<u>2008 Herp Survey</u>

NEW ADDITION

May 10, 2008-10 hours
1 *Bufo fowleri*-Adult encountered in forest on old logging road
5 Cricket frogs (*Acris crepitans*)- encountered on logging road
17 *Diadophis punctatus* encountered under metal sheets at old homestead
2 *Lampropeltis triangulum*(1 juv., 1 adult) encountered under metal sheets at old homestead
2 Longtailed salamanders (*Eurycea longicauda*)
1 *Terrapene Carolina Carolina*
1 Black rat snake (*Elaphe obsoleta*) encountered at roadside
1 Plains scorpion
3 Southern leopard frogs (*Rana sphenocephala*)
1 bullfrog (*Rana catesbeiana*)
1 *Diadophis punctatus* encountered under stone near road with scorpion

May 30, 2008-4 hours
1 broadhead skink (*Eumeces laticeps*)

June 10, 2008-3.5 hours
1 baby *Bufo fowleri*
1 Western chorus frog (*Pseudacris triseriata*)

July 2, 2008-10 hours
8 *Diadophis punctatus*-encountered under metal sheets at home site
1 hatchling *Lampropeltis triangulum*- encountered under metal sheets at home site
1 adult *Rana catesbeiana*- encountered at pond

July 23, 2008-5 hours
8 Southern Leopard frogs (*Rana sphenocephala*)
2 Plains Leopard frogs (*Rana blairi*)
1 cricket frog (*Acris crepitans*)

August 4, 2008-7 hours
1 *Eumeces laticeps*

August 24, 2008-4 hours
3 adult *Rana catesbeiana* encountered at pond

September 4, 2008-4 hours
(No animals encountered)

September 21, 2008-4 hours
(No animals encountered)

October 4, 2008-6 hours
(No animals encountered)

October 9, 2008-3 hours
(No animals encountered)

BRICKY-GONTERMAN/ANGELA'S PRAIRIE

May 21, 2008-3 hours
1 Black rat snake (*Elaphe obsolete*)
1 ribbon snake (*Thamnophis proximus*)

June 16, 2008-3.5 hours
1 Plains Leopard frog (*Rana blairi*)
1 Southern Leopard frog (*Rana sphenocephala*)
1 racer (*Coluber constrictor*)

July 11, 2008-3 hours
1 *Pseudacris triseriata*

August 6, 2008-6.5 hours
2 Southern Leopard frogs (*Rana sphenocephala*)

August 11, 2008-3 hours
1 *Elaphe obsolete*

September 4, 2008-4 hours
1 Northern Water snake (*Nerodia sipedon*) Dead on Road

September 21, 2008-4 hours
(No animals encountered)

October 9, 2008-2 hours
(No animals encountered)

Total survey hours: 89.5

Report Preparation hours: 15

Total project hours: 104.5

Project Objective

The objective of this project was to obtain baseline data for an inventory of herpetofaunal species present at The New Addition to Fults Hill Prairie and the Brickey-Gonterman Nature Preserve. The New Addition to Fults Hill Prairie is nearly 400 acres of secondary growth forest that represents an important corridor between sites such as Fults Hill Nature Preserve and Brickey-Gonterman Nature Preserve. Brickey-Gonterman Nature Preserve is roughly 19 acres and contains a long narrow strip of hill prairie along the bluff top. It is possible that these sites harbor rare species of local reptiles such as timber rattlesnakes (*Crotalus horridus*) and flathead snakes (*Tantilla gracilis*), among other species. This survey was needed due to the lack of knowledge on the herptiles present at these sites.

Introduction

The New Addition to Fults Hill Prairie Nature Preserve and Brickey-Gonterman Nature Preserve represent important habitat and function as vital connections between large pristine habitat sites such as Fults Hill Prairie. These sites represent important habitat along the Ozark bluff corridor of southwest Illinois. The New Addition to Fults Hill Prairie is nearly 400 acres of deciduous upland forest with large grassy fields covering the top of its ridges. These fields were former farmland and roadbeds that have been abandoned for quite some time and are being colonized by locust trees. Brickey-Gonterman Nature Preserve boasts a large expanse of hill prairie, which is high quality habitat for reptiles. No herpetofaunal surveys have been conducted for these sites. This study provides baseline data for the area that can be used to establish management practices and build upon for future investigations.

Materials and Methods

The sites were visited during the warm season when ectothermic reptiles and amphibians were active, from March to October 2008. Surveys conducted at these sites were incidental observation only. No traps or drift fences were set. Areas of the study site were walked and reptiles and amphibians searched for visually. Cover objects such as rocks and scraps of tin were lifted to check for hiding animals. When possible, animals were captured by hand or snake hook and briefly examined physically. Most of the survey trips were undertaken by the author alone. Two searchers were present on two survey trips. All surveys were conducted during daylight hours, with most taking place between the hours of 8 A.M and 4 P.M.

Results

A total of 16 species of reptiles and amphibians were found during this survey. None of the species were listed as endangered or threatened. Although the total number of species was low, the species that were seen were often observed in high numbers, such as ring-necked snakes (*Diadophis punctatus*) and leopard frogs (*Rana sphenocephala*). Animal sightings were most numerous in May and June, with declines in sightings in July and August. The only listed animal found was not a reptile or amphibian but a Plains scorpion.

Discussion

The results of this survey may reflect the past heavy use of the land. Species that are known for their intolerance of human encroachment, such as Timber rattlesnakes (*Crotalus horridus*), were not found at these sites, though that does not necessarily indicate their absence. The most commonly found animals were those which are often

found in environments that have been subject to anthropogenic disturbance, such as ring-necked snakes (*Diadophis punctatus*) and milk snakes (*Lampropeltis triangulum*).

The New Addition to Fults Hill Prairie is a site that is laced with old logging roads and remnants of past human use such as home foundations, discarded tools, and waste such as tin sheets and lumber. While many of these now provide refugia for the reptiles and amphibians that are present, sensitive species appear to be largely absent from this area. A large pond can be found on the site near the end of the old roadbed, at the top of the bluff, deep within the property. This provides excellent habitat for aquatic herpetofauna, and many frogs (*Rana* sp.) were observed there. However, no turtles were observed at the pond on any occasion.

The Brickey-Gonterman Nature preserve is composed primarily of secondary growth deciduous forest, with a well-preserved hill prairie along the top of the bluff. The hill prairie extends along a narrow strip of the bluff top, and is perched at a steep angle above a precipitous cliff. This geography precluded intensive searches of the prairie itself, and searches were primarily conducted along the periphery of the prairie near the treeline where the footing was level.

This survey represents the first attempt at gathering data for an inventory of reptiles and amphibians inhabiting these sites. This baseline data should be built with successive surveys and searches to determine a more complete inventory through time, which could also be used to track trends in occurrence and abundance of species.

Guide to the Photographs

Photograph 1: Adult *Bufo fowleri* encountered on May 10 at New Addition.

Photograph 2: Adult male *Terrapene carolina carolina* found on May 10 at New Addition.

Photograph 3: Juvenile *Lampropeltis triangulum* found under tin sheets at New Addition.

Photograph 4: Ephemeral stream New Addition in May, where a long-tailed slalamander was found.

Photograph 5: Adult Long-tailed salamander.

Photograph 6: Another view of the stream from photograph 4.

Photograph 7: Juvenile *Bufo fowleri*.

Photograph 8: *Pseudacris triseriata*.

Photograph 9: Adult southern leopard frog, *Rana sphenocephala*, at Brickey-Gonterman Nature Preserve.

Photograph 10: Adult Coluber constrictor encountered in hill prairie at Brickey-Gonterman Nature Preserve.

Photograph 11: Juvenile Lampropeltis triangulum

Photograph 12: Plains scorpion encountered at New Addition under rock near roadside.