanahan: Both Agencies to meet in January to discuss a formalized cave survey schedule and WNS arrival in IL. Rod will replace Steve Widowski as he retires

in late December.

-Kath coordinating with IDNR Division of Land Management, Director's Office, and IDNR Public Affairs to discuss closure of all State owned/managed caves in Illinois beginning in early 2010 to reduce spread of WNS. All offices are in support of this measure!

-National Wildlife Health Center's winter sample submission guidelines for WNS - Kath to function as official POC for Illinois per FWS (Bloomington, IN. Office)

POC(s) for submission of samples -- that individual does not necessarily have to submit each sample personally, but should be consulted prior to sample submission. That will allow each State to have a handle on what is being submitted. It will also allow for State input into prioritization of samples if that becomes necessary.

-WNS update from east coast: From VA. Division of Wildlife: Last week I entered two sites confirmed last year. The good news is that none of the bats I saw inside had any sign of fungus. On the flip side, one site (Shindle) had 2,317 bats prior to WNS last year and there were only 6 bats remaining. At this point in the season the majority should be inside already...though I will be hoping otherwise. The second site is a coal mine. The main gangway is all we survey and that alone had 2,000 bats pre-WNS. Probably not more than 2X that total if I had to venture a guess. Main gangway had only 5 bats last week. If those numbers were to hold up we are looking at >99% reduction in single year.

Continued: FYI, last night we banded the "early bat arrivals" at Breathing Cave (WNS positive site, Bath Co., VA). We entered the cave and did a quick assessment of bats showing signs of the white fungus. Of the approximately 100 bats, only 1 showed visible signs of the white fungus (see photos). We collected the specimen and it is being shipped to USGS (Madison). We banded all the bats (105 individuals) present in this section of the cave.

-Bat book: Feldhamer, Hofmann, Carter, and Kath: Have begun work on "Bats of Illinois" book. This book will be published and distributed by the Midwest Center for Bat Conservation (Indiana State University) in 2012.

19. Illinois Cave Amphipod: Final report for the recharge delineation of the new IDNR land recently acquired from TNC. We are calling this the Annbriar State Natural Area but it has also been referred to as the Wednesday cave property and Mueller property. It is a know location for the Illinois Cave Amphipod, so we contracted with Ozark Underground to get the caves and the property recharge delineated.

-Findings indicate: "The stream that feeds and passes through Reverse Stream is a relatively large cave stream and its recharge area is commensurately large. The Reverse Stream recharge area is approximately 3.6 square miles (2,305 acres). If the former Mueller property were dedicated as an Illinois Nature Preserve, it would be prudent to apply to have this recharge area designated as Class III groundwater, which would increase the amount of Class III groundwater in the range of the Illinois cave amphipod appreciably."

-Kath/Tecic: Investigating following options - The land adjacent (w/Reverse Stream Cave) is privately owned. The owners have been very cooperative with ICA surveys, so they may be willing to enroll in a program or at least talk about it (work with INPC and landowners to discuss designation).

-Kath: Possible use of FWS Recovery Land Acquisition Grants to purchase part of property if landowner willing- we have not done much of this in Illinois, but it is worth a try for this project.

20. Rabbitsfoot Mussel: Endangered in Illinois and found along the Indiana border - Vermilion and Wabash Rivers.

-On 11/09/09: Kristen Lundh of the FWS Rock Island Field Office stated that this species was being elevated to Federal Candidate Species. The official notice should be published soon.

-Kath working with DNR Database staff to get FWS all records so an updated distribution map can be generated.

21. **Bald eagle:** The U.S. Fish and Wildlife Service has developed a permit program under the Bald and Golden Eagle Protection Act to continue to protect populations of bald eagles and golden eagles while providing the necessary flexibility for people to manage their lands and businesses. The regulations were published in the Federal Register on Sept. 11, 2009 <http://edocket.access.gpo.gov/2009/pdf/E9-21589.pdf> , and took effect on Nov. 10, 2009.

The rulemaking establishes two new permit regulations. New 50 CFR 22.26 authorizes limited take of bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) under the Bald and Golden Eagle Protection Act (Eagle Act), where the take to be authorized is associated with otherwise lawful activities. New 50 CFR 22.27 provides for intentional take of eagle nests when their removal is necessary to protect human safety, the public's welfare, or will benefit eagles.

The Migratory Bird Program Permits Web site outlines the permit process and implementation guidance for the final rule <http://www.fws.gov/migratorybirds/mbpermits.html>.

Management guidelines are also provided at <http://www.fws.gov/midwest/eagle/guidelines/index.html>

22. Incidental Take Update:

-Currently Active Projects: 8 total

-Oil-Dri (**Dusky Salamander**) Pulaski County

-IDOT (various mussel species) - Fayette Creek - Vermilion County

-Exelon/Braidwood Diffuser (mussels and fish) - Kankakee River

-IDOT (**black sandshell mussel**) - Nippersink Creek - McHenry County

-Logsdon Construction (**IL. chorus frog**) - Beardstown - Cass County

-SS Administration Bldg. (**Franklin's Ground Squirrel**) - Springfield - Sangamon County

-Wal-Mart (**Blanding's turtle/Sandhill crane**) - McHenry County

-Kane County DOT (**slippershell mussel**) - Tyler Creek - Kane County

*Amendments to IT rule as of 11/10/09: Currently in JCAR (contact Brad Taylor)-

A Complete Description of the Subjects and Issues Involved: Amendments to this Part are necessary to add standard measures that can be included in a conservation plan which will allow faster and more efficient review and approval of certain incidental take authorizations. Amendments are being made to: modify newspaper publication requirements, plan submittal requirements and the deadline for receipt of public comments; authorize the Department to develop standard measures for minimizing, mitigating, and/or compensating for the effects of specific types of actions; allow applicants to **adopt** Department-approved standard measures in lieu of developing their own measures; and to modify language to clarify the options available to applicants for authorization of incidental take.

23. USFWS Section 6 Funding Update: A total of 9 Section Projects, totaling \$68,060.00 were submitted by the IDNR and recently approved by the FWS.

-Feasibility of reintroduction and translocation of neonate **Eastern Massasauga Rattlesnakes** as a tool for population recovery

-Demographic and population viability comparison of the Illinois Beach **Dune Thistle** reintroduction to a seed source natural population

-Assessing the restoration status of **Mead's Milkweed** in Illinois

-Care and propagation of **EMRs** captured from NE Illinois as a service to species recovery efforts

-A rearing protocol for the **Illinois Cave Amphipod** to support its recovery

-Survey for new sites for the federally Endangered **Hines Emerald Dragonfly** in Illinois

-Implementation of recovery actions for the **HED** in Illinois and Wisconsin

-Implementation of recovery actions for the **Eastern Prairie Fringed Orchid** in northern Illinois

-5 year review of research and recovery plan implementation for the **HED**

24. Miscellaneous:

*Recovery Tool/Outlines/Plans being prepared for: **Osprey** (Patrick McDonald-Wildlife) and **Blanding's Turtle** (Dan Ludwing - Wildlife): using ORC's Endangered Species Recovery Planning protocol approved by Mike Conlin on 11/06/08.

-Kath: to coordinate with ESPB and Division/District staff as documents become available.

*Roger's Elementary (Marquette Heights, IL. near Peoria): Same 4th grade class (Patti Massaglia-teacher) have hosted annual fund-raising events for a listed species. This has been occurring for just over 10 years. Kath recently approached for a Spring 2010 fund raiser to raise money for osprey platforms along Illinois River - formal presentation to class scheduled for Spring 2010

144-11 ESPB Research Program

Vice-Chair Campbell introduced the agenda item, reviewed the status of FY08 and FY09 projects and opened the discussion of the eight FY10 proposals received (Attachment D). Ms. Mankowski stated that the Board does not have a formal process for reviewing proposal, but for the last cycle the Board ranked each proposal. Secretary Phillips stated that the last time the Board just jumped-in with discussion by Board members who knew about individual proposals, and started discussion by commenting on the reptile and amphibian proposals. He stated that for the two **ornate box turtle** proposals, because this is such a hard species to survey for, he did not believe either proposal was a good way to spend the Board's research money because the Board would receive very little return for that kind of money. He added that for that level of funding he would rather see data-rich proposals that can generate data that can be used for management. For these reasons, he indicated that he did not support either box turtle proposal. Dr. Retzer stated that he thought the 120 hours of volunteer time offered in the Conservation Foundation proposal was very significant. Dr. Phillips agreed that the \$13,000 in-kind match represented by the volunteer time was very nice, but noted that either project still would take roughly \$10,000 from the limited \$25,000 total. Dr. Phillips continued by reiterating that he did not support either box turtle project and would answer questions about the **four-toed salamander** project, but noted that since Abigail Maley was one of his students he had a potential conflict of interest and would recuse himself from commenting on that project. Ms. Masi stated that she understood the EIU ornate box turtle project to cover a period of three field seasons and the Conservation Foundation project to cover two field seasons, so on an annual basis, either project became less expensive. Dr. Phillips stated that he still did not feel this was a good commitment of the Board's money especially in light of the several other really good competing proposals that would generate really useful data.

Ms. Mankowski then interjected some explanation to Board members about multi-year contracts. Although the RFP stated that the Board would only be awarding single-year commitments in its contracts for FY10, some of the RFP projects and some proposals requested multiple years of funding and some did not break-out the budget into single years. Because of DNR and Illinois Central Management Services contracting requirements, the Board needs to be careful not to "string" contracts (in reality or perception), which typically relates to purchases of goods rather than funding research, by issuing successive annual contracts with a cumulative total that will exceed \$10,000. There is precedent within DNR for awarding additional years of research funding based upon initial study findings, but if the Board knows the total cost of a project will exceed \$10,000 over however many years, it should commit that total amount in a contract at the front end. Ms. Mankowski indicated that she and Dr. Retzer had discussed this for the **river and greater redhorses** proposal and the Board discussed the proposed funding amounts for that project. The Board agreed that if the Board chose to recommend funding for the redhorse project, it would be for only a single year commitment and if second-year funding were sought, the

Board would get clarification about such allowance or would only fund at a level that kept the cumulative total below \$10,000.

Dr. Phillips suggested that if the **ornate box turtle** proposals and the **river and greater redhorses** proposal were thrown-out, noting that the EIU ornate proposal and the **river and greater redhorses** proposal both included salaries, which he felt the Board could not afford to fund, the Board could fund all other projects with a balance.

Dr. Herkert asked Board members to review the plant proposals. Ms. Masi stated that she had a vested interest in the *Asclepias lanuginosa* project because she is a participant in the project, so would not comment on that proposal. Dr. Taft stated that he ranked the *Asclepias* project as a top priority and the *Schoenoplectus hallii* as a secondary priority. There was discussion that the *Schoenoplectus* project, while inexpensive, was to secure the EORs for field work and would not result in the genetic analysis and only looked at 11 of the 29 historically known populations of the species. The Board agreed that funding solely for the EORs and tissue sample collecting was acceptable for the requested dollar amount.

Ms. Masi remarked about what she saw as a problem with several proposals, that they only looked at a portion of the range of a species and Ms Campbell agreed, noting that the EIU ornate box turtle project only proposed to look at known locations, so would not be able to fully assess the statewide status of the species.

Dr. Herkert asked for discussion about the fish proposals. Dr. Retzer responded that he preferred the **river and greater redhorses** proposal because these are two poorly known species that are wide-ranging in large rivers and this is an excellent way to get additional information about their life cycles and habitat use that will be useful in evaluating listing status. Dr. Retzer stated that some work is already being done annually for the **northern sturgeon** and **western sand darter** and that \$4,000 seemed to be expensive for the type of work described.

Vice-Chair Campbell summarized that the Board could fund the *Aesclepias lanuginosa*, *Schoenoplectus hallii*, **four-toed salamander**, **river and greater redhorses**, and **enigmatic cavesnail** projects for a total of \$24,727. Secretary Phillips moved that the Board recommend funding for those projects and Mr. Clemetsen seconded. Ms. Masi added one discussion point asking whether the budget for the *Aesclepias* project could be revised to move money between supplies and travel, but not changing the total dollar amount. Ms. Mankowski responded that such revision would probably be acceptable via a justified amendment to the contract within the appropriate timeframe. The Board then voted unanimously to approve the five projects at the amount indicated.

144–12 ESPB Protocol for Reviewing and Commenting on Proposed Recovery Guidelines, Criteria, and Plans

Ms. Mankowski reviewed that, at the 143rd meeting, Chairman Gooch recommended that the Board develop a protocol for reviewing and commenting on proposed recovery guidelines, criteria, and plans and suggested the topic could be discussed further at the 144th meeting. Ms. Mankowski advised the Board that the IDNR Office of Resource Conservation had developed a Recovery Planning Tool and Process that the Board could adopt, to be in-step with the IDNR, and a description of those was distributed to the Board by Mr. Kruse at the Board's 140th meeting in November, 2008. Dr. Herkert asked if any recovery plans had been developed using this new protocol and Ms. Mankowski responded that the IDNR Division of Fisheries had prepared a plan for the Alligator Gar, which the Board reviewed in the spring of 2009, and there were some other outlines and plans in-process now. Dr. Herkert asked if it would be a good time for the IDNR and ESPB to review the Planning Tool and Process to revise and update relative to experiences gained from the first year of the Planning Tool and Process being used. Mr. McFall, Mr. Kath, and Ms. Mankowski replied that they all thought that would be appropriate and agreed to initiate that review. The Board agreed to review the topic again at its 145th meeting.

144-13 Presentation: Proposed Status Review Triggers for Three Listed Mammals: Eastern Woodrat, Marsh Rice Rat, Golden Mouse – Bob Bluett (IDNR)

Mr. Bluett made presentation to the Board to describe proposed status review triggers for the **Eastern woodrat**, **marsh rice rat**, and **golden mouse**. The Board engaged Mr. Bluett in discussion about some of the parameters for each proposal and noted that status review triggers for species are those population level parameters at which the Board agrees to review the listing status of a species to consider a possible change in listing status, and not population levels that would automatically trigger a listing status change. Following more discussion, Dr. Phillips moved to approve the proposed status review triggers for the **Eastern woodrat**, **marsh rice rat**, and **golden mouse**, Dr. Retzer seconded the motion, and it was approved unanimously (Attachment E).

144-14 Presentation: Habitat Conservation for the Illinois Chorus Frog – Bob Bluett (IDNR)

Mr. Bluett made presentation to the Board to describe various State Wildlife Grant funded projects being led by IDNR to survey for the species and do habitat construction and enhancement in areas of the Illinois River valley.

144-15 Presentation: Proposed Project - Reestablishing a Viable Population of Ornate Box Turtles (*Terrepenne ornata*) on the Lost Mound Unit of the Upper Mississippi River National Wildlife Refuge – Ed Britton and Jeramie Strickland (USFWS)

Mr. Britton and Mr. Strickland made presentation to the Board to describe the proposed subject project. Ms. Mankowski reviewed that Mr. Britton had previously been in contact with the ESPB and IDNR in developing his proposal and, that Ms. Mankowski had provided and comments on Mr. Britton's first proposal and had met with IDNR and INPC to discuss review of Mr. Britton's current proposal (see also #10 under *Species Updates*, above).

Following the presentation by Messrs. Britton and Strickland, Dr. Phillips engaged Mr. Britton in discussion about multiple aspects of the proposed project, including; evaluation of habitat suitability including quantitative data of vegetation structure and composition at Lost Mound as compared to Thomson Prairie; evaluation and defense of the proposed target numbers of individuals to collect and to release; how "viable population" is defined; the need for population viability analysis (PVA) that includes evaluation and defense of the number of turtles that should be released each year, for how many years, and how to determine the necessary sex ratios, to reach a viable population at translocation sites for a number of years (for example, at least 50 years); evaluation and defense that proposed donor sites can withstand harvest (using PVA) at 50 and 100 years out; and, that predation rates be firmly established with data for each site, to incorporate in the PVA models. Other Board members continued discussion and Ms. Mankowski reviewed that the presenters were seeking endorsement from the Board and for the Board to recommend that IDNR issue permit for their current project proposal. Dr. Phillips reiterated his direction for the need of a PVA demonstrating the likely success of the project prior to the Board endorsing the proposal and indicated that the Board should not recommend that IDNR issue permit for the project, as proposed. Mr. Britton asked if the Board would provide him all of its recommendations in a letter. Ms. Mankowski explained that the Board would communicate such to the IDNR and correspondence from the IDNR to the USFWS should reflect Board recommendations. Dr. Herkert asked that Dr. Phillips work with Ms. Mankowski to draft a letter directly from the Board outlining its recommendations to assist the USFWS in further developing their research and project proposal. Dr. Phillips and Ms. Mankowski agreed to provide Mr. Britton with such a letter.

144-16 Next Meeting Information

The 145th meeting of the Illinois Endangered Species Board will be at 10:00 A.M. on February 19, 2010 at the Midwin National Tallgrass Prairie visitor's center.

144-17 Public Comment Period (3 minutes per person)

None

144-18 Other Business

Vice-chair Campbell thanked Dr. Herkert for his leadership and long-term service on, and support of, the Board and that she hoped in his new position he would remain equally supportive of endangered and threatened species and be available to the Board for consultation. She ended by wishing Dr. Herkert all the best in his new position.

144-18 Adjournment

Secretary Phillips moved to adjourn the 144th meeting, Vice-chair Campbell seconded the motion, and it was approved unanimously. The meeting was adjourned at 1:16 P.M.

**Illinois Endangered Species Protection Board staff report
for the 144th Meeting, November 13, 2009**

Submitted by Anne Mankowski, Director

The Board currently only has one staff, its Director. All activities were conducted by Ms. Mankowski, unless otherwise noted. Because the Board has reduced staff and had been without any fulltime staff from 2002-2007 and then without any staff from 2007-2008, Ms. Mankowski has not been able to complete all required work in the course of a 40-hour work week. Since the last staff report, Ms Mankowski has donated the following “volunteer hours” toward ESPB duties: August = 31.00; September = 35.25; October = 87.75

1. ESPB letter (dated August 26, 2009) in response to request by Mr. Eugene Chesrow for review of Lincoln Park Zoo pond work and potential impacts upon the black-crowned Night-Herons nesting there.

The letter stated that the Board was aware of the project as well as the Memorandum of Understanding between the Illinois Department of Natural Resources (IDNR) and the Lincoln Park Zoo (LPZ) outlining conditions for construction; that the DNR and LPZ had coordinated quite extensively on all aspects of this project and actions by the LPZ had been compliant with agreed upon conditions to minimize impacts to wildlife and maintain adherence to the Illinois Endangered Species Protection Act; and, that considerable monitoring and surveillance of black-crowned night-heron fledgling development and responses to construction project activities had also taken place and demonstrated no adverse effects on the local population. The letter also expressed appreciation for the importance of Illinois citizens’ advocating for our State’s listed species and that the Board values hearing from individuals about such matters.

2. ESPB letter (dated October 13, 2009) in response to public comment by Dr. Mike Dreslik received at the 143rd meeting of the Board, held August 14, 2009, addressed to the United States Army Corps of Engineers regarding proposed project specifications at Carlyle Lake and potential impacts upon Eastern Massasauga Rattlesnakes there.

The letter briefly reviewed Dr. Dreslik’s comments (a copy of full comment was attached to the letter); indicated that in his comment, Dr. Dreslik requested that the Board write a letter to the USACE, in support of his recommended project specifications regarding a Saddle Dam III bike path alignment and surfacing project; and, explained that the Board agreed to provide the subject letter in support of Dr. Dreslik’s recommendation.

3. Met with IDNR staff to discuss several issues related to Carlyle Lake and IDNR funded planning grants.

On October 19, 2009, ESPB Director Anne Mankowski met with IDNR Assistant Director John Rogner, Division of Natural Heritage Chief Don McFall and Endangered Species Manager Joe Kath, and Office of Realty and Environmental Planning Director Tom Flattery, Impact Assessment Section Manager Karen Miller, and Recreation Planning staff Marla Gursh to discuss several issues related to Carlyle Lake and recommendations to improve conservation of the Eastern Massasauga Rattlesnake (EMR) there, as well as ensuring that IDNR funded planning grants include an environmental review in the final product. Action items agreed upon at the meeting included: IDNR would request confirmation from USACE about the final decision for project treatment of Saddle Dam III; IDNR would send a letter to the USACE stating that the final draft "Illinois Recovery Plan for EMR" will be available for review in January and inviting the USACE to comment, and acknowledging that the IDNR appreciates the successes that have been achieved via the “Eastern Massasauga (*Sistrurus c. catenatus*) Management Plan, Carlyle Lake, Illinois. 2001” and would like to formalize the relationship between the IDNR/USACE/USFWS in the form of a Cooperative Agreement (that will either directly, or by reference, stipulate responsibilities and management actions) and request a meeting; IDNR will advise the City of Carlyle that they will need to consider the EMR and other E&T species in their current bike path planning grant; and, IDNR will review its grants programs to ensure that all grants are subjected to the IDNR Comprehensive Environmental Review Process (CERP), as appropriate.

4. ESPB response (dated August 26, 2009) to public comment from Mr. Bob Becker, President Illinois Federation of Outdoor Recreation, received during Second Notice of proposed amendment to 17 IAC 1010 (Fauna).

At the request of DNR Director Marc Miller, Ms. Mankowski provided response to Mr. Becker’s request on behalf of the Great Lakes Falconers Association for a meeting with Director Miller to discuss why the Board was not taking action to delist

the peregrine falcon. The email response reviewed the Board's actions, recommendations to IDNR, and communication with GLFA throughout the process.

5. Attended the 2009 USFWS Region 3 Threatened and Endangered Species Coordinators meeting in Camdenton, Missouri from October 6 – 9; next year's meeting is in Indiana.

6. Forwarded budget request to DNR Director Marc Miller.

At its 143rd meeting, the Board approved a FY11 Budget request that was subsequently sent to DNR Director Marc Miller. That request is for \$329,800 to reinstate the full staffing and performance of the Board by funding three staff (including operating expenses), reestablishing the Board's research program that currently relies solely on an annual allocation of \$25,000 from the Wildlife Preservation Fund, and reimbursing member expenses incurred in the performance of their duties.

7. Barn Owl (*Tyto alba*) recovery planning and implementation State Wildlife Grant project (T-35-P-1).

Continued planning and administration.

8. ESPB WPF Research Projects

(See "Draft Report on the ESPB Research Program for the 144th meeting" for details.)

- Administered contracting paperwork for vendor partial payment on one FY08 project, and circulated final report to Board and ESTAC members and DNR staff; and
- Distributed the FY10 RFP, responded to seven inquiries from researchers, circulated proposal packets to Board members.

9. ESPB 5-Year List Review ending in 2009

The amended Administrative Rules 17 IAC 1010 - Illinois List of Endangered and Threatened Fauna and 17 IAC 1050 - Illinois List of Endangered and Threatened Flora were adopted October 30, 2009. They were updated to the IDNR website Administrative Rules page and a more user friendly 'checklist' version was posted to the Board's webpage. Unfortunately, Board staff made two errors in listing status, so the mudpuppy and black-billed cuckoo will be listed as endangered instead of as threatened, as intended; there is no difference in legal protection between endangered and threatened status. Amendments to correct those and a few other name changes and typographic corrections (and not including any status changes or additions or deletions) will take place sometime in the next few months.

10. Illinois Fish and Wildlife Action Team

Represented ESPB at the 9th IFWAT meeting held October 28, 2009. The agenda included a review of the recent national Action Plan Coordinators meeting, Conservation Opportunity Areas project update, update of active SWG projects, Climate Change considerations for the WAP, and SWG funding for FY09 and FY10.

11. Illinois DNR Natural Areas Evaluation Committee

Represented ESPB at the 53rd NAEC meeting held November 3, 2009. The agenda included addition of five new mussel sites, one new seep, deletion of a site that had been heavily logged, and discussion of changes to Category II listings due to E&T status changes reflected in the October 30, 2009 List.

12. ESPB webpage on the DNR website

Ongoing.

13. ESPB Coordination with INPC

- Attended the September 22, 2009 meeting of the Illinois Nature Preserves Commission and provided an Illinois Endangered Species Protection Board report.
- Provided a presentation with Joe Kath at an October 27, 2009 INPC staff meeting reviewing the ORC recovery planning process and INPC/ESPB/IDNR Plant Translocation Policy and ESPB Animal Translocation Policy.

14. ESPB Coordination with IDNR

- State Fair assistance including development of displays (ESPB General, Research, Bald Eagle Recovery Success Story).
- Met with ORC and INPC to discuss opportunities for improved communication and coordination.
- Assistance to Natural Heritage and Law Enforcement – bald eagle mount and turtle ID, king rail harassment and enforcement

of IESPA.

- Provided comments on 5 ITA Conservation Plans.
- Coordinated with the Endangered Species Program ORC, Division of Wildlife ORC, Impact Assessment Section ORE Office of Land Management, Office of Law Enforcement, Office of Legal Counsel, Media Relations, and Illinois Nature Preserves Commission, on multiple matters, including:
 - Assisted DNR, INPC, and USFWS in review and development of an initial USFWS/IDNR proposal for headstarting and translocation of ornate box turtles (*Terrepene ornate*) in JoDaviess and Carroll Counties. Met with IDNR and INPC to discuss ESPB recommendations regarding agency permits for the proposed project.
 - Met with IDNR ORC and OREP about USACE projects at Carlyle Lake and updating and revising the USACE/IDNR/USFWS Carlyle Lake Management Plan and IDNR review of grant programs to ensure compliance with the IESPA and 17 ILL ADM CODE CH. I, SEC. 1075, *Consultation Procedures for Assessing Impacts of Agency Actions on Endangered and Threatened Species and Natural Areas*; and,
 - Attended IDNR meeting with the Eastern Massasauga Recovery Team.
- Fielded and referred 12 permit, data, and consultation calls and emails to respective programs at DNR; Endangered Species Program ORC; Natural Heritage Database ORC; Impact Assessment Section OREP.

15. Coordination with other Agencies

- Working with the invertebrate ESTAC and other experts to assist Jody Millar, USFWS Rock Island Field Office, in compiling status and distribution data for four invertebrate species that are currently being considered for candidate status: Bluff Vertigo (*Vertigo meramecensis*), Frigid Ambersnail (*Catinella gelida*), Minnesota Pleistocene Succineid (*Novisuccinea n. sp. minnesota a*), and Iowa Pleistocene Succineid (*Novisuccinea b*).
- Working with the USFWS Rock Island Field Office, IDNR, and several other partners in developing a Decurrent False Aster (*Boltonia decurrens*) Conservation Agreement for Managed Lands in the Illinois River and Mississippi River Floodplains.
- Accepted a request from the Illinois Attorney General's Office to present at an Illinois State Bar Association May 2010 Environmental Law Practitioner's Seminar. The presentation will focus on the Illinois List and procedures for status review, listing changes, and consultation.
- Provided to Dr. Deanna Glosser with the Illinois Natural Areas Update response to questionnaire about opportunities and constraints for developing and implementing an INAI Sustainable Natural Areas Plan.

16. Field Work

Assisted Natural Heritage Biologist, Bob Lindsay, with surveillance for *Thalia dealbata* (powdery thalia) in Alexander County.

17. Other General Administration and Clerical Work

- Drafted and routed letters of recommendation for ESPB Member appointment of Glen Kruse.
- Completed State Boards and Commissions Ethics Training.
- Completed University of Illinois Employee Ethics Training
- Prepared and routed Board member and staff travel vouchers.
- Regularly distributed information to Board and ESTAC members via internet and hardcopy mailings.
- Prepared and distributed to Board members draft minutes from the 143rd meeting.
- Prepared first draft of updates to the Board's Policy Manual.
- Prepared first draft of an ESTAC Manual.
- Responded to 24 requests for information and/or ESPB reference materials.
- All aspects of preparation for the November 13, 2009 144th ESPB meeting (including location change - filed public notice, made change to meetings notice on the ESPB webpage, emailed notice to mass email distribution list, cancelled arrangements at Thompson Center and made reservations for Midewin National Tallgrass Prairie).

**Illinois Department of Natural Resources
Report to the Endangered Species Protection Board
November 13, 2009**

Personnel – Glen Kruse retired as Chief of the Division of Natural Heritage August 31. Glen was with DNR and the ESPB for 27 years. Don McFall was named the new chief of Natural Heritage effective September 1. Don has been with DNR for 16 years and the Nature Preserves Commission 9 years.

Jim Herkert was named Chief of the Office of Resource Conservation November 10. He starts December 1.

Conservation Congress was held October 24-25 at the DNR building in Springfield. Citizens representing more than 80 conservation groups participated. The Congress focused on public access to private lands for recreation, youth recruitment and retention and conservation funding.

Asian Carp Rapid Response - DNR is planning an emergency effort to control bighead carp and silver carp in a 6 mile stretch of the Chicago Sanitary and Ship Canal in Will Co. by applying rotenone. The control effort will take place the first week of December. The goal is to prevent exotic Asian carp from entering the Great Lakes. The control effort was analyzed for possible effects to Hine's emerald dragonfly.

The **70th Annual Midwest Fish and Wildlife Conference** will be held in Springfield December 6- 9.

The **Natural Heritage Database** received more than 80 records of E and T species in October, mapped and did data entry of 38 plant E and T occurrences, and started making changes in the database to reflect the recent list changes.

Illinois Natural Areas Inventory update - As of the end of September 2009, the regional ecologists have successfully completed the first stage of the screening process for 53 counties with a total of 2,095 potential sites being identified. To date during this growing season, the regional ecologists have determined that 1,584 of those sites are non-qualifying. Landowner contact has been slow with 354 sites remaining outstanding due to lack of response. As site surveys can not be completed without landowner permission, this lack of response from a significant number of landowners will have an impact on the total number of sites eventually added to the INAI. Initial ground surveys have been completed on 462 sites, with final field surveys completed on 65 sites.

The **Natural Areas Evaluation Committee** met November 3 in Springfield. 3 sites were added to the inventory and one site was deleted. All 3 sites that were added to the Inventory qualified as high quality mussel stream segments.

Anne Mankowski and Joe Kath made a presentation about recovery planning at the **Nature Preserves Commission staff meeting** in October.

Don McFall
IDNR Division of Natural Heritage
November 2009

To: Board Members
From: Kelly Neal, Jenny Skufca, and Randy Heidorn
Date: November 12, 2009
Subject: INPC Staff Report for the Endangered Species Protection Board

I. Illinois Nature Preserves Commission (INPC) Operations:

- A. Jenny Skufca continued coordination on promotion, budget, planning and judging of photos for the *Outdoor Illinois* photo contest in the INPC category.

II. Training, Presentations, and Meetings Attended:

- A. Jenny Skufca attended the Third Annual Advancing Wind Power in Illinois two-day conference in Bloomington.
 B. Jenny Skufca, Kelly Neal, and Division of Natural Heritage staff participated in a nationwide conference call with NatureServe to discuss how each state is altering its natural areas program priorities in response to climate change.
 C. Steven Byers attended a U.S. Environmental Protection Agency (USEPA) Climate Change workshop.
 D. Judy Faulkner Dempsey and Randy Heidorn attended an Illinois State Water Survey Meeting in Champaign to learn the latest research results on details of reconnection of the Upper and Lower Cache River.
 E. Debbie Newman:
 1. Gave a presentation on Threatened and Endangered Species of southwestern Illinois at Kaskaskia Valley Audubon's annual Nature Festival.
 2. Assisted with a program on timber rattlesnakes hosted by Clifftop.

III. Inventory and Monitoring:

- A. John Nelson
 1. With Bob Szafoni coordinated a mussel survey of the lower Kishwaukee River Basin. Other participants included staff from the Natural Land Institute (NLI), Rockford Park District, Boone County Conservation District (BCCD), Winnebago Forest Preserve District, and two private landowners. The survey will result in an INAI nomination of new stream segments as Category VI – for high diversity mussel fauna.
 2. Reviewed a final report submitted by Iowa State University for a Blanding's turtle genetics and nesting study conducted at Exner Marsh NP, McHenry County. This nest monitoring and genetics work was funded as condition of a wetland fill permit for the Lake Point Development next to Exner Marsh NP.
- B. Kim Roman and Mary Kay Solecki conducted endangered plant surveys at Sweet Fern Savanna LWR.
- C. Kim Roman:
 1. Conducted Blanding's turtle surveys at Goose Lake Prairie NP.
 2. Conducted wetland bird surveys at McGinnis Slough, Hegewisch Marsh, Eggers Marsh, and Burhnam Prairie.
- D. Angella Moorehouse:
 1. Continued to monitor the success of the translocation of 50 state-endangered queen of the prairie (*Filipendula rubra*) plants threatened by road repair work. The plants were moved with the assistance of Illinois Natural History Survey and Illinois Department of Transportation (IDOT) staff in May, 2009 from Lost Grove Wetland INAI to Short Fork Seep NP. As of July, 2009 at least 30 reintroduced plants were still thriving, and several were flowering.
 2. Worked with Augustana College as part of a Wildlife Preservation Fund (WPF) grant to search for new locations and to monitor populations of rare plants on hill prairies including: prairie larkspur (*Delphinium carolinianum*), stickleaf (*Mentzelia oligosperma*) and narrow-leaved green milkweed (*Asclepias stenophylla*).
- E. Tom Lerczak:
 1. Completed baseline bird surveys at Rock Springs Center and Independence Park.
 2. Completed a U.S. Geological Survey's Breeding Bird Survey Route #71 for the 16th year.
- F. Mary Kay Solecki assisted IDNR staff with mussel surveys at several stations on the Sangamon River and the North Fork of the Vermilion River.
- G. Debbie Newman:
 1. Conducted an annual Breeding Bird Survey route.
 2. Monitored endangered plants at six sites.
- H. Bob Edgin conducted royal catchfly (*Silene regia*) monitoring at five sites in Lawrence County.

IV. Protection Program:

- A. The 203rd INPC meeting was held at the Illinois Beach Resort and Conference Center at Illinois Beach State Park in Zion on September 22, 2009.
 - 1. The following sites were given approval as land and water reserves (LWR):
 - a. Kildeer Creek Woodland, Lake Co. (63.94 acres) owned by Lake County Forest Preserve District (LCFPD). The significant natural community present is dry-mesic upland forest, with elements of mesic upland forest, mesic floodplain forest and wet-mesic floodplain forest located in the Morainal Section of the Northeastern Morainal Natural Division.
 - b. Halo Hill Tree Farm and Artists Retreat, McHenry Co. (437.43 acres), privately owned. Significant natural communities present are dry-mesic upland forest and dry-mesic savanna located in the Morainal Section of the Northeastern Morainal Natural Division.
 - c. Chinquapin Bluffs, Woodford Co. (765.98 acres) owned by ParkLands Foundation. The site has river frontage along approximately 1.7 miles of the Mackinaw River Natural Area, in the Grand Prairie Section of the Grand Prairie Natural Division; state-threatened slippershell mussel (*Alasmidonta viridis*) and state-threatened spike mussel (*Elliptio dilatata*) are present.
 - 2. The following sites were given preliminary approval for dedication as an Illinois nature preserves:
 - a. Grainger Woods, Lake Co. (169.4 acres) owned by LCFPD. The site supports dry-mesic upland forest, mesic upland forest and northern flatwoods located in the Morainal Section of the Northeastern Morainal Natural Division. Ten state-listed plant species have been recorded at the site including: shining bur sedge (*Carex intumescens*), bent-seeded hop sedge (*Carex tuckermanii*), Wood's stiff sedge (*Carex woodii*) forked aster (*Aster furcatus*), dog violet (*Viola conspersa*), marsh speedwell (*Veronica scutellata*), shadbush (*Amelanchier interior*), brome hummock sedge (*Carex bromoides*) and dwarf raspberry (*Rubus pubescens*).
 - b. Buffer addition to Lyons Prairie and Woods NP, Lake Co. (125 acres) owned by LCFPD. The proposed addition includes dry-mesic upland forest, graminoid fen and wet prairie located in the Morainal Section of the Northeastern Morainal Natural Division.
 - 3. Addition and buffer addition to Pistakee Bog NP, Lake Co. (50.32 acres) owned by IDNR was given final approval for dedication. Pistakee Bog NP has nine natural communities providing habitat for 11 state-listed plant species and lies within Morainal Section of the Northeastern Morainal Natural Division.
 - 4. Legal protection for 4 tracts of land totaling 1,308.67 acres was approved by the Commission at its 203rd meeting. There are now 347 dedicated nature preserves in 83 counties totaling 47,419.72 acres and 156 land and water reserves in 64 counties totaling 44,275.64 acres.

V. Land Acquisition

- A. John Nelson provided input to IDNR's Office of Realty and Environmental Planning on two land parcels offered for sale near Black-Crown Marsh LWR and Apple River Canyon State Park (SP).
- B. Kim Roman contacted two landowners regarding the sale of lots adjacent to Sweet Fern Savanna LWR.
- C. Mary Kay Solecki assisted the Champaign County Forest Preserve District with potential acquisition of high-quality forest near Salt Fork of Vermilion River INAI site.

VI. Defense Program:

- A. Randy Heidorn and Jenny Skufca attended update meetings addressing asbestos containing material (ACM) and other issues related to the management of Illinois Beach SP, including Illinois Beach NP and North Dunes NP.
- B. Jenny Skufca:
 - 1. Responded to five reviews for the IDNR's Comprehensive Environmental Review Program (CERP) and 25 reviews for the IDNR's consultation program.
 - 2. Created a poster describing the high-quality natural features of Illinois Beach SP. The IDNR displayed this poster at a public availability session to highlight the recent release of the Agency for Toxic Substances and Disease Registry report regarding the ACM issue.
 - 3. Attended a meeting with British Petroleum Wind Energy staff to discuss potential effects of proposed wind turbines near Sibley Grove NP.
 - 4. Reviewed wind ordinances submitted by three counties to IDNR's consultation staff – Macon, Winnebago, and Champaign counties.
 - 5. Submitted Class III Groundwater Petition packets for nine NPs to the Illinois Environmental Protection Agency (IEPA): Armin Krueger Speleological Area NP, Bluff Spring Fen NP, Braidwood Dunes and Savanna NP, Elizabeth Lake NP, Illinois Beach NP, Lake in the Hills Fen NP, Lockport Prairie NP, Romeoville Prairie NP, and Volo Bog NP.
 - 6. Has been in the process of preparing Class III Groundwater Petition packets for three NPs to the IEPA: George B. Fell NP, Goose Lake Prairie NP, and Spring Grove Fen NP.
- C. Bob Edgin attended meetings and assisted with damage assessment and mapping of a portion of Dismal Creek Savanna INAI site that was sprayed by IDOT personnel. The investigation continues.

D. Threats to sites within INPC programs:

1. **Black-Crown Marsh LWR, McHenry-Lake counties – John Nelson**
 - a. Issue: The Village of Lakemoor is converting a building adjacent to the LWR into a public works facility.
 - b. Threat: Main issue is the storage of road salt adjacent to the LWR and other wetlands located downstream at Moraine Hills SP.
 - c. Status: Final engineering plans have been received, and the IDNR consultation has been closed. A new salt storage facility will be constructed and maintained along Wegner Road at the same location, but furthest from the marsh.
2. **Volo Bog State Natural Area (SNA) and Volo Bog NP, Lake County – John Nelson**
 - a. Issue: The proposed Spruce Lake Industrial Park is being considered for final engineering approval by the Village of Volo.
 - b. Threat: Concerns that the industrial park will have negative impacts on the hydrology of the bog.
 - c. Status: INPC and IDNR staff reviewed a hydrologic report received June 30, 2009. INPC and IDNR staff submitted comments on the report in a letter to the Village of Volo and documented areas of disagreement. The IDNR has terminated consultation. The development is now approved by the Village of Volo. The IDNR and the INPC will monitor compliance with all conditions imposed to help protect Volo Bog SNA.
3. **Lake in the Hills Fen NP, McHenry County – John Nelson**
 - a. Issue: On March 25, 2009, a wildfire occurred at Lake in the Hills (LITH) Fen NP.
 - b. Threat: The LITH-Algonquin Fire Protection District (FPD) responded by entering the NP with brush trucks that got stuck in hydric soils. A Bobcat skidsteer was called on-site to extract vehicles, and it also got stuck.
 - c. Status: INPC staff met with LITH-Algonquin FPD staff on August 27, 2009, to discuss wildland fire certification and training. The FPD is committed to hosting a training course offered by the Illinois Fire Service Institute (IFSI). Equipment and certification in the Wildland Fire course will best prepare the FPD to better respond to the next wildfire at the NP. Training is pending the approval of a grant between the IDNR and the IFSI.
4. **Julia M. & Royce L. Parker Fen NP, McHenry County – John Nelson**
 - a. Issue: Proposed construction and operation of the Resurrection Center Retirement Community on nearby uplands.
 - b. Threat: Potential groundwater impacts within a Class III Ground Watershed designated for the NP has been the main concern for the INPC.
 - c. Status: The McHenry County Board approved the proposed retirement community with a vote of 17 to 6 on June 22, 2009. Thirty conditions were imposed on the development, many of which were related to environmental protections. The INPC was listed as a natural resource agency that should review the woodland and wetland restoration plan for the site. These planning efforts are now underway. The INPC received some letters and calls from neighbors who were opposed to this development and who lobbied for a stronger “no development” position.
5. **Bluff Spring Fen NP, Cook County – John Nelson, Stevonn Byers**
 - a. Issue: Routing of water from Gifford Lake and “finger lakes” located adjacent to Bluff Spring Fen is currently under consideration by the Forest Preserve District of Cook County (FPDCC). Options include surface conveyance of water from Gifford Lake or conveyance of the water via a pipe.
 - b. Threat: INPC groundwater consultants Randy Locke and Jim Miner, Illinois State Geological Survey, have both recommended the “piping” alternative. The open swale alternative threatens groundwater chemistry and a previously permitted project to restore surface and groundwater hydrology (and fen wetlands) by filling a shallow gravel pit lake.
 - c. Status: Two conference calls took place in June and July, 2009, to discuss the methods and data needed to update a groundwater model. The first version of the model was completed in 2005, but since that time, new groundwater monitoring data, restoration work, and flooding issues prompted a need to revise the original model to better reflect actual conditions observed. Bluff City Materials and Vulcan Materials agreed to move forward with the groundwater model update. This effort is nearly complete at this time.
6. **Gladstone Fen NP, McHenry County – John Nelson**
 - a. Issue: Proposed residential subdivision on land adjacent to the NP.
 - b. Threat: Close proximity to the NP could have impacts to the groundwater resource that sustains the high quality fen wetland and sedge meadow at the NP. The development property is 58 acres in size and is currently zoned for seven home parcels. The subdivision plan calls for 13 homesites with a conservation area adjoining the NP.
 - c. Status: On August 24, 2009, INPC staff attended a public hearing at the Village of Bull Valley and spoke on behalf of Lorna Gladstone and the INPC. The developers, Raj and Preeti Vemuri, met at the NP the following week with INPC staff and Lorna Gladstone. An IDNR consultation is open. The groundwater contribution area to Gladstone Fen has not been defined by a Class III Groundwater petition, but that effort is underway.
7. **Flora Prairie NP, Boone County – John Nelson**
 - a. Issue: The Flora Township Road Commissioner cleared and removed portions of relict prairie vegetation from within the NP on April 29, 2009. Work was performed along the road right-of-way (ROW). According to the BCCD, the NP boundary extends to the center of road and precludes the authority of the Township to conduct earth moving activities.

- b. Threat: Direct impacts to the dry dolomite prairie that cannot be restored.
 - c. Status: Met with the Township Road Commissioner on May 4, 2009. A police report has been obtained by the BCCD. INPC staff and Dan Kane, BCCD, met with the Boone County State's Attorney, Michelle Courier, on July 28, 2009, to discuss potential legal action. The State's Attorney has contacted Flora Township to discuss the matter further. The Township insists it has the legal authority to maintain the road ROW as it has easement rights. Ms. Courier requested documentation of such rights.
8. **Palatine Prairie NP, Cook County – Steven Byers, Jenny Skufca**
- a. Issue: A private firm (Golf Nation) erected a structure (with netting) in 2007 to support a golf driving range. The ground wires that support the structure intrude into the NP.
 - b. Threat: Unauthorized intrusion into an Illinois NP. The NP owner, Palatine Park District, wants the infrastructure removed.
 - c. Status: Golf Nation has stated its intent to remove the infrastructure, but it failed to remove the infrastructure by the September 1, 2009 deadline. Golf Nation stated that the failure to complete the project was due to the contractor. The Palatine Park District Board has directed its staff to work with the INPC to seek recourse with the Attorney General's office if the project has not been completed by October 1, 2009.
9. **Wolf Road Prairie NP, Cook County - Steven Byers, Jenny Skufca**
- a. Issue: The Village of Westchester is seeking approval from the FPDCC to route infrastructure along 31st Street (adjacent to Wolf Road Prairie NP) and along Hickory Lane.
 - b. Threat: Potential direct threat posed by construction activities along 31st Street. Indirect threat from conversion of three 5-acre lots along Hickory Lane into a more dense development. There is no existing easement for the proposed sewer line work along Hickory Lane.
 - c. Status: A resolution submitted to the FPDCC Real Estate Committee to grant approval for installation of infrastructure failed to pass. The INPC submitted formal comments to the Committee regarding easement concerns. The issue may go before the full Board of Commissioners of the FPDCC in October, 2009.
10. **Wadsworth Prairie NP, Lake County – Jenny Skufca, Steven Byers**
- a. Issue: The Wetland Initiative has proposed to construct and place an inflatable weir in the Des Plaines River to conduct studies on hydrology, sediment, and nutrient loading in the River.
 - b. Threat: The weir would impound the Des Plaines River, backing water into the NP and threatening a population of a federally-listed orchid.
 - c. Status: The INPC submitted formal comments to The Wetland Initiative expressing its opposition to this project.
11. **Kemper Park NP, Kane County – Steven Byers**
- a. Issue: The Village of Carpentersville proposed to construct a water detention basin in the NP to alleviate flooding in a nearby neighborhood.
 - b. Threat: Direct impact to the NP; indirect impact to the hydrology.
 - c. Status: INPC staff met on site and suggested several alternatives; to include permitted use of a camera to identify debris in the storm sewer. The INPC subsequently granted a permit to remove the identified debris.
12. **Eastern Prairie Fringed Orchid NP, Lake County – Steven Byers**
- a. Issue: The IDOT intends to widen Illinois Route 22. The proposal for this site provided for this construction and includes construction of a berm in order to reduce the width of the road project.
 - b. Threat: Indirect threat posed by sedimentation and subsequent increase in reed canary grass on the population of a federally-threatened orchid.
 - c. Status: INPC staff facilitated an orchid count, and a site visit with IDOT staff to look at construction limitations and identify mitigation measures to ensure a healthy orchid population.
13. **Dixie Fromm Briggs Prairie NP, Kane County – Jenny Skufca, Steven Byers**
- a. Issue: A residential neighbor removed rocks from within the NP.
 - b. Threat: It is a violation of the Illinois Natural Areas Preservation Act to remove rocks from a NP.
 - c. Status: A police report was filed by the NP landowner, Dundee Township, with no perpetrator identified. The rocks were returned to the NP without event.
14. **Superior Street Prairie LWR, Cook County – Kim Roman**
- a. Issue: A portion of the prairie was mowed by the Calumet City Public Works Department.
 - b. Threat: Encroachment to the LWR.
 - c. Status: INPC staff submitted a letter to the Mayor of Calumet City requesting that unlawful activities at the site cease. Stewardship projects at the site will be initiated as mitigation for the encroachment.
15. **Goose Lake Prairie NP, Grundy County – Kim Roman**
- a. Issue: Proposed inspection and repair of a natural gas pipeline that runs through the NP.
 - b. Threat: Disturbance to prairie and soil.

- c. Status: Staff developed measures and restrictions for the project implementation. Staff conducted site inspections to ensure compliance.
16. **Hickory Creek Barrens NP, Will County – Kim Roman**
- a. Issue: Sedimentation on the NP due to off-site land development.
 - b. Threat: Direct impacts to the NP.
 - c. Status: The INPC has recently had all related documents subpoenaed. The INPC Chair, Jill Riddell, signed the consent agreement, but to date the finalized order has not been received.
17. **Kinney’s Ford Seep LWR, Vermilion County – Mary Kay Solecki, Kelly Neal, Randy Heidorn**
- a. Issue: The IDNR addressed a drainage issue on its property near the LWR by removing fill and ballast in an old rail embankment down to a pair of culverts. The contractor, a local road commissioner, asked and received permission from the IDNR to store excess fill in the parking lot area within the LWR. There was more fill than anticipated, and the piles were also placed in a disturbed area of the LWR in and adjacent to the parking lot slated for restoration. This work was done in the fall of 2008 and came to the attention of the INPC in mid-April, 2009.
 - b. Threat: Erosion control was not put in place, and silt had potentially washed into wetland areas containing state-listed species. The CERP for this project did not include storage of the fill in the LWR, and INPC approval was not sought for the storage of the fill in the LWR.
 - c. Status: Silt fencing has been put in place. The INPC worked with the Endangered Species Protection Board (ESPB) and IDNR staff to review procedures that led to the placement of the fill within the LWR without proper authorization and to correct deficiencies. It is anticipated that the fill will be removed by late September, 2009. Ms. Solecki and Ms. Neal met on-site with INPC, IDNR, and ESPB staff to determine actions needed to minimize impacts to listed species and provided input to the action plan and corrective measures. A letter was drafted and sent by the INPC Chair, Jill Riddell, to the IDNR Director, Marc Miller. The stock piled fill should be out of the LWR by September 22, 2009.
18. **Columbia Quarry-White Rock LWR, Monroe County – Debbie Newman**
- a. Issue: Unknown person(s) sprayed a path from a logging road down through woods to edge of the bluff. A path was also sprayed along the bluff, killing the hill prairie. With this site being remote, it will be difficult to determine who did this.
 - b. Threat: Decimated a portion of the hill prairie.
 - c. Status: The contractor working at the site posted a “Do Not Spray” sign at the area.
19. **Prairie of the Rock Overlook LWR, Randolph County – Debbie Newman**
- a. Issue: Unknown persons have ridden ATVs all over the site below the hill prairie.
 - b. Threat: ATV damage throughout the site.
 - c. Status: The INPC is working with the landowner’s tenant farmer and Prairie du Rocher Police to eliminate the activity.
20. **Salt Lick Point LWR, Monroe County – Debbie Newman**
- a. Issue: An individual bulldozed approximately one-quarter of an acre area across LWR line.
 - b. Threat: Encroachment in the LWR.
 - c. Status: INPC staff and a Conservation Police Officer are working with the neighbor to remedy the situation and prevent future incursions.
21. **DesPain Wetlands LWR, St. Clair County – Debbie Newman**
- a. Issue: A neighbor to the LWR had a survey done and posted boundaries on the LWR, claiming an additional 30-50 feet as his property.
 - b. Threat: Boundary intrusion; no damage to the LWR.
 - c. Status: INPC staff is working to resolve the survey issue.
22. **Mermet Swamp NP, Massac County – Judy Faulkner Dempsey, Jenny Skufca**
- a. Issue: An adjacent landowner requests that the NP landowner, the IDNR, remove beaver dams to allow water to drain more quickly from field drain tiles.
 - b. Threat: Removing beaver dams will drain the NP.
 - c. Status: At the request of IDNR Legal staff, the INPC submitted formal questions to the IDNR District Heritage Biologist and IDNR Site Superintendent regarding the timeline of placement of drain tiles in relation to the beaver dam construction. It was confirmed that beaver activity had been ongoing prior to installation of the drain tiles. The INPC has been advised by IDNR Legal staffs that, with the information available at this time, beaver dams are naturally holding water in the NP and are not responsible for water holding on the adjacent property.

VII. Stewardship Program:

- A. Field staff conducted site surveillance at several NPs and LWRs.
- B. John Nelson, Steven Byers, and Kelly Neal coordinated initial planning meetings for the development of a gypsy moth control policy for the INPC and the Chicago Wilderness region. The meeting was hosted by Steven Byers and Sue Hayden, MCCC.
- C. Kelly Neal:

1. Has been working with IDNR Systems and Licensing staff to design a new database for INPC special-use permits.
2. Conducted various activities with TNC's Volunteer Stewardship Network (VSN) including:
 - a. Monitoring the VSN listserv and providing INPC clarification or information as needed.
 - b. Working with TNC's Volunteer Coordinator, completed the purchase and distribution of equipment used by volunteers for stewardship at INPC sites.
 - c. Represented the INPC at VSN meetings in northern and central Illinois.
- D. At the request of the IDNR, INPC's Stewardship staff was asked to evaluate impacts and make stewardship recommendations regarding the removal of a portion of a railroad embankment to improve drainage on property neighboring the IDNR's Middle Fork State Fish and Wildlife Area. In addition to erosion concerns, there may have also been impacts to a state-threatened species habitat and potential take. Kelly Neal organized a site visit with Mary Kay Solecki, ESPB staff, and IDNR staff. Ms. Neal then compiled information and worked with Randy Heidorn and Mary Kay Solecki in creating a report and a recommendation memo to the IDNR.
- E. Stewardship Planning:
 1. Kelly Neal reviewed four management schedules, two unscheduled management activities, and one management related CERP.
 2. Deborah Stone, Randy Heidorn, Steven Byers, and Kim Roman participated in several meetings related to the USEPA Great Lakes Restoration Initiative grants - Sustain our Great Lakes including :
 - a. A meeting with a stakeholder in the Waukegan Area of Concern area hosted by the Waukegan Citizen Advisory Group.
 - b. A meeting coordinated by Steven Byers with stakeholders of NPs in the Chicago Lake Plain Section to discuss funding opportunities for stewardship through - for habitat and restoration of 22 Chicago Lake Plain sites.
 3. John Nelson:
 - a. Met with board members of the Brookville Lutheran Cemetery Association to discuss management needs at Brookville Lutheran Cemetery Prairie NP. Mr. Nelson submitted a new five year management plan and schedule.
 - b. Met at Freeport Prairie NP with the site steward and local volunteers to discuss management activities and site needs. A five year management plan was submitted to the landowner, the Jane Adamsland Parks Foundation.
 - c. Worked with NLI staff to submit a new three year management plan for approval for Howard D. Coleman Dells NP.
 - d. Met with staff of Sterling Rock Falls Family YMCA Camp Merrill M. Benson LWR to discuss controlled burn plans and other management priorities.
 4. Steven Byers:
 - a. Coordinated with Friends of the Forest Preserve and the FPDCC to secure a grant with the Gaylord and Dorothy Donnelley Foundation for restoration activities at Thornton Lansing Road NP.
 - b. Coordinated a hands-on demonstration of restoration activities at Wolf Road Prairie NP, with Jack Pizzo, for the American Society of Landscape Architects.
 5. Kim Roman:
 - a. Met with Forest Preserve District of Will County staff for the annual review of management/stewardship issues associated with all 15 of its sites enrolled in INPC programs.
 - b. Met with a potential volunteer steward at Short Pioneer Cemetery Prairie NP.
 6. Angella Moorehouse:
 - a. Coordinated with the NLI and met with staff from the Rock Island County Soil and Water Conservation District and volunteers from the Quad Cities Natural Area Guardians to discussion management and restoration plans for the 92-acre NLI tract at Milan Bottoms.
 - b. Met with representatives from the Prairie Land Conservancy, the new owner of Jamar Haven LWR and Stony Hills NP, to post NP boundary signs and to discuss management and restoration issues.
 7. Tom Lerczak:
 - a. Met on-site with landowners to discuss management at McCune Sand Prairie LWR and developed a short-term (2009-2010) management strategy for the LWR.
 - b. Met with the Land Conservation Foundation to discuss management of Mettler Woods NP.
 - c. Provided information to the Wetlands Initiative, owners of Thomas W. and Elizabeth Moews Dore Seep NP, regarding floodplain management.
 - d. Began compiling the FY10 herbicide order.
 - e. Provided herbicide to volunteers and contractors for use at sites enrolled in INPC programs.
 - f. Assisted distribution of INPC staff herbicide orders, signs, and sign posts.
 8. Mary Kay Solecki provided management plans for NPs, LWRs and NHLs within the Vermilion River COA to the COA project manager to be used in habitat/stewardship implementation plans for the COA.
 9. Debbie Newman:
 - a. Worked with a committee on developing a plan for a large Environmental Quality Incentives Program grant for Salt Lick Point LWR.

- b. Worked with Clifftop and the IDNR on strategy development for a CCPI Natural Resources Conservation Service focus area in the Northern Ozark Natural Division COA.
- 10. Bob Edgin contacted owners of six sites enrolled in INPC programs to discuss short and long-term management objectives.
- 11. Judy Faulkner Dempsey:
 - a. Attended Joint Venture Partnership meetings on the Cache River to better manage and protect the area and make long range plans for the area's future.
 - b. Conducted a field trip for the owner of Horsefly Ridge NP to educate owner about the benefits of prescribed burning.
 - c. Met with Chris Evans, River to River Invasive Species Coordinator, to obtain recent educational material for distribution.
- F. Stewardship project implementation: Staff continued to coordinate and administer stewardship projects, including the Hill Prairie Project, funded by the Landowner Incentive Program, a State Wildlife Grant, the Wildlife Habitat Incentive Program, an EPA 319 Grant, the Natural Areas Acquisition Fund, and the 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 and sign posting, and prescribed burn site preparation and burn crews. Sites where this kind of work occurred include:
 - 1. Area 1: Kinnikinnick Creek NP, Boone Creek Fen NP, and Pistakee Bog NP
 - 2. Area 2: Sterne's Fen NP, 10 high-quality wetland basins in McHenry County, and a high-quality fen wetlands in northeastern Illinois.
 - 3. Area 3: Old Plank Road Prairie NP, Goose Lake Prairie NP, Maze Woods LWR, Butterfield Creek Headwaters LWR, Messenger Woods NP, and Sand Ridge NP.
 - 4. Area 6: Monticello's Sangamon River LWR, and Shady Rest LWR.
 - 5. Area 8: Lost Creek Marsh LWR and NP.
 - 6. Area 9: Ren-Dill Shale Glade NP, Faulkner-Franke Pioneer Railroad Prairie NP, Circle B Ranch LWR, Horsefly Ridge NP, and Degognia Canyon LWR.
- G. Land management conducted by staff:
 - 1. John Nelson:
 - a. Participated at a workday at Gladstone Fen NP.
 - b. Performed several days of management activities at Harlem Hills NP and Boone Creek Fen NP.
 - c. Posted new boundary signs at Brookville Lutheran Cemetery Prairie NP.
 - 2. Steven Byers participated in stewardship activities with volunteer stewards (pulling garlic mustard and herbicide application) at a number of NPs.
- H. Kim Roman conducted regular stewardship activities at Goose Lake Prairie NP, Long Run Seep NP, DesPlaines Dolomite Prairies LWR, Sweet Fern Savanna LWR, Voight-Pauper Cemetery Prairie LWR, Short Pioneer Cemetery Prairie NP, and Superior Street Prairie LWR.
- I. Mary Kay Solecki conducted invasive species control and other stewardship activities such as boundary posting, planting, and trash/litter cleanup at several sites, including: Prospect Cemetery Prairie NP, Barnhart Prairie Restoration NP, Unity East Prairie Restoration, and Rocky Branch NP.
- J. Debbie Newman:
 - 1. Removed sweet clover, garlic mustard, and honeysuckle at five sites.
 - 2. Continued working with volunteers at Salt Lick Point LWR.
- K. Bob Edgin:
 - 1. Conducted invasive species control at Allison Gravel Prairie NHL, Green Prairie NHL, Horn Prairie Grove LWR, Beall Woods NP, Chauncey Marsh NP, Marjorie Brines White Oak Woods LWR, Padgett Pin Oak Woods LWR, Red Hills Woods NP and Robeson Hills NP.
 - 2. Posted boundary signs at Culley Barrens LWR.
 - 3. Installed a fire line at Padgett Pin Oak Woods LWR.
- L. Judy Faulkner Dempsey organized and gathered materials and volunteers to post boundaries at Horsefly Ridge NP.

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

Submitted by Anne Mankowski, Director
for the 144th Meeting, November 13, 2009

1. FY08 and FY09 Projects

FY08 Projects

Contract #	Title	Researcher/ Institution	Award Amount	Status
RC08E02W	Establishing population trends of <i>Hyla avivoca</i> in southern Illinois by duplicating the 1995 Redmer, Brown and Brandon survey	John Palis	\$ 3,402.00	Done
RC08E01W	Survey of breeding colonial wading birds of conservation concern in the lower Wabash River drainage in Illinois, with special emphasis on the Little Blue Heron	Three Rivers Environmental Assessments	\$ 18,423.00	Due 10/31/09
RC08E03W	Status survey update for listed herptiles for Kidd Lake Marsh, Fults Hill Prairie N.P., and other newly dedicated lands in Monroe County	Robert Weck	\$ 4,852.20	Done
RC08E04W	Genetic variation in <i>Astragalus crassicaarpus</i> var. <i>trichocalyx</i> in Illinois	SIU at Edwardsville, Dept. of Biological Sciences	\$ 2,999.70	Done
RC08E05W	Spatial Ecology and Over-Winter Survival of Neonate Eastern Massasauga Rattlesnakes (<i>Sistrurus catenatus catenatus</i>) at Carlyle Lake	INRS INHS UIUC	\$ 13,191.00	Due 06/30/10
RC08E06W	Conservation genetics of the state endangered spotted turtle, <i>Clemmys guttata</i>	INRS INHS UIUC	\$ 5,000.00	Due 12/31/09
RC08E07W	Status, Distribution and Resource Requirements of the Longnose Dace in Illinois	INRS INHS UIUC	\$ 6,450.00	Done
RC08E08W	Status Survey of <i>Mentzelia oligosperma</i> (Stickleaf)	Michael Jones	\$ 4,986.00	Done
RC08E09W	Population Size and Genetics of the Blanding's Turtle at Goose Lake State Natural Area, Grundy County, Illinois	INRS INHS UIUC	\$ 8,318.00	Due 12/31/09
RC08E10W	Status Report for Native Populations of Shortleaf Pine (<i>Pinus echinata</i>)	Michael Jones	\$ 9,632.00	Due 06/30/10
RC07E02W	Reproductive Success of Sandhill Cranes in Northeastern Illinois	Dr. David Thomas, PI; Dr. Michael Ward, INRS INHS UIUC, INHS	\$ 5,730.00	Done

FY09 Projects

Contract #	Title	Researcher/ Institution	Award Amount	Status
RC09E01W	Habitat Use, Nest Success, and Natal Philopatry of Loggerhead Shrike in Northwest Illinois.	Wenny and Elbert (INRS INHS UIUC)	\$ 6,053	Due 05/01/10
RC09E02W	Conservation Genetics of Jefferson Salamanders in Illinois: Implications for Conservation and Recovery	Kuhns (INRS INHS UIUC)	\$5,995	Due 03/30/10
RC09E03W	Status assessment survey for springtails (Collembola) in Illinois caves.	Soto-Adames and Taylor (INRS INHS UIUC)	\$4,663	Due 03/31/10
RC09E04W	Rarely Seen Illinois Native Plant Species; Their Status and Distribution.	Phillippe and Ebinger (INRS INHS UIUC)	\$6,419	Due 12/31/09
RC09E05W	Status of three freshwater snails species in the lower Ohio River basin in Illinois.	Tiemann and Cummings (INRS INHS UIUC)	\$3,993	Due 06/30/10

2. Brief Summaries for Recently Received Project Reports

Status, distribution, and resource requirements of the longnose dace *Rhinichthys cataractae* (Valenciennes) in the Wisconsin Driftless region of Illinois, by Jeremy S. Tiemann and Christopher A. Taylor (Illinois Natural History Survey), Jason H. Knouft (Saint Louis University), and Joshua L. Sherwood (Western Illinois University), RC08E07W.

The longnose dace *Rhinichthys cataractae* (Valenciennes) is a small, elongated, slightly dorsoventrally compressed minnow that possesses the widest distribution of any North American cyprinid. In Illinois, it is known from streams in the Wisconsin Driftless Area and the shoreline of Lake Michigan. We examined the distribution and population status, habitat requirements, and diet of *R. cataractae* in the Wisconsin Driftless Area in Illinois. The dace was collected at 11 of the 33 sites sampled, and catch-per-unit-effort (standardized by number of individuals per hour collecting) varied from 0.8 to 52 per site. It was found most often in gravel/cobble riffles in small- to medium-sized streams. Stable isotope analysis showed the diet of *R. cataractae* to be dominated by macroinvertebrates and periphyton. Although its range is limited in Illinois, the dace is locally abundant in several basins and we feel it does not warrant listing at this time.

3. FY10 Cycle

The current balance is \$7.68 and current indications are that the Board will receive an allocation of \$25,000 from the Illinois Wildlife Preservation Fund for the FY10 cycle; bringing the **total balance to \$25,007.68**. At the 144th meeting, the Board will consider which project proposals to recommend for funding. Following the November meeting, approval will be sought from DNR Director Miller and contracts will be initiated. It is estimated that persons submitting proposals will be notified of their status by January 8, 2010. If Ms. Mankowski has to rework proposals with applicants that submitted multi-year projects and did not break-out a one-year budget, the timeline may be delayed.

Proposals received in response to the FY10 ESPB RFP.

ESPB Approved Research Project Title	Proposals Received Investigator (Institution)	Proposal Title	Total Budget Request	Budget Details	Proposed End Date
Plants					
Glacial Relict Monitoring	None				
Experimental Reintroduction of Species Extirpated from Illinois	None				
<i>Polygala incarnata</i> germination ecology.	None				
<i>Asclepias lanuginosa</i> : Genetic and Population Studies Leading to a Recovery Plan	David Zaya and Jeremie Fant UIC and CBG	Investigating the role of genetic diversity and pollination biology as potential causes for reproductive failure.	\$7,632		3/31/11
	Elizabeth Esselman SIUE	Status of <i>Schoenoplectus hallii</i> (Hall's bulrush) in Illinois.	\$750		Unclear, maybe March 2011
Birds					
None	None				
Mammals					
None	None				
Reptiles and Amphibians					
Surveys for the Ornate Box Turtle in Illinois	Stephen J. Mullin EIU	The population status of Ornate Box Turtles in Illinois.	\$11,667	Greater than one-year proposal that does not break-out budget by year. Will require re-working proposal with applicant.	Dec 2012
	Jennifer Hammer The Conservation Foundation	A Proposal for the Survey of the Ornate Box Turtle (<i>Terrepena ornata</i>).	\$9,750	In-kind match of \$13,600. Greater than one-year proposal that does not break-out budget by year. Will require re-working proposal with applicant.	Aug 2011
	Abigail J. Maley INHS/UIUC	Gene Flow among Populations of the Four-Toed Salamander, <i>Hemidactylium scutatum</i> .	\$5,000		Dec 2010
Fishes					
Evaluation of Distribution, Movements, and Habitat Use of River Redhorse (<i>Moxostoma carinatum</i>) and Greater Redhorse (<i>Moxostoma valenciennesi</i>) in the Upper Illinois River Basin.	David H. Wahl INHS/UIUC	Evaluation of Distribution, Movements, and Habitat Use of River Redhorse (<i>Moxostoma carinatum</i>) and Greater Redhorse (<i>Moxostoma valenciennesi</i>) in the Upper Illinois River Basin.	\$8,500	Budget is noted as running through 3/31/2011. Timetable runs through Winter 2012. Greater than one-year proposal that does not break-out budget by year. Will require re-working proposal with applicant.	Winter 2012
Status of <i>Ammocrypta clarum</i> (Western Sand Darter) in the Middle Kaskasia River and <i>Fundulus catenatus</i> (Northern Studfish) in Southwestern Illinois.	Robert Colombo, Eden Effert, and Trent Thomas EIU and IDNR	Distribution and population status of the western sand darter in the Middle Kaskasia River and the Northern Studfish in Southwestern Illinois.	\$4,000		Dec 2010
Invertebrates					
None	Steven J. Taylor, Marlis Douglas, Jeremy Tiemann, and Robert Weck INHS/UIUC and individual.	Baseline monitoring and molecular characterization of the state endangered Enigmatic Cavesnail, <i>Fontigens antroecetes</i> (Hubricht 1940)	\$2,878		Feb 2011

Status Review Criteria for De-listing the Golden Mouse from Its State Threatened Status

Developed by the Endangered Species Protection Board
Mammal Technical Advisory Committee:
Bob Bluett, IDNR
Dean Corgiat, IDNR
George Feldhamer, SIUC
Joyce Hofmann, INHS/UIUC
Joe Kath, IDNR

Approved by the Endangered Species Protection Board at its 144th meeting, November 13, 2009.

Obtaining quantitative estimates of a species' distribution, and particularly its abundance, is a difficult task. The problem can be acute for endangered and threatened species because their rarity and/or patchy distribution prevent efficient detection. Therefore, most status determinations are recommended by panels of experts who consider the best available data. This approach is credible, but tends to be subjective (Clark et al. 2006).

Listing a species as endangered or threatened conveys protection under state and/or federal laws. This action can incur social and economic costs such as reviews for incidental take, surveys to determine a species' presence or absence in a project area, modifications to civil and private construction/development, and mitigation for projects that diminish the quality and/or quantity of a species' habitat. Litigation can occur when these costs are perceived as excessive (e.g., Yaffee 1994). Therefore, objective criteria for listing (and de-listing) species are desirable if resource agencies responsible for protecting endangered and threatened species want to fulfill their statutory obligations, allocate resources to species most in need of conservation actions, and avoid frequent challenges in courts and other venues.

Research priorities recommended by Illinois' Endangered Species Technical Advisory Committee for mammals included assessing the status of the golden mouse. This document proposes specific criteria for de-listing the golden mouse to help define an appropriate scope for the research project and a clear, objective outcome when it is completed.

The following background information and criteria were developed by Dr. George Feldhamer (Zoology Department, Southern Illinois University) in anticipation of the study:

Introduction

Rarity of a species—and enhanced potential for extinction—is a fundamental concept in wildlife management and conservation biology. Most mammalian species in North America are neither widespread nor abundant (Gaston 1994). Resource managers working with rare species that may be identified as threatened or endangered at the state or national level face many ecological and methodological uncertainties. A species may actually *be* rare or it may only appear to be rare because it is highly elusive, spatially clustered throughout its range, or it exhibits temporal (seasonal) variation in abundance. The golden mouse (*Ochrotomys nuttalli*) is a prime example of the uncertainties faced by managers attempting to determine the current status of listed species.

Current Conservation Status of the Golden Mouse

Golden mice are distributed throughout the southeastern United States, and are on the periphery of their geographic range in Illinois (Figure 1), where they are currently listed as a state threatened species (Herkert 1992). The golden mouse is considered “secure” in most of the other states where it occurs although it also is a state-listed species in Texas, Missouri, and West Virginia (Feldhamer and Morzillo 2007).

This project is proposed to quantitatively assess populations of golden mice throughout Illinois in comparison with populations throughout their core geographic distribution. Assessment will involve mark-recapture of individuals to determine the percentage of sampled sites that are occupied by golden mice, and their relative abundance on occupied sites. If there is no significant difference in these two quantitative factors, the golden mouse could be considered for removal from the list of threatened species in Illinois.

Geographic Range and Density

The golden mouse is restricted to the southeastern United States from the Appalachian Mountains in northwestern Virginia south to central Florida and from extreme eastern Texas and Oklahoma through southeastern Missouri to southern Illinois and most of Kentucky (Figure 1). Often found in deciduous hardwood and coniferous forests, the golden mouse occupies a variety of habitats including the borders of old fields, swampy lowlands, canebrakes, and xeric wooded uplands. Its occurrence is usually associated with dense understory vegetation and the presence of abundant climbing vines such as greenbriar (*Smilax* sp.), Japanese honeysuckle (*Lonicera japonica*), grape (*Vitis* sp.), blackberry (*Rubus* sp.), poison ivy (*Toxicodendron radicans*), and cane (*Arundinaria* sp.). It is generally regarded as a habitat specialist (Dueser and Hallett 1980, Knuth and Barrett 1984, Seagle 1985) as opposed to sympatric species such as white-footed mice (*Peromyscus leucopus*) or cotton mice (*Peromyscus gossypinus*) that are more habitat generalists.

Although it may be fairly common in localized areas, as a general rule the golden mouse is uncommon, with population densities well below those of sympatric species of *Peromyscus* (Feldhamer and Morzillo 2007). The species lives in highly localized populations. Population densities reported in the literature are highly variable (Linzey and Packard 1977; Rose 2007). Although to some extent the reported variation in densities may reflect different trapping protocols, site-specific and seasonal differences are no doubt significant as well. Densities of golden mice are usually lower than that of sympatric *Peromyscus*. Also, there may be inverse relationships between population densities of golden mice and co-occurring *Peromyscus* (Linzey 1968, Furtak-Maycroft 1991). Finally, there also are behavioral differences between golden mice and *Peromyscus* that may affect perceived densities. Feldhamer and Maycroft (1992) found that individual golden mice were trapped significantly fewer times, and in fewer traps, than sympatric white-footed mice.

Proposed De-Listing Criteria to be Considered for Golden Mice in Illinois

The following criteria will be used to address the question of de-listing. Criteria 1-6 are those for listing a species from the Administrative Code, Title 17 Conservation, Chapter 1 Department of Natural Resources, Subchapter c Endangered Species. In many cases, data are available to address these criteria as noted below. Data to address the final two criteria—which are not part of the Administrative Code—will result from the study.

1. Species included in the Federal list of Endangered or Threatened Species

Golden mice are not federally listed as endangered or threatened.

2. Species proposed for Federal Endangered or Threatened status that occur in Illinois

Golden mice are not being proposed for federal threatened or endangered status. As noted, they are generally considered secure throughout most of their range.

3. Species which formerly were widespread in Illinois but have been nearly extirpated from the state due to habitat destruction, collecting, or other pressures resulting from the development of Illinois

There is no historical evidence that golden mice were ever widespread in Illinois. Given land management practices the past 50 years, density and distribution of the species may be greater than ever, although recent management trends toward reduced cutting and burning of forested sites may negatively impact golden mice.

4. Species which exhibit very restricted geographic ranges of which Illinois is a part

The geographic range of most species of North American mammals is fairly limited. The median geographic range of close to 700 mammalian species is only about 1% of the total area of North America; only about 14 species have ranges > 50% of the area of North America. Thus, one in six species of North American mammals has a range smaller than the state of Connecticut. Most have ranges smaller than the states of California, Oregon, and Washington combined (Pagel et al. 1991; Pimm and Jenkins 2005). Also, as a general rule small species such as rodents have smaller ranges than large species. The golden mouse is a prime example of a small species with a relatively extensive geographic range. The extent of occurrence of golden mice is well above the average for most North American mammals, especially for a small rodent.

5. Species which exhibit restricted habitats or low populations in Illinois

As noted above, golden mice are often found in deciduous hardwood and coniferous forests, but they also occupy a variety of habitats including the borders of old fields, swampy lowlands, canebrakes, and xeric uplands. Populations generally are low, but may not be different from other populations in the core area.

6. Species which are significant disjuncts in Illinois, i.e., the Illinois population is far removed from the rest of the species' range

This is not the case for golden mice. Their range in Illinois is contiguous with the core distribution.

The following two criteria will be addressed through the study:

These proposed status review criteria represent measures of distribution and abundance to prompt the Endangered Species Protection Board to review the status of golden mice and consider de-listing. Status review criteria do not prompt an automatic change in status, and the Endangered Species Protection Board may review the status or status review criteria of the species at any time.

- Determine if the percentage of sites sampled in Illinois (with appropriate habitat) that contain golden mice is significantly different ($P < 0.05$) from sites sampled in the core of the distribution that contain golden mice.

- Determine if the average number of individual golden mice trapped per unit effort on all occupied sites within Illinois is significantly different ($P < 0.05$) from that within the core of the range of golden mice.

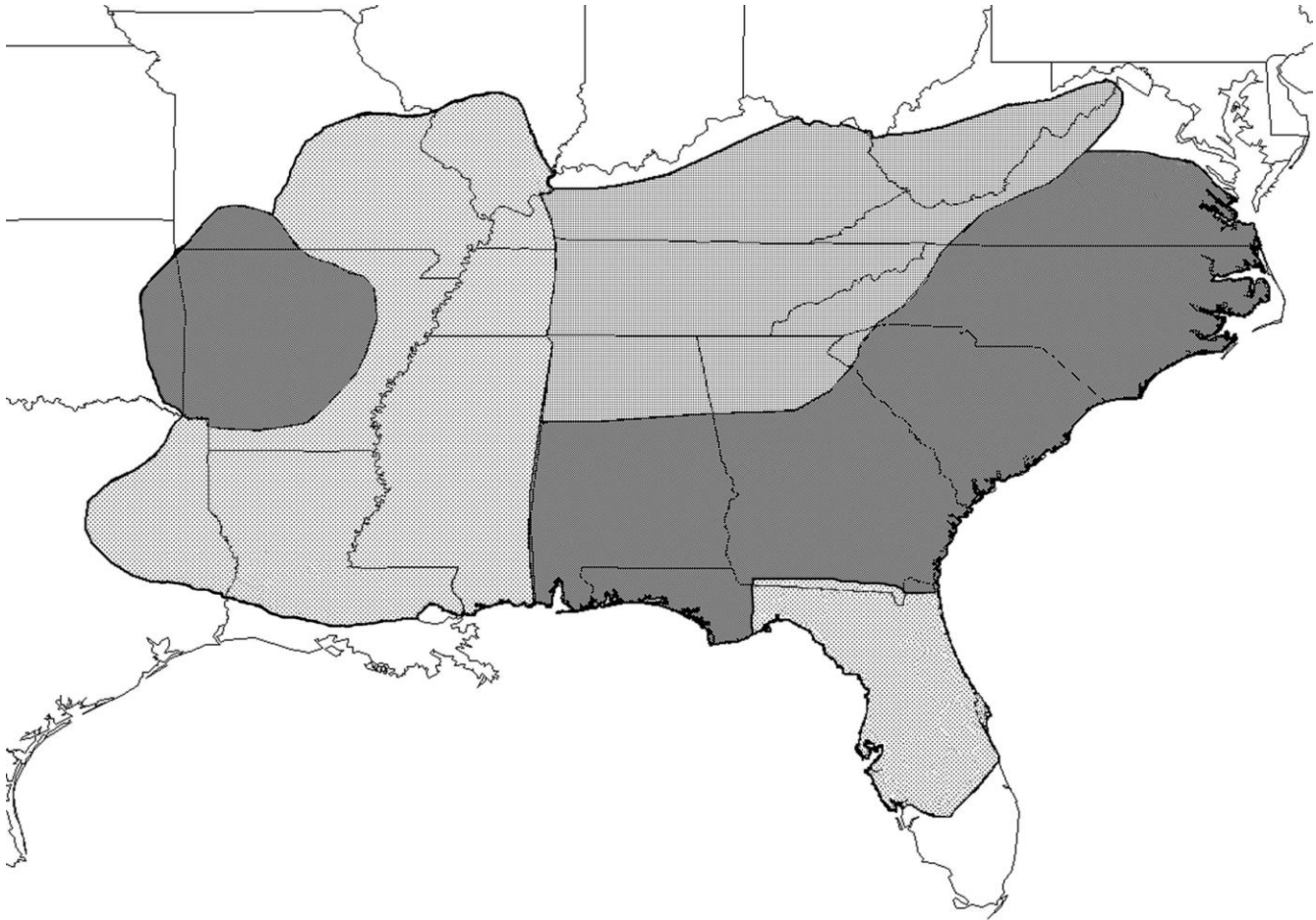
LITERATURE CITED:

- Clark, K. E., J. E. Applegate, L. J. Niles, and D. S. Dobkin. 2006. An objective means of species status assessment: adapting the Delphi technique. *Wildlife Society Bulletin* 34:419-425.
- Dueser, R. D and Hallett, J. G. 1980. Competition and habitat selection in a forest-floor small mammal fauna. *Oikos* 35:293-297.
- Feldhamer, G. A. and Maycroft, K. A. 1992. Unequal capture response of sympatric golden mice and white-footed mice. *American Midland Naturalist* 128:407-410.
- Feldhamer, G. A. and Morzillo, A. T. 2007. Relative abundance and conservation: is the golden mouse a rare species? In G. W. Barrett and G. A. Feldhamer (editors), *Conservation, Ecology, and Behavior of The Golden Mouse*. Springer Publishing, New York (in press).
- Furtak-Maycroft, K. A. 1991. An empirically-based habitat suitability index model for golden mice, *Ochrotomys nuttalli*, on pine stands in the Shawnee National Forest. M.S. Thesis, Southern Illinois University, Carbondale. 44 pp.
- Gaston, K. J. 1994. *Rarity*. Chapman and Hall, New York.
- Herkert, J. R. editor. 1992. *Endangered and threatened species of Illinois: Status and distribution, Vol. 2 – Animals*. Endangered Species Protection Board, Springfield, IL. 142 pp.
- Knuth, B. A. and Barrett, G. W. 1984. A comparative study of resource partitioning between *Ochrotomys nuttalli* and *Peromyscus leucopus*. *Journal of Mammalogy* 65:576-583.
- Linzey, D. W. 1968. An ecological study of the golden mouse, *Ochrotomys nuttalli*, in the Great Smoky Mountains National Park. *American Midland Naturalist* 79:320-345.
- Linzey, D. W. and Packard, R. L. 1977. *Ochrotomys nuttalli*. *Mammalian Species* No. 75:1-6.
- Pagel, M. D., May, R. M., and Collie, A. R. 1991. Ecological aspects of the geographic distribution and diversity of mammalian species. *American Naturalist* 137:791-815.
- Pimm, S. L. and Jenkins, C. 2005. Sustaining the variety of life. (September) *Scientific American* Vol. 293:66-73.
- Rose, R. K. 2007. Population ecology of the golden mouse. In G. W. Barrett and G. A. Feldhamer (editors), *Conservation, Ecology, and Behavior of The Golden Mouse*. Springer Publishing, New York (in press).

Seagle, S. W. 1985. Competition and coexistence of small mammals in an east Tennessee pine plantation. *American Midland Naturalist* 114:272-282.

Yaffee, S. L. 1994. The northern spotted owl: an indicator of the importance of sociopolitical context. Pages 47-71 in T. W. Clark, R. P. Reading, and A. L. Clarke (editors). *Endangered Species Recovery: Finding the Lessons, Improving the Process*. Island Press, Washington, D.C.

Figure 1. Range map of the golden mouse with currently recognized subspecies: (1) *O. n. aureolus*; (2) *O. n. flammeus*; (3) *O. n. floridanus*; (4) *O. n. lisae*; and (5) *O. n. nuttalli*.



STATUS REVIEW AND RECOVERY OUTLINE

MARSH RICE RAT – *ORYZOMYS PALUSTRIS*

Eric C. Hellgren, Jack R. Nawrot, and Bryan Eubanks
Cooperative Wildlife Research Laboratory
Southern Illinois University-Carbondale

Approved by the Endangered Species Protection Board at its 144th meeting, November 13, 2009.

Current status

The marsh rice rat (*Oryzomys palustris*) is currently listed as a state-threatened species (Herkert 1992) in Illinois due to historical wetland loss in conjunction with being at the edge of its range. It is a semi-aquatic rodent in wetland habitats throughout the southeastern United States and along the Atlantic Coast that reaches the northern extent of its range in southern Illinois (Hoffmeister 1989, Wolfe 1982). Distribution of the rice rat in southern Illinois has expanded from initial sites consisting of remnant wetlands, ditches, and wet meadows (Hofmann et al. 1990) to more recent records (see below) associated with moist soil and emergent wetlands dominated by common reed (*Phragmites australis*). These wetlands are often associated with surface mines and subsidence basins of underground coal mine (Feldhamer and Carter 2004, Nielsen et al. 2006).

Small-scale studies have provided new records in recent years. Feldhamer and Carter (2004) documented rice rats in mine-associated wetlands at the recently acquired Pyramid State Park in Perry County, Illinois while conducting a small mammal survey. This record was the first for rice rats in Perry County, Illinois as Hofmann et al. (1990) failed to capture rice rats at their Perry County site. Nielsen et al. (2006) captured rice rats approximately 3 km from previous known locations near Harrisburg, Saline County, Illinois. These new records suggest rice rats may be extending their distribution in Illinois or may be more common throughout the state than previously reported.

Rice rats have been documented in the Big Muddy, Cache, Saline, Mississippi, Ohio, Wabash, and Kaskaskia watersheds of southern Illinois (Hofmann et al. 1990). These major drainages, combined with an increase in mine-associated wetlands, may have provided rice rats with opportunities for dispersal and population expansion in the last 2 decades. Recent data for this species, which is considered in the greatest need of conservation, are lacking.

Historical Status

Archeological records indicate the distribution of *Oryzomys* was once as far north as Peoria County, Illinois (McLaughlin and Robertson 1951). Hofmann et al. (1990) also reported the findings of Purdue and Styles (1986. Dynamics of mammalian distribution in the Holocene of Illinois. Illinois State Museum Reports of Investigations Number 41. original not seen) that rice rat remains had been identified in “Indian midden materials and paleontological deposits” in several northern Illinois counties. The first modern records of rice rats in Illinois were reported by Cory (1912) and Necker and Hatfield (1941) in Alexander County. These records led McLaughlin and Robertson (1951) to conclude that rice rats were limited to areas south of the Shawnee Hills Division (Schwegman 1973). Studies in the past 50 years have provided live rice rat specimens from Franklin, Hamilton, Jackson, Johnson, Massac, Perry, Pope Pulaski, Saline, Union, and Williamson counties (Fig. 1), which suggests this species may occur throughout the Southern Till Plain Division (Feldhamer and Carter 2004, Hoffman et al. 1990, Hofmann and Gardner 1987, Klimstra 1969, Klimstra and Roseberry 1969, Klimstra and Scott 1956, Rose and Seegert 1982, Schwegman 1973, Urbanek and Klimstra 1986). Casson (1984) also

provided a new record of distribution in Washington County by finding remains of a rice rat while examining mink (*Mustela vison*) stomach contents.

The only widespread assessment of the distribution of the marsh rice rat in Illinois was conducted in 1987 (Hofmann et al. 1990). The study provided new county records for rice rats in 4 counties and records at new localities in 6 counties (Fig. 2). Specimens were captured in a variety of wetland types, including palustrine emergent wetlands, palustrine scrub-shrub wetlands, palustrine aquatic beds, and riverine aquatic beds (Cowardin et al. 1979, Hofmann et al. 1990). Hofmann et al. (1990) concluded that “optimal habitat” for the species in southern Illinois included standing water and emergent wetland vegetation.

Status Review Criteria for Rice rat

The proposed status review criteria represent measures of distribution and abundance to prompt the Endangered Species Protection Board to review the status of rice rats and consider status changes. Status review criteria do not prompt an automatic change in status, and the Endangered Species Protection Board may review the status or status review criteria of the species at any time.

Evaluate Change in Status to Not Listed as Threatened or Endangered –

Rice rats will be considered recovered and eligible for a change in status to “not listed” when it is demonstrated that:

1. Two distinct, reproductively viable populations (composing a watershed metapopulation) persist in each of at least 3 major watersheds (i.e., Big Muddy, Saline, Ohio, Cache, Mississippi, Kaskaskia, Little Wabash, Wabash) in southern Illinois for 5 years.
2. Habitats used by rice rats show a stable or increasing trend in area over the most recent 5 years.

Reasons for Decline

The rice rat was listed as state threatened due to its unique habitat affiliation, limited distribution, and historical wetland loss. No recent (last 100 years) evidence exists regarding changes in population abundance and distribution. However, Hofmann et al. (1990) opined that the species is limited by climate to the southern region of Illinois and by declines in wetland areas to small, isolated populations. They noted anthropogenic forces responsible for decreases in wetland areas in the region. Rice rat populations in disjunct and ephemeral wetlands may be vulnerable to stochastic forces, and recolonization of suitable areas may be hindered by the isolated nature of suitable habitat (Hofmann et al. 1990).

Recovery Actions

Action I: Determine Distribution and Abundance of Rice Rats in Illinois — A comprehensive survey for rice rats in southern Illinois counties should be conducted. Results of this survey could be used to begin to address the proposed status review criteria for the species.

Action II: Quantify Extent and Distribution of Suitable Rice Rat Habitat — The above-mentioned survey should provide additional information supplementing and refining Hofmann’s (1990) findings on habitat preferences of rice rats. Following the definition of rice rat habitat, its current extent and distribution can be modeled.

Action III: Determine Trends in Important Wetland Habitats for Rice Rats —Documentation of historic trends and modeling of future projections in availability of rice rat habitats would provide input to a status review by the Endangered Species Protection Board.

Action IV: Monitor abundance of rice rats in identified metapopulations — If Action I succeeds in identifying ≥ 2 populations in at least 3 southern Illinois watershed, long-term monitoring of the status of these populations should be implemented in conjunction with periodic surveys of formerly unoccupied but suitable habitat within these watersheds.

Recovery Timing and Estimated Costs

Action I: Determination of Distribution and Abundance — A survey of the major watersheds in southern Illinois could document the current distribution and relative abundance of rice rats in the region. This survey could also provide the initial data directed toward addressing the first review criterion of 2 populations existing in each of 3 watersheds.

Time to complete this action: 2 years

Cost to complete this action: \$50,000

Action II: Quantify Extent and Distribution of Suitable Rice Rat Habitat— This action will be addressed in association with the survey of distribution and abundance. Habitat types of capture sites for rice rats will be determined, and GIS modeling in conjunction with Illinois land cover data and National Wetlands Inventory data will be used to estimate extent and distribution of those habitats within the 2-year time frame of the rice rat survey.

Action III: Determine Trends in Important Wetland Habitats for Rice Rats — This action will require assistance from an updating of the National Wetlands Inventory being conducted through a State Wildlife Grant 2007 to Ducks Unlimited.

Action IV: Monitor Abundance of Rice Rats in Identified Metapopulations— Monitoring segments of identifiable metapopulation of rice rats within watersheds from the rice rat survey (Action I) should be conducted at least twice in the subsequent 5-year period to document persistence of watershed metapopulations.

References

- Casson, J.E. 1984. A new distribution suggested for the rice rat (*Oryzomys palustris*) in southern Illinois. Transactions of the Illinois Academy of Science 77:285.
- Cory, C. B. 1912. The mammals of Illinois and Wisconsin. Field Museum Natural History Zoology Series 11:1-505.
- Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRue. 1979. Classifications of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service. FWS/OBS-79/31.
- Feldhamer, G., and T. Carter. 2004. Small mammal survey of ark land acquisition property, Perry County, Illinois, with special emphasis on the threatened rice rat (*Oryzomys palustris*). Carbondale, Illinois. Unpublished report.

- Herkert, J. R., ed. 1992. Endangered and threatened species of Illinois: status and distribution. Vol. 2: Animals. Illinois Endangered Species Board, Springfield, Illinois.
- Hoffmeister, D. F. 1989. The mammals of Illinois. University of Illinois Press, Urbana, Illinois.
- Hofmann, J. E., and J. E. Gardner. 1987. Investigations of the distribution, abundance and status of the marsh rice rat (*Oryzomys palustris*) in Illinois. Section of Faunistic Surveys and Insect Identification Technical Report. Springfield, Illinois. Unpublished report.
- Hofmann, J. E., J. E. Gardner, and M. J. Morris. 1990. Distribution, abundance, and habitat of the marsh rice rat (*Oryzomys palustris*) in southern Illinois. Transactions Illinois State Academy of Science 83:162-180.
- Klimstra, W. D., and T. G. Scott. 1956. Distribution of the rice rat in southern Illinois. Chicago Academy of Science Natural History Miscellaneous Note 154.
- Klimstra, W. D., and J. L. Roseberry. 1969. Additional observations on some southern Illinois mammals. Transactions Illinois State Academy of Science 62:413-417.
- McLaughlin, C. A., and W. B. Robertson. 1951. A new record of the rice rat, *Oryzomys palustris palustris*, from southern Illinois. Chicago Academy of Science Natural History Miscellaneous Note 80.
- Necker, W. L. and D. M. Hatfield. 1941. Mammals of Illinois. Bulletin of the Chicago Academy of Science. 6:17-60.
- Nielsen, C. K., J. Nawrot, and S. Cooper. 2006. Site Investigation: Rice rat (*Oryzomys palustris*) presence at AMAX Delta Mine Project. Final Report. Carbondale, Illinois. Unpublished Report.
- Schwegman, J. E. 1973. Comprehensive plan for the Illinois nature preserve system part 2: The natural divisions of Illinois. Illinois Nature Preserves Commission. Rockford.
- Urbanek, R. P., and W. D. Klimstra. 1986. Vertebrates and vegetation on a surface-mined area in southern Illinois. Transactions of the Illinois State Academy of Science 79:175-187.
- Wolfe, J. L. 1982. *Oryzomys palustris*. Mammalian Species 175:1-5.

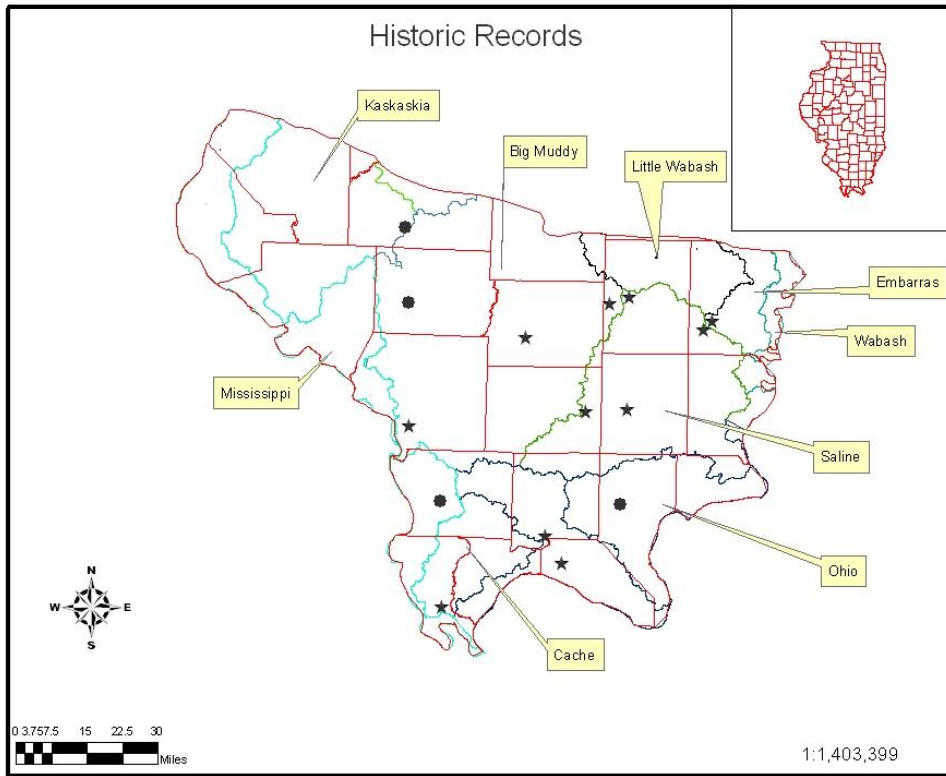


Figure 1. Locations of marsh rice rats documented from previous studies in Illinois. Watershed labeled with box and arrows. Stars depict exact locations of rice rat captures. Circles are not in exact locations but represent historical county records.

STATUS REVIEW CRITERIA FOR THE EASTERN WOODRAT

Developed by the Endangered Species Protection Board

Mammal Technical Advisory Committee:

Bob Bluett, IDNR

Dean Corgiat, IDNR

George Feldhamer, SIUC

Joyce Hofmann, INHS/UIUC

Joe Kath, IDNR

Approved by the Endangered Species Protection Board at its 144th meeting, November 13, 2009.

Introduction

Recovery of the eastern woodrat (*Neotoma floridana*), currently classified as a state endangered species, is consistent with Objective 1.1.2.3 of the Department's Strategic Plan (Illinois Department of Natural Resources 2002) and its legislatively mandated responsibility to "take all measures necessary for the conservation, distribution, introduction and restoration of birds and mammals" (520 Illinois Compiled Statutes 5/1.10). The recovery plan for this species advocates an overall goal of insuring the long-term viability of the eastern woodrat in Illinois by increasing genetic heterogeneity of extant populations, establishing populations at sites where woodrats occurred historically, monitoring population levels, and managing key habitats (Bluett 2003).

Current Conservation Status of the Eastern Woodrat

The eastern woodrat is not listed as endangered or threatened at the federal level, nor is it proposed for such action. Illinois is the only state within the range of *N. f. illinoensis* that lists it as endangered or threatened.

Geographic Range and Density

Eastern woodrats occur throughout much of the southeastern and south-central United States. They are considered common to abundant in most of their range. Illinois occurs at the extreme northern periphery of *N. f. illinoensis*' range, which also includes portions of Missouri, Arkansas, Tennessee, Kentucky, Alabama, Mississippi, Florida and Louisiana. As recently as the early 1900s, woodrats were found at numerous sites in Jackson, Union, Johnson, Pope, Gallatin, Alexander, and Hardin counties. Studies conducted during the 1990s documented the woodrat's presence at only 5 sites in Jackson and Union counties; these small, isolated populations had experienced significant inbreeding and loss of genetic variation. Recovery actions were implemented during 2003 through the present (2008) and are expected to continue during the immediate future.

Considerations for Changing the Status of Eastern Woodrats in Illinois

1. Species included in the Federal list of Endangered or Threatened Species

Eastern woodrats are not federally listed as endangered or threatened.

2. Species proposed for Federal Endangered or Threatened status that occur in Illinois

Eastern woodrats are not being proposed for federal threatened or endangered status. As noted, they are generally considered secure throughout most of their range.

3. Species which formerly were widespread in Illinois but have been nearly extirpated from the state due to habitat destruction, collecting, or other pressures resulting from the development of Illinois

There is no historical evidence that eastern woodrats were widespread in Illinois. Extensive areas of forested habitat are maintained in the woodrat's historical range by the U.S. Forest Service, Illinois Department of Natural Resources, The Nature Conservancy, and other governmental and not-for-profit organizations. Ownership by these groups limits threats from development, although current policies that limit active silvicultural practices such as timber harvest may reduce overall habitat quality as forests continue to mature.

4. Species which exhibit very restricted geographic ranges of which Illinois is a part

The geographic range of *Neotoma floridana* is large compared to most species of North American mammals.

5. Species which exhibit restricted habitats or low populations in Illinois

In Illinois, evidence of the past presence of woodrats (i.e., stick nests) has generally been associated with rock outcrops or caves. These features are somewhat restricted in Illinois. However, their importance to woodrats might be overstated because of biases associated with the long-term persistence of nest materials in caves, crevices, overhangs or other sites protected from weathering and disturbance. Animals collected in Missouri and Arkansas for translocation to Illinois were seldom associated with rock outcrops or caves; most were captured near piles of brush from timber harvests or thinning and abandoned homes, outbuildings and agricultural equipment. Recent studies conducted in southern Illinois suggest that woodrats are able to traverse wooded areas not directly associated with rock outcrops and caves. Determining whether woodrats use such areas to establish home ranges is difficult because of logistical constraints.

Recent surveys at Pine Hills and Fountain Bluff documented population levels similar to those observed in the past. From 2003 to 2007, 341 woodrats were translocated from Missouri and Arkansas to 4 locations in southeastern Illinois: Garden of the Gods, Pounds Escarpment, High Knob, and Buzzard's Point. Known survival one month after release was 8.8% of individuals. We documented reproduction based on 56 unmarked woodrats subsequently trapped. These were offspring of pregnant females introduced as well as naturally occurring breeding on site. We also used the Pine Hills population as a source for translocations to unoccupied sites. Recent studies suggest that juveniles usually disperse from Pine Hills and are essentially lost to the population through natural mechanisms. We also translocated 41 woodrats from various sites in Arkansas and Missouri to Pine Hills and 6 woodrats from 2 sites in Missouri to Fountain Bluff.

6. Species which are significant disjuncts in Illinois, i.e., the Illinois population is far removed from the rest of the species' range

Sites occupied by woodrats in southern Illinois are isolated from the nearest known populations 120.7 km (75 mi) to the west in Missouri and 136.8 km (85 mi) to the south in Tennessee.

Criteria for reviewing the status of the eastern woodrat

The proposed status review criteria represent measures of distribution and abundance to prompt the Endangered Species Protection Board to review the status of eastern wood rats and consider status changes. Status review criteria do not prompt an automatic change in status, and the Endangered Species Protection Board may review the status or status review criteria of the species at any time.

Illinois' Woodrat Recovery Plan (Bluett 2003) advocates the following criteria for recommending changes in the status of this species to the Endangered Species Protection Board for consideration:

Reclassify the eastern woodrat from state endangered to state threatened.

This objective is met when a stable or increasing metapopulation of ≥ 50 individuals (fall estimate) has been established in an unoccupied part of the woodrat's historical range on the eastern part of the Shawnee Hills Natural Division (i.e., Johnson, Saline, Gallatin, Pope, or Hardin counties) and persisted ≥ 4 years after translocations have ceased.

Delist the eastern woodrat from state threatened status.

This objective is met when (1) genetic heterogeneity of the Pine Hills metapopulation has increased, (2) a stable or increasing metapopulation has been documented at Pine Hills and associated sites for ≥ 4 consecutive years, (3) a stable or increasing metapopulation consisting of ≥ 50 individuals (fall estimate) has persisted on the eastern side of the Shawnee Hills Natural Division for ≥ 4 years after translocations have ceased, and (4) ≥ 2 additional populations consisting of ≥ 30 individuals each have persisted ≥ 2 years after translocations have ceased.

Literature Cited

Bluett, R. D. (editor). 2003. Eastern woodrat recovery plan. Illinois Department of Natural Resources, Springfield, Illinois, USA.