

Proposal No. 66
Project No. FY87-1

HERPTILE INVENTORY OF FOUR CENTRAL
ILLINOIS PRAIRIE PRESERVES
[Final Report]

Presented to:

Illinois Department of Conservation
Division of Natural Heritage
524 South Second Street
Springfield, IL 62706

Kipp C. Kruse, Ph.D. and Edward O. Moll, Ph.D.
Department of Zoology
Eastern Illinois University
Charleston, IL 61920

September 18, 1987

STUDY AREAS: Sand Prairie-Scrub Oak Nature Preserve (Mason Co.), Matanzas Prairie Nature Preserve (Mason Co.), Shick Shack Sand Pond Nature Preserve (Cass Co.), and Meredosia Hill Prairie Nature Preserve (Morgan Co.)

STUDY DATES: March---August 1987

STUDY OBJECTIVES: To inventory the amphibian and reptile populations on the study areas, provide a species list of specimens collected and/or observed and to estimate relative abundance of the various herptile species

Study Methods:

In this study we used a standardized sampling system for terrestrial reptiles and amphibians developed by the Fish and Wildlife Service (Campbell and Christman, 1982). Keystone of this system is an array of pitfall and funnel traps used in conjunction with drift fences to divert moving animals into the traps. The drift fences of the array system are 7.6 m length of 46 cm high flashing (or valley tin) arranged in a plus-shaped pattern with a central separation of 15 m. At each end of the flashing a plastic bucket is sunk flush with the ground. A masonite roof is set 2 to 4 cm above each bucket to protect captured animals from the sun. Funnel traps are made from window screening rolled into a cylinder about 20 cm in diameter with a screen funnel set in each end. These are placed flush with the ground and appressed to the tin fence, one on each side of each arm. Loose soil or litter is placed in the mouth of the trap to create a more natural entry. A masonite board is placed over each funnel to provide shade.

Hoop traps baited with chicken livers or fish were used to sample turtles and other aquatic herps. A variety of other conventional techniques such as nocturnal road cruising and opportunistic manual collecting were also used to inventory the areas.

Relative abundance of species in each area is indicated by the terms "very common" (VC), "common" (C) and "uncommon" (UC). The terms are based on trapping, array results and general collecting. For this study trapping or drift fence results exceeding .01 and .003 per hour were considered VC and C respectively. Species taken below these levels are categorized UC.

Applying these categories to general collections and observations is necessarily more subjective. In regard to frog choruses VC, C, and UC represent more than 50, 10 to 50, and less than 10 calling individuals respectively. For general collecting, VC is used for species regularly seen in some number (10+) in trips to a site under favorable conditions; C represents species regularly seen at the site but in smaller numbers (<10); UC is used for species seen only one or two times. Where different categories were obtained through different methods or at different sites on the same study area, the highest category of abundance has been used.

These categories are merely an indication of how likely it is that a visitor to the study area will see these species. They have little biological significance for the

reader must keep in mind that numbers which imply uncommon for one group may be considered as common for another. For example an active, high trophic level predator such as a snake is typically seen in much fewer numbers than an insectivorous, sit and wait predator such as a bullfrog. Five bullfrogs at a pond might be considered an unusually low number but five rat snakes seen in the vicinity would be considered unusually high. We also point out that the relative abundances indicated here are merely representative of our findings for this particular year. Weather conditions were unusually dry in 1987 and this has biased both the quality and quantity of our collections. Such a survey would have to be conducted for several years to obtain a true picture of relative abundance and the total variety of herps at these sites.

RESULTS

Twenty-eight different herptile species were collected or observed in the 4 study areas. The species lists provided (see next section) represent specimens collected or observed and should be thought of as a minimum species estimate for each of the 4 areas. Although the species lists are not unusual, there are some finds of interest. For example, the Illinois Chorus Frog (Pseudacris streckeri--a threatened species in the state) was found at the Matanzas and Shick Shack sites and might very well be present on the Scrub Oak area. The Plains hognose snake (Heterodon nasicus) was found

on the Scrub Oak and Shick Shack areas, whereas the Western Slender Glass Lizard (Ophisaurus attenuatus) was observed several times in the latter locality. Two leopard frog species (Rana blairi and R. sphenoccephala) are found together (sympatrically) at Matanzas, Shick Shack and Scrub Oak. Surprisingly, the ground skink (Scincella laterale) was collected on several occasions at Scrub Oak. Although not included on our list, the Wood Frog (Rana sylvatica) might have a viable population at the Shick Shack location (a possible chorus was heard calling in early April). Field work next spring should help clear up this issue. Blanding's turtle (Emydoidea blandingi) was collected at Shick Shack and Matanzas. We have also tentatively identified a turtle carapace collected at Meredosia as Terrepene carolina which would be a record for Morgan County.

The Shick Shack area had the most diverse herptile community (22 species). This is a very interesting area in that it contains aquatic, grassland and forest habitats which probably accounts for the fairly impressive species list compiled. Scrub Oak is a very large area with a number of distinct habitats but our species list is not particularly large. The spring-early summer 1987 was an extremely arid period and we strongly suspect that many more species inhabit this area.

The following is a species listing for the 4 areas and a subjective evaluation (very common, common and uncommon) of relative abundance. Location of drift fence traps and number

of collecting hours are also included. Number of specimens collected, date of collection, etc in each location can be found in Appendix I. Appendix II presents the habitat preferences and relative abundance of each species at each study area.

SCRUB OAK

Sand Prairie - Scrub Oak Nature Preserve is the largest of the four study sites (1460 acres) in Mason County. Soils at this site are deep sand. Sand prairie comprises much of the northern third of the site whereas oak-hickory woodland predominates in the southern two-thirds. There is at least one small temporary pond (reportedly another exists) located in the sand prairie on the west side of the area. Four arrays of drift fencing were placed at this site. Array #1 was set in sand prairie on the west side near the pond and within 20 m of an "island" of oak hickory woodland. Array #2 was set in forest edge habitat on the southwest side of the site where an intrusion of sand prairie meets the oak hickory woodland. Array #3 was set in oak-hickory woodland on the east side of the site some 170 m west/northwest of the parking area. Array #4 was in a recently burned area of sand prairie at the northeast portion of the study area.

Scrub oak was the second most productive area in numbers of species with 13. The array set in the sand prairie near the pond with nine species was the most productive individual site in the study area.

Drift Fence Dates (4 different arrays)

4 April -- 7 April

18 April -- 21 April

11 May -- 25 May

28 May -- 31 May

17 June -- 24 June

total = 738 hours 20 min

(approximately 2900 total
drift fence trap hours)

Hand Collecting Hours = 91.5 hours

Species Collected or Observed

Amphibians

Common Name

Hyla versicolor UC

Gray Tree Frog

Rana sphenocephala UC

Southern Leopard Frog

Rana blairi UC

Western Leopard Frog

Bufo woodhousei C

Fowler's Toad

Rana catesbeiana UC

BullFrog

Reptiles

Cnemidophorus sexlineatus VC

Six-Lined Race Runner

Scinella laterale UC

Ground Skink

Pituophis melanoleucus UC

Bull Snake

Heterodon nasicus UC

Plains Hognose Snake

Heterodon platyrhinos UC

Eastern Hognose Snake

Elaphe obsoleta UC

Black Rat Snake

Lampropeltis calligaster UC

Prairie King Snake

Coluber constrictor UC

Eastern Yellow-Bellied
Snake

SHICK SHACK POND

This 45.74 acre study area in Cass Co. has a diversity of habitat types including a sand pond bounded by a large hill of sand with sand prairie vegetation to the north and east and with forest and shrub swamp around the rest. This area was the most diverse of the four study areas in habitat and in herps (22 species). One drift fence array was set in the sand prairie to the north of the pond.

Drift Fence Dates

4 April -- 7 April
18 April -- 20 April
11 May -- 25 May total = 756 hours 05 min
28 May -- 31 May
17 June -- 24 June

Turtle Trap Dates

4 April -- 7 April
18 April -- 20 April
12 May -- 25 May total = 2748 hours/30 min
28 May -- 31 May
17 June -- 19 June

Hand Collecting Hours = 42.9 hours

Species Collected or Observed

Amphibians

Common Name

<u>Ambystoma tigrinum</u>	UC	Tiger Salamander
<u>Pseudacris triseriata</u>	VC	Chorus Frog
<u>Pseudacris streckeri</u>	UC	Illinois Chorus Frog
<u>Acris crepitans</u>	VC	Cricket Frog
<u>Rana sylvatica</u> (possible calling)		Wood Frog
<u>Hyla crucifer</u>	VC	Spring Peeper
<u>Hyla versicolor</u>	VC	Gray Tree Frog
<u>Rana sphenocephala</u>	C	Southern Leopard Frog
<u>Rana blairi</u>	UC	Western Leopard Frog
<u>Bufo woodhousei</u>	VC	Fowler's Toad
<u>Bufo americanus</u>	VC	American Toad
<u>Rana catesbeiana</u>	VC	Bullfrog

Reptiles

<u>Pituophis melanoleucus</u>	UC	Bull Snake
<u>Heterodon nasicus</u>	UC	Plains Hognose Snake
<u>Heterodon platyrhinos</u>	UC	Eastern Hognose Snake
<u>Elaphe obsoleta</u>	UC	Black Rat Snake
<u>Coluber constrictor</u>	UC	Eastern Yellow-Bellied Snake
<u>Nerodia sipedon</u>	UC	Northern Water Snake
<u>Chrysemys picta</u>	VC	Painted Turtle
<u>Emydoidea blandingi</u>	UC	Blanding's Turtle
<u>Chelydra serpentina</u>	UC	Snapping Turtle
<u>Cnemidophorus sexlineatus</u>	VC	Six-Lined Race Runner

Turtles at the Shick Shack area were sampled by hand

collecting, drift fences and baited hoop traps. Three species were collected--painted turtles, Chrysemys picta, snapping turtles, Chelydra serpentina, and a Blanding's Turtle, Emydoidea blandingi. Painted turtles predominated numerically. In 2749 trap hours, we captured 15 painteds, 4 snappers and 1 Blanding's. Using turtles per trap hour as a measure of abundance, painted turtles (.00546) were almost 4 times as abundant as snappers (.00145) the next most common species. The single Blanding's male would figure in as .00036 turtles per trap hour. General observations suggest that the numerical superiority of painteds could be greater yet. A visual survey of the pond using binoculars at 1529 on May 29 with air temperatures of 32 C and water temperatures of 24 C identified 77 heads of Chrysemys and only 4 of Chelydra. Of course it is possible (even likely) that painted turtles spend more time at the surface than snappers.

In addition to the turtles captured in hoop traps, 6 painted turtles were captured on land. One hatchling was excavated from its nest while constructing the arrays on 11 April. Three other hatchlings were taken in array traps 19-20 April. Two females also fell into one of the array traps on 21 June.

Some information on reproduction of the painted turtle was obtained in the study. The large sand hill on the north side of the pond was found to be one of the nesting sites for the painted turtles at Shick Shack. Four hatchlings collected at this sand hill in April had apparently

overwintered in their nests there. Gravid females were collected on 30-31 May and 21 June on the study area.

Based on observed variation in the plastral figure of the turtles examined, we agree with Smith (1961) that the painted turtles here represent an intergrading population between C.p. bellii and C.p. marginata.

MEREDOSIA

This hill prairie site in Morgan Co. had the greatest relief of any of the study areas varying over a 30 m from the prairie vegetation on the steep ridge tops to the oak-hickory woodland occupying the intervening ravines. A single array was set in the prairie habitat along a ridge. Seven species were collected or seen at this site.

Drift Fence Dates

4 April -- 7 April
 18 April -- 20 April
 11 May -- 25 May total = 763 hours 35 min
 28 May -- 31 May
 17 June -- 24 June

Hand Collecting Hours = 19.8 hours

Species Collected or Observed

Amphibians

Common Name

Bufo woodhousei UC

Fowler's Toad

Reptiles

Pituophis melanoleucus UC

Bull Snake

Coluber constrictor UC

Eastern Yellow-Bellied Snake

Thamnophis (sirtalis?) UC

Eastern garter snake?

Cnemidophorus sexlineatus VC

Six-Lined Race Runner

Ophisaurus attenuatus UC

Western Slender Glass Lizard

Terrapene carolina UC

Eastern Box Turtle

A box turtle carapace (sans scutes) was collected in the woodland portion of Meredosia Hill prairie. Although positive identification is impossible without the scutes, the shell is tentatively identified as the eastern box turtle, Terrepene carolina based on the presence of a weak mid-dorsal keel and the connection of the bridge at the fifth marginal. The western box turtle, T. ornata typically lacks a keel and has the bridge beginning at the seam between the fifth and sixth marginals or on the sixth. This find may be significant in that it exceeds the known range of the eastern box turtle as given by Smith (1961).

MATANZAS PRAIRIE

This 27.64 acre site in Mason Co. is predominately wet sand prairie although it contains some woodland. One drift fence array was set on a patch of slightly higher ground surrounded by wet prairie. Eleven species of herps were collected .

Drift Fence Dates

4 April -- 7 April	
18 April -- 21 April	
11 May -- 25 May	total = 753 hours 10 min
28 May -- 31 May	
17 June -- 24 June	

Hand Collecting Hours = 22.5 hours

Species Collected or Observed

Amphibians		Common Name
<u>Pseudacris triseriata</u>	VC	Chorus Frog
<u>Pseudacris streckeri</u>	C	Illinois Chorus Frog
<u>Hyla crucifer</u>	VC	Spring Peeper
<u>Hyla versicolor</u>	UC	Gray Tree Frog
<u>Rana sylvatica</u> (possible call record)		Wood Frog??
<u>Rana sphenocephala</u>	C	Southern Leopard Frog
<u>Rana blairi</u>	UC	Western Leopard Frog
<u>Bufo woodhousei</u>	VC	Fowler's Toad
<u>Bufo americanus</u>	VC	American Toad
Reptiles		
<u>Emydoidea blandingi</u>	UC	Blanding's Turtle
<u>Thamnophis sirtalis</u>	UC	Eastern Garter Snake
<u>Storeria dekayi</u>	UC	Dekay's Snake

The remains of two Blanding's turtles, Emydoidea blandingi, were found at this site. Blanding's turtles are adapted for marsh-type habitats but usually are found in areas which have somewhat more permanent water.

VC = VERY COMMON

C = COMMON

UC = UNCOMMON

=====

LITERATURE CITED

- Campbell, H.W., and S.P. Christman. 1982. Field techniques for herpetofaunal community analysis. pp. 193-200. In: (Scott, N.J., Jr., Ed.). Herpetological Communities. U.S. Department of the Interior. Fish and Wildlife Service. Wildlife Research Report 13.
- Smith, P.W. 1961. The Amphibians and Reptiles of Illinois. Illinois Natural History Survey Bulletin Vol. 28, Article 1. 298 pp.
-

APPENDIX 1

Collection data for each study site. Abbreviations: tl = total length, sv = snout to vent, cl = carapace length.

MATANZAS

Array Location: West central portion of area-moist grassland

Date	Species	Trap	Time	Size	Comments
4/5	<u>P. triseriata</u>	---	1630	---	large chorus (50+)
4/6	<u>P. triseriata</u>	---	1945	---	large chorus (50+)
4/6	<u>P. streckeri</u>	---	1945	---	large chorus (30-40)
4/6	<u>H. crucifer</u>	---	1945	---	large chorus (50+)
4/6	<u>R. sylvatica??</u>	---	1945	---	possible chorus
4/18	<u>E. blandingi</u>	manual	1410	---	plastron parts
4/19	<u>T. sirtalis</u>	funnel	910	tl=11 1/4" sv=8 5/8" ---	
4/20	<u>P. triseriata</u>	---	2050	---	large chorus (50+)
4/20	<u>H. crucifer</u>	---	2050	---	large chorus (50+)
4/20	<u>B. woodhousei</u>	---	2050	---	large chorus (50+)
4/20	<u>B. americanus</u>	---	2050	---	large chorus (50+)
4/20	<u>H. versicolor</u>	---	2050	---	3-4 males
4/20	<u>R. sphenocephala</u>	---	2050	---	15 males in chorus
4/20	<u>R. blairi</u>	pit	1605	adult	---
4/21	<u>S. dekayi</u>	funnel	755	adult	---
5/11	<u>R. sphenocephala</u>	pit	1234	adult	---
6/18	<u>E. blandingi</u>	manual	650	adult	plastron only
6/18	<u>B. woodhousei (2)</u>	pit	825	sv=42mm ---	---
6/20	<u>S. dekayi</u>	pit	1045	---	---

SCRUB OAK #1

Array Location: West central portion of preserve in grassland 100 meters southwest of pond

Date	Species	Trap	Time	Size	Comments
4/19	<u>R. blairi (2)</u>	manual	2050	---	---
4/19	<u>H. crucifer</u>	---	2050	---	large chorus (50+)
5/12	<u>B. woodhousei</u>	pit	1008	adult	---
5/13	<u>C. sexlineatus (2)</u>	funnel	1020	---	hand captured 11
5/13	<u>R. catesbeiana (4)</u>	manual	1925	adults	---
5/13	<u>R. sphenocephala</u>	manual	1925	adult	---
5/13	leopard frogs	manual	1925	metamorphics	---
5/14	<u>C. sexlineatus</u>	funnel	925	---	---
5/14	<u>B. woodhousei</u>	pit	925	---	---
5/16	<u>H. nasicus</u>	manual	655	tl=6.5"	---
5/18	<u>S. laterale</u>	pit	1830	---	---
5/20	<u>B. woodhousei</u>	pit	1210	adult	---
5/21	<u>B. woodhousei</u>	funnel	1150	---	---
5/21	<u>C. sexlineatus</u>	manual	1150	tl=8"	---

Date	Species	Trap	Time	Size	Comments
5/22	<u>B. woodhousei</u> (2)	pit	1424	---	---
5/22	<u>S. laterale</u>	pit	1424	---	---
5/22	<u>B. woodhousei</u>	manual	1452	---	---
5/22	<u>C. sexlineatus</u> (3)	manual	1452	---	---
5/23	<u>B. woodhousei</u>	pit	1058	adult	---
5/23	<u>P. melanoleucus</u>	funnel	1058	tl=47" sv=42.5"	---
5/23	<u>C. sexlineatus</u>	funnel	1058	---	observed 8
5/23	<u>B. woodhousei</u> (2)	manual	1411	---	---
5/23	<u>C. constrictor</u>	manual	1452	tl=26.5" sv=20.5"	---
5/25	<u>B. woodhousei</u>	pit	1103	adult	---
5/29	<u>C. sexlineatus</u>	funnel	1547	---	---
5/29	<u>P. melanoleucus</u>	manual	1547	tl=58.5" sv=51"	---
5/30	<u>C. constrictor</u>	funnel	1600	sv=650mm	---
5/30	<u>C. sexlineatus</u>	pit	1600	Female	---
6/22	<u>C. sexlineatus</u> (2)	pit	1430	sv=50mm sv=41mm	---
6/24	<u>C. sexlineatus</u> (2)	funnel	725	sv=59mm sv=52.5	---

 SCRUB OAK #2

Array Location: Southwest portion of preserve on grass/forest edge

Date	Species	Trap	Time	Size	Comments
4/6	<u>E. obsoleta</u>	manual	1130	tl=52" sv=39"	---
5/13	<u>C. sexlineatus</u>	---	1105	---	observed
5/18	<u>B. woodhousei</u>	pit	1800	sv=2.5"	---
5/21	<u>B. woodhousei</u> (4)	pit	1225	sv=2" sv=2" sv=2" sv=2"	---
5/22	<u>C. constrictor</u>	manual	1458	tl=41.5" sv=30"	---
5/23	<u>L. calligaster</u>	manual	1145	tl=28" sv=25"	---
5/23	<u>C. sexlineatus</u>	manual	1156	---	---
5/24	<u>C. constrictor</u>	manual	1519	tl=43" sv=33"	---
5/29	<u>C. sexlineatus</u>	pit	1804	---	---
6/24	<u>L. calligaster</u>	pit	1855	sv=330mm	---

 SCRUB OAK #3

Array Location: East central portion of preserve, approximately 170 meters west/northwest of parking area on east side of preserve--woodland habitat

Date	Species	Trap	Time	Size	Comments
5/21	<u>H. versicolor</u>	pit	1300	---	---
5/25	<u>H. platyrhinos</u>	manual	1159	tl=14"	sv==12"
6/18	<u>C. sexlineatus</u>	pit	740	sv=62mm	---
6/24	<u>H. platyrhinos</u>	funnel	1815	sv=340mm	---

 SCRUB OAK #4

Array Location: Northeast portion of preserve, in recently burned area - grassland habitat

Date	Species	Trap	Time	Size	Comments
5/11	<u>C. sexlineatus</u>	pit	1336	---	observed 2
5/12	" "	pit	1655	---	---
5/13	" "	(3) pit	1246	---	1 recapture
5/13	" "	(17) --	1314	---	observed
5/14	" "	funnel	1040	---	recapture
5/16	" "	(2) funnel	1740	tl=7.5"	female
				tl=7.5"	male
5/16	" "	pit	1740	tl=6.5"	---
5/17	<u>C. sexlineatus</u>	pit	1255	---	---
5/18	" "	funnel (2)	1710	tl=7"	---
5/18	<u>B. woodhousei</u>	funnel	1710	sv=2"	---
5/19	<u>C. sexlineatus</u>	(2) funnel	1225	---	---
5/22	<u>S. laterale</u>	pit	1350	---	---
5/23	<u>B. woodhousei</u>	manual	1305	adult	---
5/23	<u>C. sexlineatus</u>	(2) manual	1305	---	---
5/24	<u>C. sexlineatus</u>	(3) funnel	1619	---	1 recapture
5/28	" "	(2) pit	1750	---	---
6/17	<u>B. woodhousei</u>	pit	2125	---	---
6/18	<u>C. sexlineatus</u>	(3) pit	710	sv=24mm	---
				sv=56mm	---
				sv=53mm	---
6/20	<u>B. woodhousei</u>	pit	1935	sv=37mm	---
6/20	<u>B. woodhousei</u>	funnel	1935	sv=39mm	---
6/20	<u>C. sexlineatus</u>	manual	735	sv=64mm	---
6/20	" "	pit	735	sv=49mm	---
6/21	" "	funnel	700	sv=46mm	---
6/21	" "	pit	700	sv=47	---
6/23	" "	pit	1635	sv=58mm	---
6/24	" "	funnel	1740	sv=47	---
6/24	" "	pit	1740	sv=64	---

 SHICK SHACK POND

Array Location: West portion of preserve in tall grassland near pond

Date	Species	Trap	Time	Size	Comments
4/4	<u>P. triseriata</u>	---	1300	---	large chorus (50+)
4/4	<u>R. sylvatica??</u>	---	1300	---	possible chorus
4/5	<u>R. sylvatica??</u>	---	1000	---	possible chorus
4/5	<u>C. picta</u> (4)	---	1000	---	observed basking
4/6	<u>R. catesbeiana</u> (13)	turtle	1440	tadpoles	---
4/6	<u>R. blairi</u>	---	1540	adult	dead
4/7	<u>R. catesbeiana</u> (5)	turtle	1235	tadpoles	---
4/7	<u>P. streckeri</u> (2)	---	1235	---	2 males in chorus
4/7	<u>R. catesbeiana</u>	---	1235	---	1 male calling
4/18	<u>C. picta</u>	---	1045	---	many basking
4/18	<u>E. blandingi</u>	turtle	1930	cl=9"	male
4/18	<u>C. picta</u>	turtle	1930	cl=150mm	male
4/18	<u>C. picta</u>	turtle	1930	cl=144mm	male
4/18	<u>C. picta</u>	turtle	1930	cl=129mm	male
4/18	<u>C. picta</u>	turtle	1930	cl=137mm	male
4/18	<u>C. picta</u>	turtle	1930	cl=133mm	male
4/18	<u>H. crucifer</u>	---	1930	---	large chorus (50+)
4/18	<u>R. blairi</u>	---	1930	---	5 males in chorus
4/18	<u>B. americanus</u>	---	1930	---	large chorus (50+)
4/18	<u>R. sphenoccephala</u>	---	1930	---	large chorus (30+)
4/19	<u>H. versicolor</u>	---	1930	---	5 males in chorus
4/19	<u>C. serpentina</u>	turtle	2050	cl=7.5"	male
4/19	<u>C. picta</u>	pit	1215	hatchlings	
4/20	<u>C. picta</u>	funnel	1105	cl=28.2 mm	hatchling
4/20	<u>P. streckeri</u>	pit	1105	adult	---
4/20	<u>C. picta</u>	turtle	1105	cl=271mm	---
4/20	<u>C. picta</u>	turtle	1105	cl=276mm	---
4/20	<u>C. picta</u>	turtle	1105	cl=265mm	---
4/20	<u>C. picta</u>	turtle	1105	cl=291mm	---
5/12	<u>C. sexlineatus</u>	---	1145	---	observed
5/13	<u>R. catesbeiana</u>	---	1937	---	large chorus (30+)
5/13	<u>A. crepitans</u>	---	1937	---	large chorus (50+)
5/13	<u>H. versicolor</u>	---	1937	---	3-4 males calling
5/13	<u>C. sexlineatus</u>	funnel	1100	tl=8"	male
5/13	<u>B. americanus</u>	manual	1100	---	---
5/14	<u>C. sexlineatus</u>	pit	1015	tl=5"	---
5/15	<u>C. serpentina</u>	turtle	1145	cl=189mm	---
5/15	<u>C. sexlineatus</u> (2)	pit	1200	tl=7.7"	male
				tl=8.5"	male
5/16	<u>C. sexlineatus</u> (2)	pit	1605	tl=7"	male
			1605	tl=5.5"	broken tail
5/17	<u>R. catesbeiana</u> (6)	turtle	1115	tadpoles	---
5/17	<u>C. serpentina</u> (2)	turtle	1115	cl=12cm	---
				cl=12.5cm	--
5/18	<u>C. sexlineatus</u>	pit	1530	---	---
5/21	<u>C. sexlineatus</u>	funnel	1015	tl=8"	female
5/24	<u>R. catesbeiana</u>	turtle	1050	tadpole	---

Date	Species	Trap	Time	Size	Comments
------	---------	------	------	------	----------

5/24	<u>H. nasicus</u>	manual	1050	tl=31.5"	
				sv=27"	----
5/24	<u>H. platyrhinus</u>	manual	1050	tl=37.5"	
				sv=23"	----
5/24	<u>N. sipedon</u> ??	---	1050	---	observed
5/24	<u>R. catesbeiana</u>	---	2250	---	chorus (20-30)
5/24	<u>A. crepitans</u>	---	2250	---	large chorus (40+)
5/25	<u>C. sexlineatus</u>	funnel	1335	---	---
5/25	<u>C. constrictor</u>	manual	1345	---	---
5/29	<u>B. woodhousei</u>	funnel	1200	---	---
5/29	<u>E. obsoleta</u>	manual	1230	sv 1050	---
5/29	<u>C. sexlineatus</u>	pit	1300	---	---
5/29	<u>C. constrictor</u>	funnel	1325	sv 850	---
5/29	<u>P. streckeri</u>	----	1400	---	2 to 3 calling
5/29	<u>A. crepitans</u>	----	2100	---	chorus (50+)
5/29	<u>H. versicolor</u>	----	2100	---	chorus (50+)
5/29	<u>R. catesbeiana</u>	----	2100	---	chorus (10-12)
5/30	<u>C. sexlineatus</u>	funnel	900	---	---
5/30	<u>R. catesbeiana</u> (18)	turtle	930	tadpoles	---
5/30	<u>C. picta</u> (4)	turtle	930	cl-163,160,153,F; 156 M;	
5/31	<u>C. picta</u>	turtle	800	cl- 141	male
6/18	<u>R. catesbeiana</u>	turtle	936	female	---
6/19	<u>R. catesbeiana</u>	turtle	1327	male	---
6/20	<u>A. crepitans</u> (2)	funnel	1215	adults	---
6/20	<u>R. sphenocephala</u> (2)	pit	1215	juvenile	---
6/20	<u>C. sexlineatus</u>	funnel	1215	sv=71mm	----
6/20	<u>A. crepitans</u>	funnel	1215	adult	---
6/20	<u>R. sphenocephala</u> (2)	pit	1215	adult	---
6/21	<u>H. versicolor</u>	---	1900	---	chorus (6-7)
6/21	<u>R. catesbeiana</u>	---	1900	---	chorus 4-5 males
6/21	<u>A. crepitans</u>	---	1900	---	chorus, large
6/21	<u>C. picta</u>	pit	2130	cl=163 mm	female with eggs
6/21	<u>C. picta</u>	pit	2130	----	recapture (3r)

 MEREDOSIA HILL PRAIRIE

Array Location: East central portion of preserve on hill top--
 grassland habitat

Date	Species	Trap	Time	Size	Comments
4/4	<u>T. carolina</u>	manual	1200	---	carapace only
4/6	<u>T. carolina</u>	manual	1945	---	carapace only
4/7	<u>C. constrictor</u>	pit	1350	tl=16.5"	
				sv=13"	---
5/2	<u>C. sexlineatus</u> (30)	--	1400	---	observed
5/11	<u>P. melanoleucus</u>	manual	930	tl=48"	---
5/12	<u>C. sexlineatus</u>	pit	1415	tl=7"	---
5/12	<u>B. woodhousei</u>	manual	1400	adult	---
5/13	<u>C. sexlineatus</u>	pit	1025	tl=3.5"	---

Date	Species	Trap	Time	Size	Comments
------	---------	------	------	------	----------

5/15	<u>C. sexlineatus</u>	(2) pit	1040	tl=7"	---
				tl=5.5"	---
5/16	<u>C. sexlineatus</u>	pit	1500	tl=7"	male
5/19	<u>B. woodhousei</u>	manual	945	sv=2.5"	---
5/21	<u>B. woodhousei</u>	manual	915	sv=2"	---
5/24	<u>C. sexlineatus</u>	(2) manual	1230	---	---
5/25	<u>C. sexlineatus</u>	(18)--	1446	---	observed
5/25	<u>B. woodhousei</u>	manual	1446	---	---
5/30	<u>C. sexlineatus</u>	(12)--	1100	---	observed
5/31	<u>O. attenuatus</u>	---	1030	---	observed

APPENDIX 2

Species list for the four study areas showing abundance and habitat preferences. Abbreviations : MA - Matanzas Wet Prairie, ME - Meredosia Hill Prairie, SS -Shick Shack site, P -prairie, W -woodland, A -aquatic or semiaquatic, G - generalized, VC -very common, C -common, U - uncommon, R - rare.

Species	Habitat	SS	Scrub Oak				MA	ME
			1	2	3	4		
<u>Salamanders</u>								
<u>Ambystoma tigrinum</u>	P	UC	--	--	--	--	--	--
<u>Frogs & Toads</u>								
<u>Bufonidae</u>								
<u>Bufo americanus</u>	G	VC	--	--	--	--	VC	--
<u>Bufo woodhousei</u>	G	VC	C	C	--	C	VC	UC
<u>Hylidae</u>								
<u>Acris crepitans</u>	A	VC	--	--	--	--	--	--
<u>Hyla crucifer</u>	W	C	--	--	--	--	VC	--
<u>Hyla versicolor</u>	W	VC	--	--	UC	--	UC	--
<u>Pseudacris triseriata</u>	P	VC	--	--	--	--	VC	--
<u>Pseudacris streckeri</u>	P	UC	--	--	--	--	C	--
<u>Ranidae</u>								
<u>Rana blairi</u>	A,P	UC	UC	--	--	--	UC	--
<u>Rana catesbeiana</u>	A	VC	UC	--	--	--	--	--
<u>Rana sphenoccephala</u>	A	C	UC	--	--	--	C	--
<u>Rana sylvatica</u>	A,W	?	--	--	--	--	?	--
<u>Snakes</u>								
<u>Coluber constrictor</u>	G	UC	UC	--	--	--	--	UC
<u>Elaphe obsoleta</u>	W	UC	--	UC	--	--	--	--
<u>Heterodon nasicus</u>	P	UC	UC	--	--	--	--	--
<u>Heterodon platyrhinos</u>	G	UC	--	--	UC	--	--	--
<u>Lampropeltis</u>								
<u>calligaster</u>	P	--	UC	--	--	--	--	--
<u>Nerodia sipedon</u>	A	UC	--	--	--	--	--	--
<u>Pituophis</u>								
<u>melanoleucus</u>	P	--	UC	--	--	--	--	UC
<u>Storeria dekayi</u>	W	--	--	--	--	--	UC	--
<u>Thamnophis sirtalis</u>	G	--	--	--	--	--	UC	UC
<u>Lizards</u>								
<u>Cnemidophorus</u>								
<u>sexlineatus</u>	P	VC	VC	UC	--	VC	--	VC
<u>Ophisaurus attenuatus</u>	P	--	--	--	--	--	--	UC
<u>Scincella laterale</u>	W	--	UC	--	--	UC	--	--
<u>Turtles</u>								
<u>Chelydra serpentina</u>	A	UC	--	--	--	--	--	--
<u>Chrysemys picta</u>	A	VC	--	--	--	--	--	--
<u>Emydoidea blandingi</u>	A,P	UC	--	--	--	--	UC	--
<u>Terrapene carolina</u>	W	--	--	--	--	--	--	UC



EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS 61920

Zoology Department
(217) 581-3126

September 21, 1987

RECEIVED
SEP 22 1987

DIV. OF FOREST RESOURCES

James D. Garner
Division of Natural Heritage
ILLINOIS DEPARTMENT OF CONSERVATION
Lincoln Tower Plaza
524 S. Second Street
Springfield, IL 62701-1787

Dear Jim:

Enclosed is a copy of our final report entitled "Herptile Inventory of Four Central Illinois Prairie Preserves". We hope that the report will be of value to the Division of Natural Heritage and the IDOC. The 4 areas studied are very interesting, unique and appear to have viable herptile populations.

If you have any questions concerning this report, please contact us. Sorry about the 3 week delay.

Sincerely yours,

Kipp C. Kruse, Ph.D.

Edward O. Moll, Ph.D.
Department of Zoology
Eastern Illinois University
Charleston, IL 61920