Inventory of the Amphibians and Reptiles of the Kyte River Bottoms, Ogle County, Illinois

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Introduction

In 2003, the Natural Land Institute (NLI) acquired a 243-acre tract of land along the Kyte River just north of Daysville, Ogle County, Illinois. An additional 89-acre tract of land registered in the Forest Legacy Program (Legacy Tract) to the west-side of the NLI tract increases the total acreage of land to 332 acres (Fig. 1). These two tracts of land, collectively known as the Kyte River Bottoms (KRB), occur within the Oregon Section of the Rock River Hill Country Division, a region underlain with outcrops of St. Peter Sandstone, and uplands with a thin mantle of glacial till from the Illinoisan and early stages of Wisconsinan Pleistocene Glaciation (Schwegman 1973). As a result, the uplands covered by till are level to rolling, but the terrain can be locally rough with bluffs, ridges and ravines in areas with sandstone outcrops.

The KRB is comprised largely of bottomland forest dominated by silver maple, ash, elm, with some black willow and cottonwood. The NLI Tract includes shallow floodplain depressions that hold water temporarily and usually dry up by mid-summer. These are dominated by buttonbush, sedge, rush and other wetland plant species. Dry or dry-mesic upland forest dominated by black, white or bur oak, hickory and black cherry occur in areas of sandstone outcrops, or where sandstone underlies the surface and is overlain by a thin cover of glacial drift. This landscape feature occurs mostly along the north portions of both tracts, and to a lesser extent to the south-side of the Kyte River in the southwest corner of the NLI Tract.

Although most of Ogle County is within the Rock River Hill Country, the Grand Prairie Division extends into the eastern-fourth of the county, with the boundaries of other natural area Divisions or Sections, such as the Wisconsin Driftless, Northeastern Morainal, Upper Mississippi River Bottomlands and Green River Lowlands nearby. Thus, there is potential for the occurrence of a variety of amphibian and reptile species in Ogle County that have eastern, northern, western or southern centers of distribution.

Twenty three species of amphibians and reptiles occur in Ogle County (Table 1). Of these, 17 are expected to occur within KRB, while 6 others potentially occur (Table 1). Nineteen additional species are known from areas near Ogle County; seven of these expected and another seven potentially occurring at KRB (Table 1). Two species documented from Ogle County are state-listed and have been reported from areas not far from KRB, including the four-toed salamander (*Hemidactylium scutatum*) and Blanding's turtle (*Emydoidea blandingii*).

KRB is of particular interest because it includes the lower stretch of the Kyte River to its confluence with the Rock River, as well as large tracts of bottomland forest with seasonally wet depressions. Further, KRB is bounded by and includes portions of sandstone outcrops and uplands that offers potential for a wide variety of reptile species. Finally, the Kyte River is a tributary of the Rock River, which in turn empties

into the Mississippi River southwest of Ogle County, creating potential for occurrence of turtle species that inhabit large river systems to occur within KRB.

To date, there have been no surveys for reptiles and amphibians at KRB. The goal of this study was to conduct a survey and document the amphibian and reptile fauna that occur within or near KRB. Primary objectives were to; 1) Evaluate existing and historic records of amphibian and reptile species known to occur within or near Ogle County, 2) Ground-truth and assess habitat, 3) Compile a list of species expected or with potential to occur at KRB, and 4) Conduct field surveys to identify and document amphibians and reptiles present within KRB and surrounding area.

Methods

The study area was divided by Daysville Road into two distinct units; The Legacy Tract (LT) and the NLI Tract (NLI; Fig. 1). The LT is situated to the west-side of Daysville Road and along the north-side of the Kyte River at the confluence with the Rock River (Fig. 1). It is bordered on the west by the Rock River and to the north by the Burlington-Northern Railroad (BNR). The NLI unit occurs to the east-side of Daysville Road and along the north by the BNR (Fig. 1). The south limit of the unit is demarcated by the north line of Section 14, with a l.2 mile stretch of the Kyte River essentially paralleling the section line in a west to east direction. The river eventually trends northeast to a point where it bends 90° due south, and then a 0.2 mile stretch north to south that forms the east perimeter of the NLI Tract (Fig. 1). Although the Kyte River "naturally" defines the south perimeter of the NLI Tract, there is a small area of steeply sloping upland at the southwest corner of the unit, as well as a level plain, primarily used for agriculture in the southeast section of the unit.

Several techniques were used to document occurrence of amphibians and reptiles within KRB, including visual encounter search, dip-netting, minnow trapping, auditory surveys and road-cruising (Karns 1986, Heyer et. al. 1994, Olson et. al. 1997). Fieldwork commenced 20 June 2003 and continued through the summer of 2004. Site visits were timed to seasonal periods when various species were most active. Survey work conducted in March and April targeted early spring-breeding salamander and frog species; work in May focused on late-spring breeding frogs, snakes and turtles. Summer surveys concentrated on turtles and snakes, but some dip-netting was also performed in June to assess status of amphibian larvae and prognosis for successful metamorphosis. Survey work in fall was timed to coincide with the peak period of ingress when mortality occurs as snakes cross roads to find overwintering sites. The bulk of survey effort was allocated to the NLI Tract because initial reconnaissance indicated it had better habitat and may yield the greatest concentration of amphibian and reptile species, excluding turtles favoring larger river systems.

Road-cruising was the principal strategy used to document species occurring within the surrounding KRB region. On most survey trips, these were conducted during daylight hours to find dead-on-road (DOR) amphibians and reptiles. Road-cruising is one of the most efficient methods to document snake fauna within a specific region and can be effective for turtles during the nesting season (pers. obs.). It is also an effective strategy to gauge regional distribution and population abundance of various frog species, especially when conducted after dusk, during or just after rain.

A perimeter road survey (PRS) included roads adjacent to KRB property and/or the nearest roads surrounding KRB including Daysville Road to the west, Blackhawk Hawk Road to the east and Honey Creek Road to the south, a total survey route of 4.25 miles.

Species documented by PRS that were not found during fieldwork within the boundaries of the units were considered to occur within KRB. Outlying road surveys (ORS) were conducted on roads to the north, east or south of KRB. Species documented on these roads also were considered to have potential to occur at KRB, depending upon the distance (see below) from the study site and the habitat requirements of various species relative to available habitat within KRB. ORS was not conducted following pre-designated routes, but total road mileage was recorded for each trip.

Most specimens collected during the survey were deposited in the collections of the Illinois Natural History Survey (INHS). Field tag numbers were recorded in the species record summary spreadsheet (see below) for all specimens deposited at INHS, and actual collection numbers are given for all specimens processed and entered into the INHS collections database prior to completion of this report. Some specimens were deposited at the Field Museum of Natural History (FMNH) in Chicago.

Data Analysis

A theoretical maximum list of species was compiled based on documented occurrences within 24 counties that comprise northern Illinois using field guides (Smith 1961, Phillips et. al. 1999), and records in the INHS, FMNH and Chicago Academy of Science (CA) collections. Northern Illinois was defined as all of the counties north of the southern tier of counties from west to east including Mercer, Henry, Bureau, Putnam, LaSalle, Grundy and Kankakee. Species were then categorized as: Common (C), Restricted (R), or Uncommon (UC). Common species were widely distributed and frequently encountered throughout Northern Illinois, usually with records of occurrence in 75% or more of the counties. Restricted species were confined to localized areas or particular habitats, usually with disjunct occurrences in 50% or less of northern Illinois counties. Uncommon species were those with occurrences in only a few counties, or were state-listed species with highly localized or restricted populations that are vulnerable to extirpation. State-listed species were further distinguished by status as State Endangered (SE) or State Threatened (ST). The initial list was categorized to indicate species that have been documented (D) or not documented (ND) within Ogle County. Documented species included records based on voucher specimens in a museum collection (V), verified photographs in a museum collection (VP) or verified sighting (VS) by reliable observers.

The initial list was then refined to eliminate species with patterns of distribution that were not in or near Ogle County (i.e. not more than 2 counties away). Species with records that occurred within or near Ogle County were also eliminated from the list if it was determined that habitat for that species was lacking in Ogle County (e.g. *Crotalus horridus*, *Sistrurus catenatus*). This pared down list was classified to indicate species that were expected (E), had potential (P) or were unlikely (U) to occur in KRB (Table 1).

Species with records in Ogle County were expected to occur in KRB, especially species with widespread distributions and having wide latitude in and generalist habitat requirements. Species with narrower habitat requirements were also categorized as expected if suitable habitat existed within KRB and considered characteristic species within the Rock River Hill Country Natural Division. P species were those with restricted or uncommon distributions within or near Ogle County, and the habitat within KRB was considered to have marginal to modest potential to support populations and/or provide temporary use. U species were those with restricted or uncommon occurrence, but had low potential to occur within KRB because the nearest records were too far from KRB, and the intervening landscape was comprised of unsuitable habitat that would create barriers to dispersion to colonization of KRB.

Records of amphibians or reptiles found during the survey were sequentially entered into a Microsoft Excel spreadsheet database, and categorized by trip number, date, species, observation type, survey technique, general location and township-range location to quarter section. Global positioning (GPS) coordinates were recorded for all collected specimens and observations of uncommon or other significant species using a Garmin GPS-12 hand held receiver (UTM NAD 83). Species records were categorized by type of survey method including DOR, visual encounter (V) or auditory observation (A). Visual encounter search included both live captures and visual observations. Species records were categorized in relation to their proximity to the study area as follows; 0 = Within and/or immediately adjacent to the NLI and/or Legacy Unit boundaries, P = Within the area defined by the PR survey route, Rock River and CNB railroad, 1 = Outside the area defined by the PR route up to 1 mile from the nearest boundary of KRB and LT tracts, 2 = Greater than 1 mile and up to 2 miles from the nearest boundary of KRB and LT tracts, 3 = Greater than 2 miles up to 3 miles, and so on.

The species record spreadsheet was sorted by species and distance rank. Distance ranks were combined into classes as follows; 0-P, 1-2, 3-5, 6-10 and > 10. The totals were summed and relative percent calculated by dividing the total number of records for a given species by the total number of records for all species times 100.

Results

A total of seven fieldtrips were conducted; three in the summer of 2003 (June 20, Aug. 29, Oct. 09) and four in the spring of 2004 (Mar. 28, Apr. 03, May 14 & 24). There was a total of 25.5 perimeter road survey miles driven (n=6) and a total of 40.4 outlying road survey miles (n=2).

A total of 15 species were documented during this survey; 13 species within KRB, plus two snake species (*E. vulpina* & *L. triangulum*) found on outlying road surveys 5 miles to the north of KRB. Fourteen of these species were expected to occur within KRB (Tables 1 and 2). The fifteenth was a potential species, the state-threatened Blanding's turtle (*Emydoidea blandingii*); a large, old adult female was captured in the SE Pond on May 21, 2004 (INHS 2004.23 photo record; Figs. 2-4).

A total of 102 records were tallied during this survey consisting of seven frog species, five snake species and three turtle species (Table 2). The frog species most

encountered included *Bufo americanus, Hyla chrysocelis*, *Pseudacris crucifer*, *Pseudacris. triseriata*, *Rana clamitans* and *Rana pipiens*. The most frequently encountered snake species included *Storeria dekayi*, *Thamnophis sirtalis* and *Nerodia sipedon*. Although the total number of turtle observations were lower than expected, *Chelydra serpentina* (Fig. 5) and *Chrysemys picta* were the most frequently encountered. A list of all records for this survey listed in chronological order is provided in Appendix 1. The same list of the records sorted by species is provided in Appendix 2.

Other species documented at KRB during this survey included three crayfish species found in the larger floodplain wetlands; *Procambarus acutus*, *Procambarus gracilis* and *Cambarus diogenes*. The rusty crayfish (*Orconectes rusticus*) was found in the Kyte River. Two of the specimens were deposited at the Field Museum of Natural History (FMNH); *C. diogenes* (FMNH 8279) and *P. gracilis* (FMNH 8281).

Four fish species were found while surveying the main channel of Kyte River (Fig. 6) including *Ictalurus punctatus* (channel catfish), *Pylodictis olivaris* (flathead catfish), *Etheostoma zonale* (banded darter) and *Percina phoxocehaphala* (slenderhead darter; observed; escaped and not collected). An additional six species of fish were found in Honey Creek including *Cyprinella spiloptera* (spotfin shiner), *Luxilis cornutus* (common shiner), *Notropis dorsalis* (bigmouth shiner), *Rhinichthys atratulus* (blacknose dace), *Semotilus atromaculatus* (creek chub) and *Lepomis macrochirus* (bluegill). Fish specimens were given to the FMNH, but collection numbers had not been assigned by the time this report was completed.

Four species of mussels were also found within the Kyte River flowing through the NLI Tract (See Fig. 6 again) including *Lampsilis cardium* (plain pocketbook, INHS 758), *L. siliquoidea* (fat mucket, INHS 765), *Potamilus ohiensis* (pink papershell, INHS 826) and *Quadrula pustulosa* (pimpleback, INHS 828). All of these are widespread, relatively common mussel species of medium to large rivers.

Discussion

More than one-half of the expected species were found during this survey at KRB (14 or 58%). Five expected snake species, *Coluber constrictor*, *Heterodon platirhinos*, *Pituophis melanoleucus*, *Regina septemvittata* and *Thamnophis radix* were not found. This was not surprising considering most of KRB is lowland forest and this was where most survey effort was focused. With the exception of *R. septemvittata*, with more survey effort in uplands, especially along the BNR and near the sandstone outcroppings (Fig. 7), as well as additional road surveys would be needed to clarify their occurrence within or near KRB. If *R. septemvittata* occurs within or in close proximity to KRB, it would probably be more restricted to areas along the banks of the Kyte and Rock River. Additional protection and/or restoration of uplands or agricultural lands to the south-side of the Kyte River and NLI Tract might be beneficial to increasing and improving habitat for terrestrial snake species.

Three expected turtle species (*Apalone spinifera*, *Graptemys geographica* & *Sternotherus odoratus*) were not found. Again this is not surprising considering the limited number of trips, and that hand search and visual survey were the primary

techniques used. *S. odoratus* is a secretive species that spends most of its time submerged. *A. spinifera* and *G. geographica* are known to occur within the Rock River and the predominantly sandy bottom substrate of the Kyte River and noticeably abundant mussel and fish populations would seem attractive to these species. Numerous *Chrysemys picta* were observed basking on logs or within the shallows along the east shoreline of the Rock River at the confluence with the Kyte River. *C. picta*, *C. serpentina*, *A. spinifera* and *G. geographica* are expected to occur within and/or utilize the lower reach of the Kyte River west of Daysville Road. It is possible that large adults and/or permanent populations of these species are lacking or sporadic in occurrence in the Kyte River east of Daysville Road, but ideal habitat appears to exist for juveniles of these species (See Fig. 6 again). More intensive survey work using hoop and fyke net trapping would be required to clarify status of turtles that occur within the Kyte River.

The most significant find was the State Threatened Blanding's turtle (*Emydoidea blandingii*); on May 21, 2004 a large, old female was captured in shallows on the south-end of the SE Pond near the sandstone outcroppings and BNR within the NLI Tract (See Figs. 1-4 again). This find indicates that *E. blandingii* occurs within KRB, but it is unknown if a reproducing population exists. Considering that there are only two inhabitable wetlands within the KRB and both are relatively small in size (i.e. NW and SE Ponds), it is improbable that they could sustain a viable population. This suggests that in terms of a population individuals must occur and range across a broader landscape matrix that includes the Kyte River, and probably extends outside KRB into the Rock River. Mark-recapture survey using hoop and fyke net trapping would be required to clarify status as a population, and radio-tracking of individuals would be useful to clarify habitat use.

Considering the uplands to the north of the KRB have no wetland habitat, and no potential wetland habitat was observed on the south-side of the Kyte River and north of Honey Creek Road, the two NLI Tract floodplain wetlands are critical habitat need to be protected and managed. Portions of the lower west and southwest-facing slopes at the sandstone outcrop consist of sandy soils that appear to provide potential nesting habitat, especially where openings in the canopy provide more sunlight. Seasonal floodplain depressions to the west-side of Daysville Road (Fig. 8) may be too small and temporary for Blanding's turtle, but do provide breeding habitat for early spring breeding frog species such as *Pseudacris triseriata* and *Pseudacris crucifer.* Additional survey work focusing on *Emydoidea blandingii* and establishing a program to monitor the NW and SW Ponds within the NLI Tract is recommended.

No salamanders were found at KRB during this survey. This was unusual, as *Ambystoma tigirnum* is one of the most widespread and abundant salamander species in Illinois, and the NW and SE Ponds at the NLI Tract appear to provide ideal breeding habitat (Figs. 9-10). In addition, survey effort was allocated to finding salamanders using combinations of proven survey techniques timed to the periods when adults are in or near breeding ponds, or when well-developed larvae would be encountered. Spring or seep-fed wetland habitats were not found within the KRB, so occurrence of *Hemidactylium scutatum* within KRB is unlikely. The results of this survey indicate that the expected salamander species, *Ambystoma tigrinum* and *Notophthalmus viridescens,* do not occur within KRB, or if present, occur in extremely low numbers.

The diversity of frog species at KRB was good and all seven expected species were found including those that are more habitat-sensitive and require seasonal wetlands such as *Pseudacris crucifer* (spring peeper) and *Hyla chrysocelis* (Copes gray treefrog). Identifications of gray treefrog species were verified by tape recordings and pulse rate. Also, there were good numbers of *Rana pipiens* (northern leopard frog) including noticeable numbers of chorusing males at the NW Pond and large numbers of communally deposited egg masses found at the SE Pond (Fig. 11). *R. palustris* (pickerel frog) was not found and despite its occurrence in nearby areas such as Castle Rock State Park, its occurrence within KRB is considered unlikely because of the lack of spring or seep-fed wetland habitat. The other potential frog species, *Acris crepitans* (cricket frog) was also not found within or near KRB.

In summary, over one-half of the expected species of amphibians and reptiles were found during this survey. Some of the expected snake and turtle species that were lacking would probably be found with greater survey effort in uplands and use of turtle trapping in wetlands and rivers. Additional survey work for Blanding's turtle will be needed to clarify its status as a population within KRB. Eventually, use of radiotracking may be desirable to identify critical habitat that the Blanding's turtle uses outside the current boundaries of KRB. Protection and/or restoration of upland or agricultural lands to the east and south sides of the Kyte River at the NLI Tract, and to the north-side of the Kyte River at the Legacy Tract would be desirable in the long-term to enhance habitat favorable for terrestrial reptile species including nesting areas for turtle species.

Acknowledgments

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Table 1
Pre-Survey List of Expected and Potential Species

Species	Common Name	Group	SO	Type	DC	PO	SLS
Acris crepitans	Cricket Frog	Anura	D	VP	R	P	
Bufo americanus	American Toad	Anura	D	V	C	E	
Hyla chrysocelis-versicolor	Gray Treefrog Complex	Anura	D	VP	C	E	
Rana catesbeiana	Bullfrog	Anura	D	V	C	E	
Rana clamitans	Green Frog	Anura	D	V	C	E	
Rana palustris	Pickerel Frog	Anura	D	V	R	P	
Rana pipiens	Northern Leopard Frog	Anura	D	V	C	E	
Ambystoma tigrinum	Tiger Salamander	Caudata	D	VP	C	E	
Hemidactylium scutatum	Four-Toed Salamander	Caudata	D	VP	R	P	ST
Coluber constrictor	Racer	Serpentes	D	VP	R	E	
Elaphe vulpina	Fox Snake	Serpentes	D	V	C	E	
Heterodon nasicus	Western Hognose Snake	Serpentes	D	VS	UC	P	ST
Heterodon platirhinos	Eastern Hognose Snake	Serpentes	D	VP	R	E	
Lampropeltis triangulum	Milk Snake	Serpentes	D	VP	R	E	
Nerodia sipedon	Northern Water Snake	Serpentes	D	V	C	E	
Pituophis melanoleucus	Bull Snake	Serpentes	D	VP	R	E	
Regina septemvittata	Queen Snake	Serpentes	D	V	R	E	
Thamnophis sirtalis	Common Garter Snake	Serpentes	D	VP	C	E	
Apalone spinifera	Spiny Softshell	Testudines	D	VP	C	E	
Chelydra serpentina	Snapping Turtle	Testudines	D	VP	C	E	
Chrysemys picta	Painted Turtle	Testudines	D		C	E	
Emydoidea blandingii	Blanding's Turtle	Testudines	D	VS	R	P	ST
Terrapene ornata	Ornate Box Turtle	Testudines	D	VP	R	P	
Pseudacris crucifer	Spring Peeper	Anura	N		R	E	
Pseudacris triseriata	Western Chorus Frog	Anura	N		C	E	
Necturus maculosus	Mudpuppy	Caudata	N		R	P	
Notophthalmus viridescens	Eastern Newt	Caudata	N		R	E	
Cnemidophorus sexlineatus	Six-lined Racerunner	Sauria	N		R	P	
Diadophis punctatus	Ringneck Snake	Serpentes	N		UC	U	
Elaphe obsoleta	Rat Snake	Serpentes	N		R	P	
Opheodrys vernalis	Smooth Green Snake	Serpentes	N		R	U	
Storeria dekayi	Brown Snake	Serpentes	N		C	E	
Storeria occipitomaculata	Redbelly Snake	Serpentes	N		R	U	
Thamnophis proximus	Western Ribbon Snake	Serpentes	N		UC	U	
Thamnophis radix	Plains Garter Snake	Serpentes	N		C	E	
Apalone mutica	Smooth Softshell	Testudines	N		R	P	
Graptemys geographica	Common Map Turtle	Testudines	N		R	E	
Graptemys ouachitensis	Ouachita Map Turtle	Testudines	N		R	P	
Graptemys pseudogeographica	False Map Turtle	Testudines	N		R	P	
Kinosternon flavescens	Illinois Mud Turtle	Testudines	N		UC	U	SE
Sternotherus odoratus	Common Musk Turtle	Testudines	N		R	E	
Trachemys scripta	Slider	Testudines	N		R	P	

Status of Occurrence in Ogle County (SO)
D = Documented
N = Not Documented
Type of Record
V = Voucher Specimen
VP = Verified Photograph
VS = Verified Sighting
State Listing Status
SE = State Endangered
ST = State Threatened

Distribution Class (DC)
C = Common
R = Restricted
UC = Uncommon
Probability of Occurrence @ KRB
E = Expected
P = Potential
U = Unlikely

Documented Species
Expected = 17
Potential = 6
Total = 23
Undocumented Species
Expected = 7
Potential = 7
Unlikely = 5
Total = 19

Table 2
Reptile and Amphibian Species Found During KRB Survey

Species	Common Name	PO	DC	0-P	1-2	3-5	6-10	Total	Rel %
Bufo americanus	American Toad	E	C	8	1			9	8.8
Hyla chrysocelis	Cope's Gray Treefrog	E	C	8				8	7.8
Pseudacris crucifer	Spring Peeper	E	R	4				4	3.9
P. triseriata	W. Chorus Frog	E	C	13	2			15	14.7
Rana catesbeiana	Bullfrog	E	C	1				1	1.0
R. clamitans	Green Frog	E	C	18				18	17.6
R. pipiens	N. Leopard Frog	E	C	16	3			19	18.6
Elaphe vulpina	Fox Snake	E	C			1		1	1.0
Lampropeltis triangulum	Milk Snake	E	R			1		1	1.0
Nerodia sipedon	N. Water Snake	E	C	2		2		4	3.9
Storeria dekayi	Brown Snake	E	C	10	1		1	12	11.8
Thamnophis sirtalis	E. Garter Snake	E	C	5				5	4.9
Chelydra serpentina	Snapping Turtle	E	C	2				2	2.0
Chrysemys picta	Painted Turtle	E	C	2				2	2.0
Emydoidea blandingii	Blanding's Turtle	P	UC	1				1	1.0
				90	**7**	**4**	**1**	**102**	**100**

PO = Probability of Occurrence at KRB; E-Expected, P-Potential, U-Unlikely
DC = Distribution Class; C-Common, R-Restricted, UC-Uncommon
Distance Class: 0-P = Within or adjacent to boundaries of KRB and/or within the area of the PR survey route;1-2 = Outside the area of the PR survey route up to 2.0 miles from KRB; 3-5 = Greater than 2 up to 5 miles from KRB; 6-10 = Greater than 5 up to 10 miles from KRB.

Species Documented At Or Near KRB During This Survey
Expected = 14
Potential = 1
Total = 15

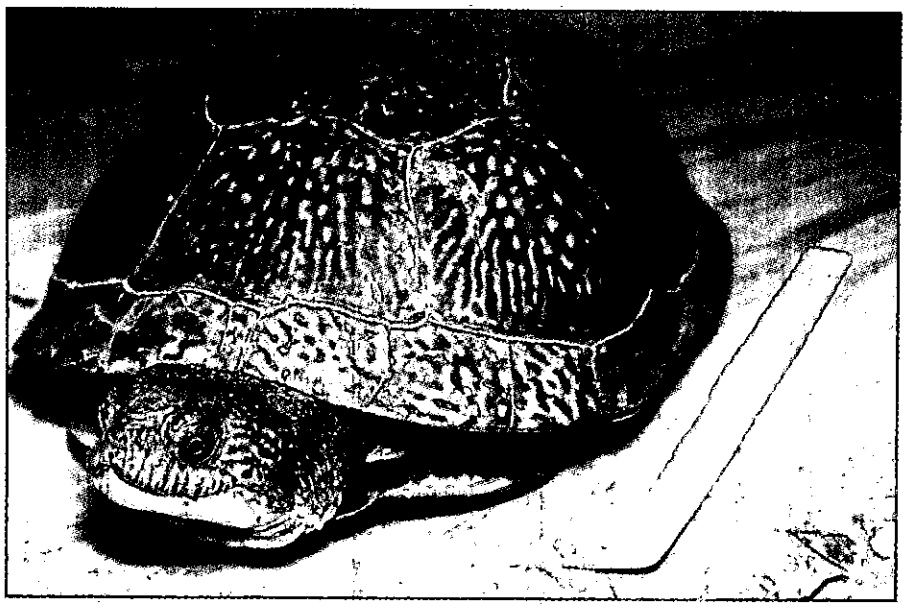

Figure 2. Front view of female Blanding's turtle (*Emydoidea blandingii*) captured at 1545 hr on 21 May 2004 submerged in shallow water on SE-side of SE Pond at NLI Tract. An old female approximately 1100-1200 g; Carapace was smooth with no trace of growth zones (Photo record INHS 2004.23).

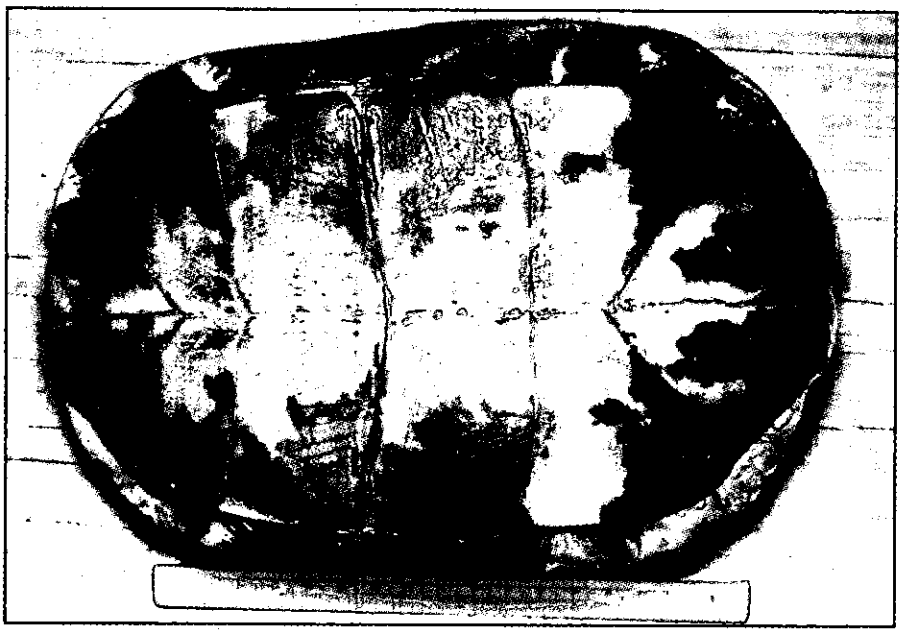

Figure 3. Plastral view of female Blanding's turtle shown in Figure 2. The plastron is worn, smooth and glossy. PL = 215 mm.

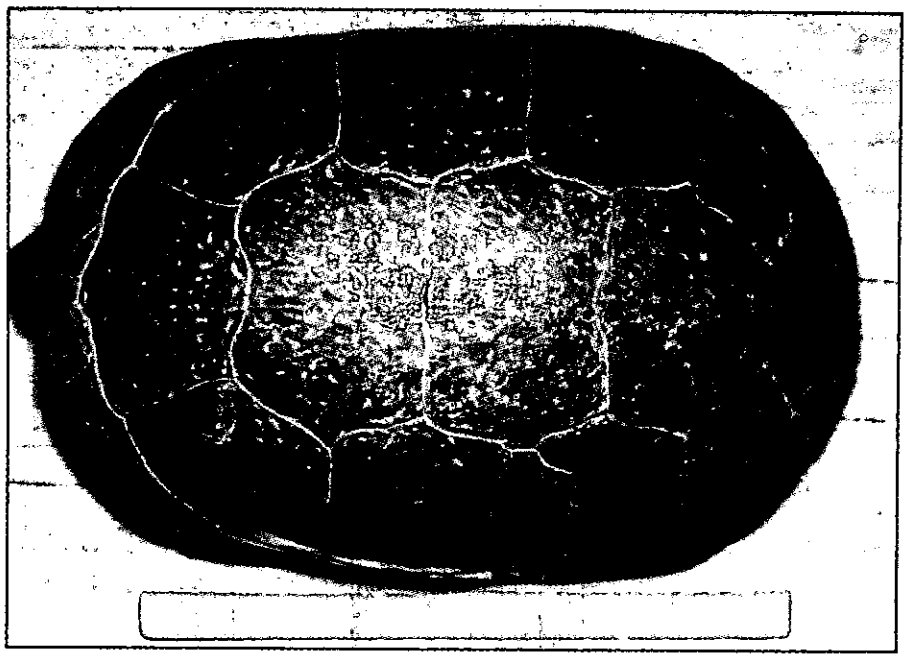

Figure 4. Dorsal view of carapace of female Blanding's turtle shown in Figure 2. Note anomaly or supernumerary costal scutes on left side (bottom of photo) between 2nd left costal and last costal. The normal condition is 4 costal scutes to a side as occurs on the right side of this specimen (top of photo). CL = 225 mm, CW = 149 mm and CH = 65 mm.

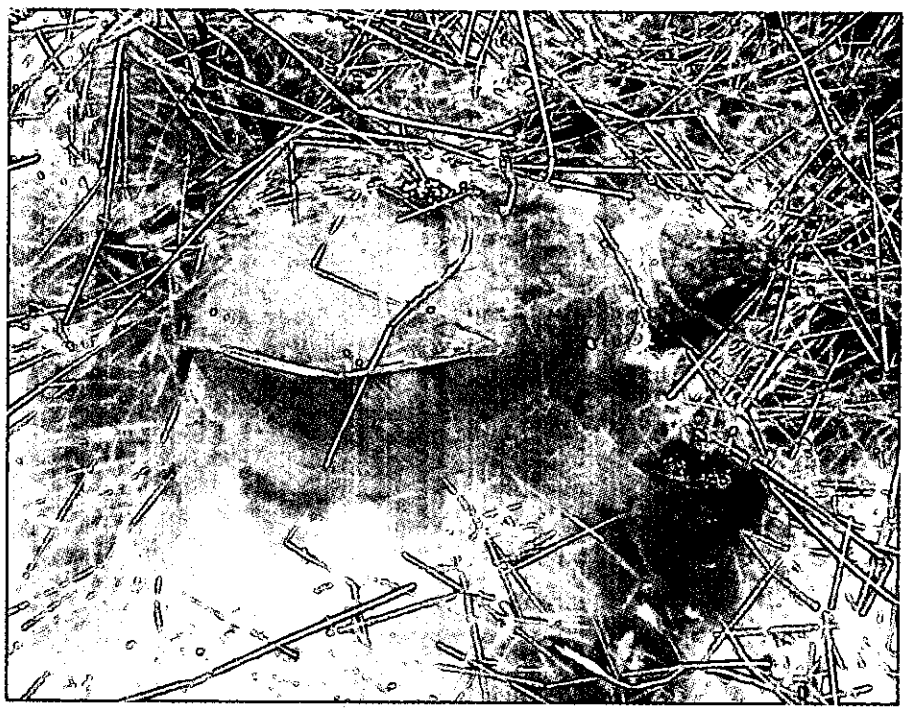

Figure 5. Large adult snapping turtle (*Chelydra serpentina*) found in SE Pond of NLI Tract on 28 March 2004. Note northern leopard frog (*Rana pipiens*) egg masses to right side of turtle (bottom of photo). Location UTM (16T NAD 83), E-0308909, N-4651548, EPE-19 ft.

Figure 6. Easterly view of main channel of Kyte River within NLI Tract on 29 August 2003. Location is UTM (16T NAD 83), E-0308207, N-4651318, EPE - 19 ft. Four species of fish including juvenile channel (*Ictalurus punctatus*) and flathead (*Pylodictis olivaris*) catfish, and slenderhead (*Percina phoxocehpala*) and banded (*Etheostoma zonale*) darter. Four species of mussels were found including plain pocketbook (*Lampsilis cardium*), fat mucket (*Lampsilis siliquoidea*), pink papershell (*Potamilus ohioensis*) and pimpleback (*Quadrula pustulosa*). The river may be an important refuge and landscape linkage for Blanding's turtle (*Emydoidea blandingii*), and provide habitat for juvenile spiny softshell (*Apalone spinifera*) and common map turtle (*Graptemys geographica*), the adults of which probably remain within the Rock River.

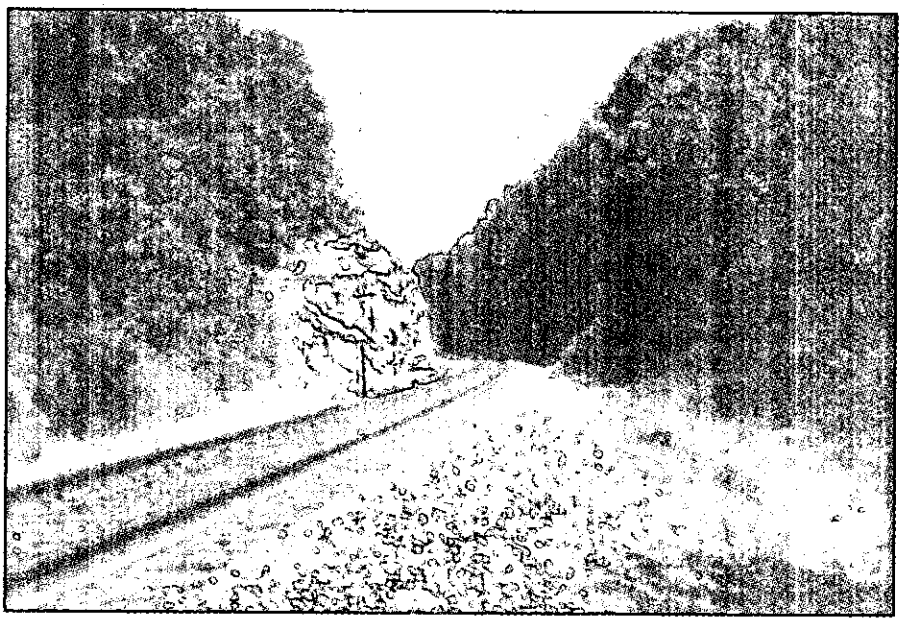

Figure 7. Sandstone outcroppings along Burlington-Northern Railroad in SE-portion of NLI Tract on 20 June 2003. The approximate location at point of exposed sandstone outcrop is UTM (16T NAD 83), E-0308940, N-4651623, EPE - 21 ft. The sandstone outcrops and nearby uplands provide habitat that may harbor reptiles not found during the survey. The SE Pond occurs just south (i.e. right side of photo) of the railroad, and sandy soils on west and southwest facing upland slopes may provide nesting habitat for Blanding's turtle.

Figure 8. Seasonal floodplain depressions to west-side of Daysville Road at the Legacy Tract on 3 April 2004. Location is UTM (16T NAD 83), E-0307998, N-4651960, EPE - 21 ft. These wetlands may be too small and temporary for Blanding's turtle, but do provide breeding habitat for early spring breeding frogs with relatively rapid larval development, including western chorus frog (*Pseudacris triseriata*), spring peeper (*Pseudacris crucifer*) and American toad (*Bufo americanus*).

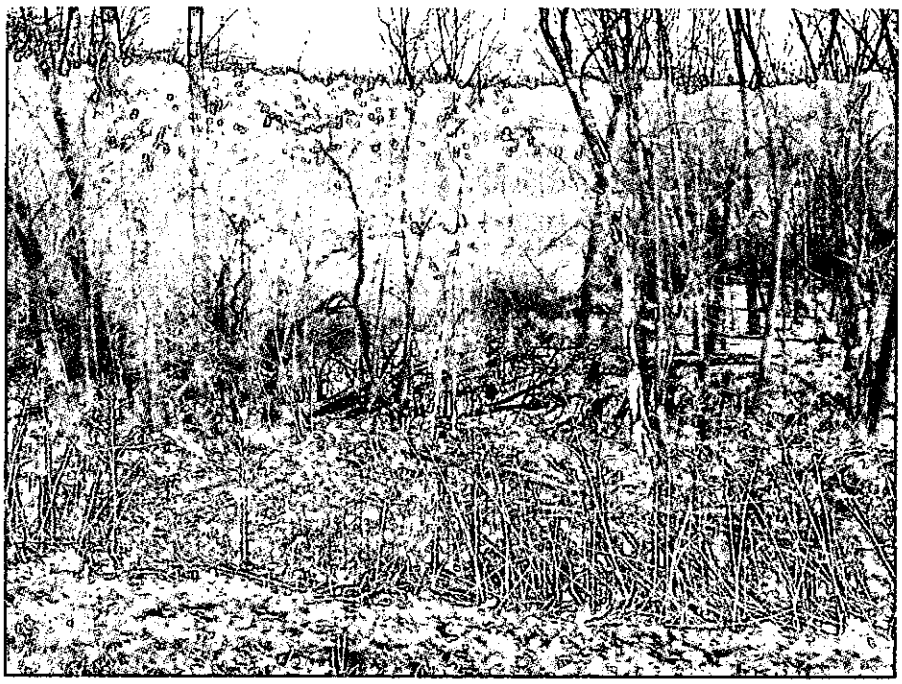

Figure 9. East view of NW Pond at NLI Tract from Daysville Road on 3 April 2004. Location at center of pond is UTM (16T NAD 83), E-0308130, N-4652028, EPE - 18 ft. Both the NW and SE Ponds provide breeding habitat for all seven frog species listed in Table 2, as well as snapping turtle (*Chelydra serpentina*), painted turtle (*Chrysemys picta*) and Blanding's turtle (*Emydoidea blandingii.*

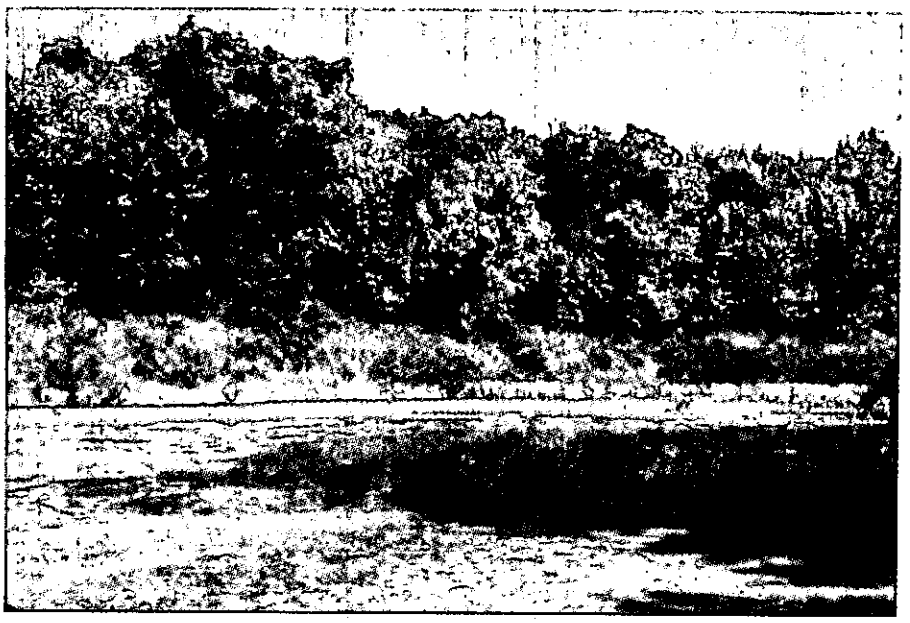

Figure 10. East view of S-end of main pool of NW Pond on 20 June 2003. Location at center of pond is UTM (16T NAD 83), E-0308130, N-4652028, EPE - 18 ft. Buttonbush (*Cephalanthus occidentalis*) rims the margin of open water. Wet and wet-mesic floodplain forest occur to the east (background) and south (right side) of the pond. Extensive mats of duckweed (*Lemna sp.*) form later in the summer.

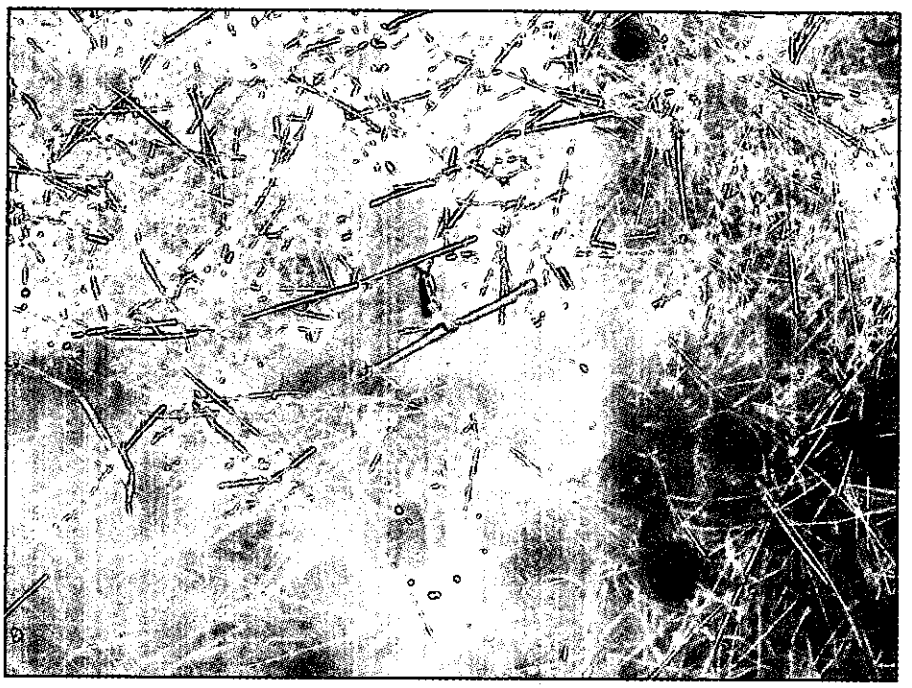

Figure 11. Communally deposited northern leopard frog (*Rana pipiens*) egg masses found in southeast end of SE Pond at NLI Tract on 28 March 2004. Location is UTM (16T NAD 83), E-0308909, N-4651548, EPE - 19 ft. At least 55-60 egg masses were counted within a 15-foot diameter area at this location,. A group of 12-18 males and 4 egg mass clusters were found chorusing at the SE-end of the NW Pond on the same day. This suggests the presence of a fairly large population of northern leopard frogs, a species which has been suggested to have declined in other areas of Northern Illinois.

Appendix I
Kyte River Bottoms Survey
Species Record List

Rec.	Trip	Date	Species	Type	DCL	No.	General Location	Field #	Col. #	E-ing	N-ing	EPE	Comments
1	1	6/20/2003	*Rana clamitans*	V	0	8	Daysville Road bridge crossing.						Anton reports seeing near shore under & near bridge; 1 photographed.
2	1	6/20/2003	*Rana catesbeiana*	V	0	2	Daysville Road bridge crossing.						Anton reports seeing near shore under & near bridge.
3	1	6/20/2003	*Rana pipiens*	V	0	1	Daysville Road bridge crossing.						Under S-side of bridge.
4	1	6/20/2003	*Rana pipiens*	DR	0	1	Daysville Road.						DOR W-shoulder midway to RR; Not salvageable.
5	1	6/20/2003	*Rana pipiens*	V	0	2	Floodplain depression.	12949		0308075	4651808	16	Anton sees 2, 1 collected as voucher; UTM location taken from center of depression & specimens ca 75 ft S of reading.
6	1	6/20/2003	*Rana pipiens*	V	0	1	Floodplain depression.	12950		0308075	4651808	16	Captured by Mauger ca 25 ft S of Rec. 05.
7	1	6/20/2003	*Thamnophis sirtalis*	V	0	1	Railroad	12816		0308135	4652207	15	Captured by Anton under piece of RR tie along S-side of ROW.
8	1	6/20/2003	*Thamnophis sirtalis*	V	0	2	Railroad						Large, gravid female under piece RR tie, then a sub-adult under another piece, along S-side ca 600 ft W of big bend in RR.
9	1	6/20/2003	*Thamnophis sirtalis*	V	0	2	Railroad						2 sub-adults under small piece RR tie along S-side ca 50 ft W of section line.
10	1	6/20/2003	*Storeria dekayi*	V	0	1	Railroad			0308833	4651661	18	Large, gravid female under piece RR tie, ca 75-85 ft W of sandstone outcropping; Anton holds until she gives birth & put in Field Museum coll.
11	1	6/20/2003	*Storeria dekayi*	V	0	1	Railroad	12817		0309321	4651555	17	Large, presumably gravid female under piece RR tie along S-side, well E of sandstone outcropping & only ca 100 ft W bend in River at NE corner of site.
12	1	6/20/2003	*Rana clamitans*	V	0	5	Tributary E-side bend NE end						Mostly younger juveniles, but 1 sub-adult in small, seepy drainage.
13	1	6/20/2003	*Pseudacris triseriata*	V	0	1	Floodplain depression.	12947		0308130	4652028	18	Metamorph captured under rotten log on W-side of pond; UTM taken from center of depression's basin.
14	1	6/20/2003	*Pseudacris triseriata*	V	0	1	Floodplain depression.	12948		0308130	4652028	18	Metamorph captured in floodplain forest on SW-side of pond.
15	1	6/20/2003	*Pseudacris triseriata*	V	0	1	Floodplain depression.			0308130	4652028	18	Numerous tads, too many to count, some transforming dipnetted in pond.
16	1	6/20/2003	*Rana clamitans*	V	0	1	Floodplain depression.			0308130	4652028	18	Numerous larger Ranid tads, presumed R. clamitans, since no bullfrog adults or sub-adults found present.
17	1	6/20/2003	*Pseudacris triseriata*	V	0	1	Floodplain depression.			0308130	4652028	18	1 metamorph found under log on W-side of basin; No salamanders found.
18	1	6/20/2003	*Chelydra serpentina*	V	0	1	Floodplain depression.			0308130	4652028	18	Large adult male captured by Anton while dipnetting for larvae & monitoring for frog calling prior to dusk.
19	1	6/20/2003	*Rana clamitans*	V	0	1	Floodplain depression.	12818		0308130	4652028	18	Adult female, possibly gravid, captured dipnetting on N-side of pond.
20	1	6/20/2003	*Pseudacris triseriata*	V	0	1	Floodplain depression.			0308130	4652028	18	Numerous metamorphs found emerging from pond on mudflats on W-side of depression.
21	1	6/20/2003	*Bufo americanus*	V	0	1	Floodplain depression.			0308130	4652028	18	Numerous metamorphs found emerging from pond on mudflats on W-side of depression.
22	1	6/20/2003	*Rana clamitans*	A	0	1	Floodplain depression.			0308130	4652028	18	Sporadic calls of a few males heard prior to and just after dusk; no *Hyla* or *Acris* or any other frog species heard.
23	2	8/29/2003	*Rana pipiens*	DR	0	1	Daysville Road.						S-bound shoulder, N-side bridge, not salvageable.
24	2	8/29/2003	*Rana pipiens*	DR	0	1	Daysville Road.	12822		0308016	4651763	22	Along S-bound shoulder.
25	2	8/29/2003	*Bufo americanus*	V	0	1	Floodplain depression.	12823		0308075	4651992	25	Juvenile in floodplain forest on W-side depression; Basin totally dry.
26	2	8/29/2003	*Rana pipiens*	V	0	1	Daysville Road bridge crossing.						Adult, captured live under S-side of bridge, released.
27	2	8/29/2003	*Rana clamitans*	V	0	1	Kyte River, E Section.						Adult on N-bank ca 400 ft E of Daysville Road.
28	2	8/29/2003	*Rana clamitans*	V	0	1	Kyte River, E Section.						Adult on N-bank just W of 1st bend.
29	2	8/29/2003	*Bufo americanus*	V	0	1	Kyte River, E Section.						Juvenile on S-side E of 1st bend.
30	2	8/29/2003	*Rana clamitans*	V	0	1	Kyte River, E Section.						Adult on tree root snag in channel @ 2nd big bend.
31	2	8/29/2003	*Nerodia sipedon*	V	0	1	Kyte River, E Section.	12824		0808539	4651156	16	Juvenile captured by Anton under limestone slab of small rock pile on W-ly side of channel.
32	2	8/29/2003	*Bufo americanus*	V	0	1	Kyte River, E Section.						Sub-adult under log on sand bar, well W of Rec. No. 31.
33	2	8/29/2003	*Rana clamitans*	V	0	1	Kyte River, E Section.						Small adult in channel strand pool, way W of Rec. No. 31.
34	2	8/29/2003	*Bufo americanus*	V	0	1	Kyte River, E Section.						Juvenile on sand bar concurrent with Rec. No. 33.
35	2	8/29/2003	*Rana clamitans*	V	0	2	Kyte River, E Section.						Sub-adults along N-bank ca 200 ft E of Daysville Road.
36	2	8/29/2003	*Rana pipiens*	V	0	1	Daysville Road bridge crossing.						Adult seen by Anton on sand bar S-side of brige.
37	2	8/29/2003	*Rana clamitans*	V	0	1	Kyte River, W Section.						Adult under rock along N-bank just to W-side of bridge.
38	2	8/29/2003	*Bufo americanus*	V	0	5	Kyte River, W Section.						Juveniles on sandbar along S-bank ca midway to confluence with Rock River.
39	2	8/29/2003	*Chrysemys picta*	V	P	3	Rock River Confluence.						In Rock River along shoreline N-side of confluence with Kyte River; 1 head of adult ca 10 ft from shore ca 50 ft N of confluence; 2 adults basking on log ca 200 ft N of confluence; ID made via 8x binocs.
40	3	10/9/2003	*Storeria dekayi*	DR	2	1	Daysville Rd. 1.0 mi. S of Lowden Rd.	12832		0308309	4648614	21	Adult DOR on E. shoulder.
41	3	10/9/2003	*Storeria dekayi*	DR	0	4	Daysville Rd. 0.3 N of Kyte to 0.1 S of BNSF railroad.						1st W-shoulder 0.3 N of Kyte River, 2nd E-shoulder 75 ft N of previous, 3rd E-shoulder 150 ft N of 1st, 4th W-shoulder 0.1 S of BNSF railroad.
42	3	10/9/2003	*Storeria dekayi*	DR	0	1	Daysville Road ca 0.1 S of BNSF railroad.	12838		0308042	4652077	14	Adult DOR on E. shoulder.

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43	3	10/9/2003	*Storeria dekayi*	V	0	1	BNSF railroad tracks ca 0.3 E Daysville Rd.						Sub-adult under small piece rr tie along N-side tracks.
44	3	10/9/2003	*Bufo americanus*	V	0	1	BNSF railroad tracks @ sandstone outcropping.						Juvenile under leaf litter along base sandstone outcropping on N-side tracks.
45	3	10/9/2003	*Hyla versicolor-chrysocelis*	V	0	1	BNSF railroad tracks @ sandstone outcropping.	12839		0308940	4651623	21	Adult female under leaf litter along base sandstone outcropping on N-side tracks.
46	3	10/9/2003	*Rana clamitans*	V	0	4	NE corner subject parcel.						3 adults & 1 juvenile in small, spring-like draw on N-side confluence Honey Crk S-side tracks.
47	3	10/9/2003	*Rana clamitans*	V	0	2	NE corner subject parcel.						1 adult & 1 juvenile in small, spring-like draw on N-side Honey Creek to N-side of tracks.
48	3	10/9/2003	*Storeria dekayi*	V	0	1	BNSF railroad ca 0.2 W of NE corner.						YOY active at surface along S-side tracks W of NE corner subject parcel.
49	3	10/9/2003	*Storeria dekayi*	DR	P	2	Honey Creek Rd ca 0.1 N of Prairie Rd.						2 adults DOR E-side road 0.1 E of int. Honey Crk & Prairie Rds, just to N-side bridge crossing Kyte River on Honey Crk. Rd., unsalvageable.
50	3	10/9/2003	*Storeria dekayi*	DR	P	1	Honey Creek Rd ca 0.25 W of Prairie Rd.						Adult live in middle of Honey Creek Rd., released on S-side road.
51	3	10/9/2003	*Storeria dekayi*	DR	P	1	Honey Creek Rd ca 0.35 W of Prairie Rd.	12840		0309356	4650667	25	Adult DOR on N-side Honey Crk. Rd. too nice condition to not salvage.
52	3	10/9/2003	*Elaphe vulpina*	DR	5	1	Spring Creek Rd. ca 0.35 E of River Rd.	12841		0307973	4659488	22	YOY juvenile DOR S-side Spring Crk Rd; ca 4.7 mi N of KRB site.
53	3	10/9/2003	*Nerodia sipedon*	DR	5	1	Spring Creek Rd. ca 0.9 E of River Rd.						YOY juvenile DOR S-side Spring Crk Rd., poor condition; ca 4.7 mi. N of KRB site.
54	3	10/9/2003	*Lampropeltis triangulum*	DR	5	1	Razorville Rd. ca 0.25 S Spring Creek Rd.	12842		0309589	4658930	16	YOY juvenile live on W-shoulder near guardrail just S-side small draw; 1st record of species by us; ca 4.4 mi. N of KRB site.
55	3	10/9/2003	*Storeria dekayi*	DR	P	1	Honey Creek Rd. W of int. Blackhawk Rd.						Adult DOR on N-side Honey Crk. Rd. ca 200 ft W of Blackhawk Rd., not salvageable.
IN	3	10/9/2003	*Storeria dekayi*	DR	9	1	Flagg Rd. 0.25 W Skare Rd; ca 8.4 mi. SE of KRB site.	FMNH		0321246	4645071	14	Adult DOR N-side Flagg Rd. @ bridge crossing a small stream; Outside general site search area, but nice cond. Ogle County specimen; T. Anton to deposit in
56	4	3/28/2004	*Rana pipiens*	DR	2	1	Prairie & Watertown Roads						Adult DOR S-side intersection; Poor condition & not salvageable.
57	4	3/28/2004	*Pseudacris triseriata*	A	2	2	Prairie Rd, N of Flagg Rd & S of Watertown Rd.						Two small to moderate size choruses in low areas along W-side Prairie Road, 2.7 & 3.1 mi N of Flagg Rd..
58	4	3/28/2004	*Pseudacris triseriata*	A	0	1	Floodplain depression.			0308130	4652028	18	Large chorus of *P. triseriata* calling in primary floodplain pond E-side Daysville Rd.
59	4	3/28/2004	*Rana pipiens*	V	0	1	Floodplain depression.			0308130	4652028	18	12-18 males clustered & calling on SE-side of pond; 4 egg masses counted.
60	4	3/28/2004	*Pseudacris triseriata*	A	0	1	NE Depression @ RR/S-tone Outcrop			0308909	4651548	19	Large chorus calling in depression to E-side of berm, mostly in the shallows with lots of submerged grasses, but also on W-side of berm where bushes & trees have been cut & cleared.
61	4	3/28/2004	*Rana pipiens*	A	0	1	NE Depression @ RR/S-tone Outcrop			0308909	4651548	19	4-6 males heard calling on SE-side of depression.
62	4	3/28/2004	*Chelydra serpentina*	P	0	1	NE Depression @ RR/S-tone Outcrop			0308909	4651548	19	Large male on SE-side of pond stationary, submerged in area where lots of N. leopard frog eggs have been laid; A recent confirmation record for Ogle County; Photographed & 3 digital j-pegs submitted to INHS as photo voucher.
63	4	3/28/2004	*Rana pipiens*	V	0	1	NE Depression @ RR/S-tone Outcrop			0308909	4651548	19	55-60 egg masses counted within a 15-foot diameter area of shallow open water on SE-side of pond.
64	4	3/28/2004	*Pseudacris crucifer*	V	0	1	NE Depression @ RR/S-tone Outcrop	12848		0308950	4651540	30	10-12 individuals calling occassionally in short bouts; A new county record, 1 specimen collected as voucher.
65	4	3/28/2004	*Pseudacris crucifer*	A	0	1	Floodplain depression.			0308075	4651808	16	A few, 3-4 individuals heard calling from along road at truck; A short bout of calling, then stopped.
66	5	4/3/2004	*Rana pipiens*	DR	2	1	Prairie Rd, ca 0.5 S of Watertown Rd						An adult female with eggs on E-side of Prairie Rd, not salvageable.
67	5	4/3/2004	*Pseudacris triseriata*	A	0	1	Floodplain depression.			0308075	4651808	16	A large chorus calling, plus 1 amplexed pair found by T. Anton.
68	5	4/3/2004	*Rana pipiens*	V	0	8	Floodplain depression.			0308075	4651808	16	8 adult *R. pipiens* captured in traps, all alive & released; A few calling infrequently; Also, 10 *P. acutus* & 2 P. *gracilis*.
69	5	4/3/2004	*Pseudacris triseriata*	A	0	1	W-side Daysville Rd.			0307998	4651960	21	A small chorus calling, scattered widely along length of depression.
70	5	4/3/2004	*Pseudacris triseriata*	A	0	1	W-side Daysville Rd.			0307919	4651897	21	A moderate size chorus along length of depression,; 2nd depression just W of No 69.
71	5	4/3/2004	*Rana pipiens*	V	0	1	W-side Daysville Rd.			0307919	4651897	21	1 individual seen by T. Anton at surface.
72	5	4/3/2004	*Thamnophis sirtalis*	V	0	1	E-side Daysville Rd.			0308051	4651915	33	Adult female captured active at surface near base of embankent along E-side of Daysville Rd.
73	5	4/3/2004	*Pseudacris triseriata*	A	0	1	NE Depression @ RR/S-tone Outcrop			0308875	4651559	23	Moderate size chorus calling, scattered across entire depression.
74	5	4/3/2004	*Rana pipiens*	V	0	11	NE Depression @ RR/S-tone Outcrop	12849		0308875	4651559	23	11 adult *R. pipiens* caught in minnow traps; 1 dead & saved as voucher; Plus crayfish, 1 *C. diogenes* & 1 *P. acutus*.

75	5	4/3/2004	*Rana pipiens*	V	0	1	NE Depression @ RR/S-tone Outcrop			0308875	4651559	23	1 adult R. pipiens found dead, floating in water on SE-end, bitten in 2 halves, not salvageable.
76	5	4/3/2004	*Pseudacris crucifer*	A	0	1	NE Depression @ RR/S-tone Outcrop			0308875	4651559	23	A few start calling when sun is out & wind calmer, then stop when cloudy & windy, soe gusts 30-35 mph.
77	5	4/3/2004	*Pseudacris triseriata*	V	0	1	NE Depression @ RR/S-tone Outcrop	12850		0308820	4651597	23	One adult male captured on NW-side of depression & saved as voucher.
78	6	5/14/2004	*Rana pipiens*	DR	2	1	Prairie & Watertown Roads						Pulverized remains W-side Prairie 0.4 S of int. with Watertown Rd.
79	6	5/14/2004	*Pseudacris triseriata*	A	2	1	Prairie & Watertown Roads						Small number calling in wetland W-side of road o.4 S of int. with Watertown Rd.
80	6	5/14/2004	*Bufo americanus*	DR	1	1	Watertown Road						Lg. adult pulverized adult on Watertown Rd. 50 ft. N of int. with Prairie Rd.
81	6	5/14/2004	*Hyla versicolor-chrysocelis*	DR	P	1	Honey Creek Road						Pulverized remains S-side 50 ft. W of int. with Blackhawk Rd.
82	6	5/14/2004	*Bufo americanus*	DR	P	1	Honey Creek Road						Pulverized remains S-side 100 ft. W of int. with Watertown Rd.
83	7	5/21/2004	*Pseudacris triseriata*	A	0	1	W-side Daysville Rd.						Some calling in linear floodplain depressions on W-side Daysville Road.
84	7	5/21/2004	*Rana clamitans*	A	0	1	Floodplain depression.						Some calliing on E-side of pond.
85	7	5/21/2004	*Thamnophis sirtalis*	V	0	1	W-side Daysville Rd.						Found by Anton along embankment on W-side Daysville Rd; Released.
86	7	5/21/2004	*Rana pipiens*	V	0	1	Floodplain depression.						Seen on log on SW-side of core floodplain depression on E-side Daysville Rd.
87	7	5/21/2004	*Rana clamitans*	A	0	1	NE Depression @ RR/S-tone Outcrop						Numerous individuals occ. calling throughout deeper water portions.
88	7	5/21/2004	*Chrysemys picta*	V	0	2	NE Depression @ RR/S-tone Outcrop						2 ind. seen by Anton basking on log on far S-end of pond.
89	7	5/21/2004	*Emydoidea blandingii*	V	0	1	NE Depression @ RR/S-tone Outcrop			0308969	4651502	26	A large old adult female captured by Anton submerged in shallows on far SE-end of depression; Photographed & released at point of capture.
90	7	5/21/2004	*Hyla versicolor-chrysocelis*	V	0	1	NE Depression @ RR/S-tone Outcrop			0308957	4651502	16	Found dead in-situ far S-end of depression; front of snout & top of head bitten off; Starting to decompose & will be recording & collecting specimens tonight, so not saved.
91	7	5/21/2004	*Rana clamitans*	V	0	4	NE Depression @ RR/S-tone Outcrop						2 adult males captured while dip-netting for larvae; Another 2 seen basking on log.
92	7	5/21/2004	*Rana clamitans*	A	0	1	NE Depression @ RR/S-tone Outcrop						Numerous indiv, at least 12-18 calling in intense bouts when it became sunny.
93	7	5/21/2004	*Nerodia sipedon*	V	0		NE Depression @ RR/S-tone Outcrop						Anton captures an adult female basking in buttonbush along SE-side.
94	7	5/21/2004	*Nerodia sipedon*	V	4	2	W-side Rock River N of Oregon						1 adult male found dead by Anton, partially eaten; Another seen swimming along shoreline at rest stop along W-side Rock River 2.1 miles N of int. with Rte 64 in Oregon.
95	7	5/21/2004	*Pseudacris crucifer*	A	0	1	NE Depression @ RR/S-tone Outcrop						1925 hr. numerous indiv. start callling.
96	7	5/21/2004	*Hyla chrysocelis*	A	0	1	NE Depression @ RR/S-tone Outcrop						1928 hr. numerous indiv. starting to call; All *H. chrysocelis*.
97	7	5/21/2004	*Hyla chrysocelis*	C	0	1	NE Depression @ RR/S-tone Outcrop	19254		0308850	4651602	64	4 calls recorded at BodyT=18.4C & frog collected.
98	7	5/21/2004	*Hyla chrysocelis*	C	0	1	NE Depression @ RR/S-tone Outcrop	19255		0308829	4651602	20	5 calls recorded at BodyT=18.5C & frog collected.
99	7	5/21/2004	*Hyla chrysocelis*	C	0	1	NE Depression @ RR/S-tone Outcrop	19256		0308854	4651591	36	4 calls recorded at BodyT=18.2C & frog collected.
100	7	5/21/2004	*Hyla chrysocelis*	A	0	1	Floodplain depression.						Many indiv & mod-size/inensity chorus scatterred throughout depression along E-side of Daysville Rd; All *H. chrysocelis*.
101	7	5/21/2004	*Rana clamitans*	A	0	1	Floodplain depression.						Many indiv. calling intensely in core depression to E-side Daysville Rd.

Type

V = Visual ID and/or live capture & release.
P = Photographed or Photo Voucher
DR = Dead on Road, not salvageable or needed as voucher.
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Appendix II
Kyte River Bottoms Survey
Records Sorted By Species

Rec.	Trip	Date	Species	Type	DCL	No.	General Location	Field #	Col. #	E-ing	N-ing	EPE	Comments
21	1	6/20/2003	*Bufo americanus*	V	0	1	Floodplain depression.			0308130	4652028	18	Numerous metamorphs found emerging from pond on mudflats on W-side of depression.
25	2	8/29/2003	*Bufo americanus*	V	0	1	Floodplain depression.	12823		0308075	4651992	25	Juvenile in floodplain forest on W-side depression; Basin totally dry.
29	2	8/29/2003	*Bufo americanus*	V	0	1	Kyte River, E Section.						Juvenile on S-side E of 1st bend.
32	2	8/29/2003	*Bufo americanus*	V	0	1	Kyte River, E Section.						Sub-adult under log on sand bar, well W of Rec. No. 31.
34	2	8/29/2003	*Bufo americanus*	V	0	1	Kyte River, E Section.						Juvenile on sand bar concurrent with Rec. No. 33.
38	2	8/29/2003	*Bufo americanus*	V	0	5	Kyte River, W Section.						Juveniles on sandbar along S-bank ca midway to confluence with Rock River.
44	3	10/9/2003	*Bufo americanus*	V	0	1	BNSF railroad tracks @ sandstone outcropping.						Juvenile under leaf litter along base sandstone outcropping on N-side tracks.
80	6	5/14/2004	*Bufo americanus*	DR	1	1	Watertown Road						Lg. adult pulverized adult on Watertown Rd. 50 ft. N of int. with Prairie Rd.
82	6	5/14/2004	*Bufo americanus*	DR	P	1	Honey Creek Road						Pulverized remains S-side 100 ft. W of int. with Watertown Rd.
18	1	6/20/2003	*Chelydra serpentina*	V	0	1	Floodplain depression.			0308130	4652028	18	Large adult male captured by Anton while dipnetting for larvae & monitoring for frog calling prior to dusk.
62	4	3/28/2004	*Chelydra serpentina*	P	0	1	NE Depression @ RR/S-tone Outcrop			0308909	4651548	19	Large male on SE-side of pond stationary, submerged in area where lots of N. leopard frog eggs have been laid; A recent confirmation record for Ogle County; Photographed & 3 digital j-pegs submitted to INHS as photo voucher.
88	7	5/21/2004	*Chrysemys picta*	V	0	2	NE Depression @ RR/S-tone Outcrop						2 ind. seen by Anton basking on log on far S-end of pond.
39	2	8/29/2003	*Chrysemys picta*	V	P	3	Rock River Confluence.						In Rock River along shoreline N-side of confluence with Kyte River; 1 head of adult ca 10 ft from shore ca 50 ft N of confluence; 2 adults basking on log ca 200 ft N of confluence; ID made via 8x binocs.
52	3	10/9/2003	*Elaphe vulpina*	DR	5	1	Spring Creek Rd. ca 0.35 E of River Rd.	12841		0307973	4659488	22	YOY juvenile DOR S-side Spring Crk Rd; ca 4.7 mi N of KRB site.
89	7	5/21/2004	*Emydoidea blandingii*	V	0	1	NE Depression @ RR/S-tone Outcrop			0308969	4651502	26	A large old adult female captured by Anton submerged in shallows on far SE-end of depression; Photographed & released at point of capture.
96	7	5/21/2004	*Hyla chrysocelis*	A	0	1	NE Depression @ RR/S-tone Outcrop						1928 hr. numerous indiv. starting to call; All *H. chrysocelis*.
97	7	5/21/2004	*Hyla chrysocelis*	C	0	1	NE Depression @ RR/S-tone Outcrop	19254		0308850	4651602	64	4 calls recorded at BodyT=18.4C & frog collected.
98	7	5/21/2004	*Hyla chrysocelis*	C	0	1	NE Depression @ RR/S-tone Outcrop	19255		0308829	4651602	20	5 calls recorded at BodyT=18.5C & frog collected.
99	7	5/21/2004	*Hyla chrysocelis*	C	0	1	NE Depression @ RR/S-tone Outcrop	19256		0308854	4651591	36	4 calls recorded at BodyT=18.2C & frog collected.
100	7	5/21/2004	*Hyla chrysocelis*	A	0	1	Floodplain depression.						Many indiv & mod-size/inensity chorus scatterred throughout depression along E-side of Daysville Rd; All *H. chrysocelis*.
45	3	10/9/2003	*Hyla versicolor-chrysocelis*	V	0	1	BNSF railroad tracks @ sandstone outcropping.	12839		0308940	4651623	21	Adult female under leaf litter along base sandstone outcropping on N-side tracks.
90	7	5/21/2004	*Hyla versicolor-chrysocelis*	V	0	1	NE Depression @ RR/S-tone Outcrop			0308957	4651502	16	Found dead in-situ far S-end of depression; front of snout & top of head bitten off; Starting to decompose & will be recording & collecting specimens tonight, so not saved.
81	6	5/14/2004	*Hyla versicolor-chrysocelis*	DR	P	1	Honey Creek Road						Pulverized remains S-side 50 ft. W of int. with Blackhawk Rd.
54	3	10/9/2003	*Lampropeltis triangulum*	DR	5	1	Razorville Rd. ca 0.25 S Spring Creek Rd.	12842		0309589	4658930	16	YOY juvenile live on W-shoulder near guardrail just S-side small draw; 1st record of species by us; ca 4.4 mi. N of KRB site.
31	2	8/29/2003	*Nerodia sipedon*	V	0	1	Kyte River, E Section.	12824		0808539	4651156	16	Juvenile captured by Anton under limestone slab of small rock pile on W-ly side of channel.
93	7	5/21/2004	*Nerodia sipedon*	V	0		NE Depression @ RR/S-tone Outcrop						Anton captures an adult female basking in buttonbush along SE-side.
94	7	5/21/2004	*Nerodia sipedon*	V	4	2	W-side Rock River N of Oregon						1 adult male found dead by Anton, partially eaten; Another seen swimming along shoreline at rest stop along W-side Rock River 2.1 miles N of int. with Rte 64 in Oregon.
53	3	10/9/2003	*Nerodia sipedon*	DR	5	1	Spring Creek Rd. ca 0.9 E of River Rd.						YOY juvenile DOR S-side Spring Crk Rd., poor condition; ca 4.7 mi. N of KRB site.
64	4	3/28/2004	*Pseudacris crucifer*	V	0	1	NE Depression @ RR/S-tone Outcrop	12848		0308950	4651540	30	10-12 individuals calling occassionally in short bouts; A new county record, 1 specimen collected as voucher.
65	4	3/28/2004	*Pseudacris crucifer*	A	0	1	Floodplain depression.			0308075	4651808	16	A few, 3-4 individuals heard calling from along road at truck; A short bout of calling, then stopped.
76	5	4/3/2004	*Pseudacris crucifer*	A	0	1	NE Depression @ RR/S-tone Outcrop			0308875	4651559	23	A few start calling when sun is out & wind calmer, then stop when cloudy & windy, soe gusts 30-35 mph.
95	7	5/21/2004	*Pseudacris crucifer*	A	0	1	NE Depression @ RR/S-tone Outcrop						1925 hr. numerous indiv. start callling.
13	1	6/20/2003	*Pseudacris triseriata*	V	0	1	Floodplain depression.	12947		0308130	4652028	18	Metamorph captured under rotten log on W-side of pond; UTM taken from center of depression's basin.
14	1	6/20/2003	*Pseudacris triseriata*	V	0	1	Floodplain depression.	12948		0308130	4652028	18	Metamorph captured in floodplain forest on SW-side of pond.
15	1	6/20/2003	*Pseudacris triseriata*	V	0	1	Floodplain depression.			0308130	4652028	18	Numerous tads, too many to count, some transforming dipnetted in pond.
17	1	6/20/2003	*Pseudacris triseriata*	V	0	1	Floodplain depression.			0308130	4652028	18	1 metamorph found under log on W-side of basin; No salamanders found.

20	1	6/20/2003	*Pseudacris triseriata*	V	0	1	Floodplain depression.			0308130	4652028	18	Numerous metamorphs found emerging from pond on mudflats on W-side of depression.
58	4	3/28/2004	*Pseudacris triseriata*	A	0	1	Floodplain depression.			0308130	4652028	18	Large chorus of *P. triseriata* calling in primary floodplain pond E-side Daysville Rd.
60	4	3/28/2004	*Pseudacris triseriata*	A	0	1	NE Depression @ RR/S-tone Outcrop			0308909	4651548	19	Large chorus calling in depression to E-side of berm, mostly in the shallows with lots of submerged grasses, but also on W-side of berm where bushes & trees have been cut & cleared.
67	5	4/3/2004	*Pseudacris triseriata*	A	0	1	Floodplain depression.			0308075	4651808	16	A large chorus calling, plus 1 amplexed pair found by T. Anton.
69	5	4/3/2004	*Pseudacris triseriata*	A	0	1	W-side Daysville Rd.			0307998	4651960	21	A small chorus calling, scattered widely along length of depression.
70	5	4/3/2004	*Pseudacris triseriata*	A	0	1	W-side Daysville Rd.			0307919	4651897	21	A moderate size chorus along length of depression,; 2nd depression just W of No 69.
73	5	4/3/2004	*Pseudacris triseriata*	A	0	1	NE Depression @ RR/S-tone Outcrop			0308875	4651559	23	Moderate size chorus calling, scattered across entire depression.
77	5	4/3/2004	*Pseudacris triseriata*	V	0	1	NE Depression @ RR/S-tone Outcrop	12850		0308820	4651597	23	One adult male captured on NW-side of depression & saved as voucher.
83	7	5/21/2004	*Pseudacris triseriata*	A	0	1	W-side Daysville Rd.						Some calling in linear floodplain depressions on W-side Daysville Road.
57	4	3/28/2004	*Pseudacris triseriata*	A	2	2	Prairie Rd, N of Flagg Rd & S of Watertown Rd.						Two small to moderate size choruses in low areas along W-side Prairie Road, 2.7 & 3.1 mi N of Flagg Rd..
79	6	5/14/2004	*Pseudacris triseriata*	A	2	1	Prairie & Watertown Roads						Small number calling in wetland W-side of road o.4 S of int. with Watertown Rd.
2	1	6/20/2003	*Rana catesbeiana*	V	0	2	Daysville Road bridge crossing.						Anton reports seeing near shore under & near bridge.
1	1	6/20/2003	*Rana clamitans*	V	0	8	Daysville Road bridge crossing.						Anton reports seeing near shore under & near bridge; 1 photographed.
12	1	6/20/2003	*Rana clamitans*	V	0	5	Tributary E-side bend NE end						Mostly younger juveniles, but 1 sub-adult in small, seepy drainage.
16	1	6/20/2003	*Rana clamitans*	V	0	1	Floodplain depression.			0308130	4652028	18	Numerous larger Ranid tads, presumed R. clamitans, since no bullfrog adults or sub-adults found present.
19	1	6/20/2003	*Rana clamitans*	V	0	1	Floodplain depression.	12818		0308130	4652028	18	Adult female, possibly gravid, captured dipnetting on N-side of pond.
22	1	6/20/2003	*Rana clamitans*	A	0	1	Floodplain depression.			0308130	4652028	18	Sporadic calls of a few males heard prior to and just after dusk; no *Hyla* or *Acris* or any other frog species heard.
27	2	8/29/2003	*Rana clamitans*	V	0	1	Kyte River, E Section.						Adult on N-bank ca 400 ft E of Daysville Road.
28	2	8/29/2003	*Rana clamitans*	V	0	1	Kyte River, E Section.						Adult on N-bank just W of 1st bend.
30	2	8/29/2003	*Rana clamitans*	V	0	1	Kyte River, E Section.						Adult on tree root snag in channel @ 2nd big bend.
33	2	8/29/2003	*Rana clamitans*	V	0	1	Kyte River, E Section.						Small adult in channel strand pool, way W of Rec. No. 31.
35	2	8/29/2003	*Rana clamitans*	V	0	2	Kyte River, E Section.						Sub-adults along N-bank ca 200 ft E of Daysville Road.
37	2	8/29/2003	*Rana clamitans*	V	0	1	Kyte River, W Section.						Adult under rock along N-bank just to W-side of bridge.
46	3	10/9/2003	*Rana clamitans*	V	0	4	NE corner subject parcel.						3 adults & 1 juvenile in small, spring-like draw on N-side confluence Honey Crk S-side tracks.
47	3	10/9/2003	*Rana clamitans*	V	0	2	NE corner subject parcel.						1 adult & 1 juvenile in small, spring-like draw on N-side Honey Creek to N-side of tracks.
84	7	5/21/2004	*Rana clamitans*	A	0	1	Floodplain depression.						Some calling on E-side of pond.
87	7	5/21/2004	*Rana clamitans*	A	0	1	NE Depression @ RR/S-tone Outcrop						Numerous individuals occ. calling throughout deeper water portions.
91	7	5/21/2004	*Rana clamitans*	V	0	4	NE Depression @ RR/S-tone Outcrop						2 adult males captured while dip-netting for larvae; Another 2 seen basking on log.
92	7	5/21/2004	*Rana clamitans*	A	0	1	NE Depression @ RR/S-tone Outcrop						Numerous indiv, at least 12-18 calling in intense bouts when it became sunny.
101	7	5/21/2004	*Rana clamitans*	A	0	1	Floodplain depression.						Many indiv. calling intensely in core depression to E-side Daysville Rd.
3	1	6/20/2003	*Rana pipiens*	V	0	1	Daysville Road bridge crossing.						Under S-side of bridge.
4	1	6/20/2003	*Rana pipiens*	DR	0	1	Daysville Road.						DOR W-shoulder midway to RR; Not salvageable.
5	1	6/20/2003	*Rana pipiens*	V	0	2	Floodplain depression.	12949		0308075	4651808	16	Anton sees 2, 1 collected as voucher; UTM location taken from center of depression & specimens ca 75 ft S of reading.
6	1	6/20/2003	*Rana pipiens*	V	0	1	Floodplain depression.	12950		0308075	4651808	16	Captured by Mauger ca 25 ft S of Rec. 05.
23	2	8/29/2003	*Rana pipiens*	DR	0	1	Daysville Road.						S-bound shoulder, N-side bridge, not salvageable.
24	2	8/29/2003	*Rana pipiens*	DR	0	1	Daysville Road.	12822		0308016	4651763	22	Along S-bound shoulder.
26	2	8/29/2003	*Rana pipiens*	V	0	1	Daysville Road bridge crossing.						Adult, captured live under S-side of bridge, released.
36	2	8/29/2003	*Rana pipiens*	V	0	1	Daysville Road bridge crossing.						Adult seen by Anton on sand bar S-side of brige.
59	4	3/28/2004	*Rana pipiens*	V	0	1	Floodplain depression.			0308130	4652028	18	12-18 males clustered & calling on SE-side of pond; 4 egg masses counted.
61	4	3/28/2004	*Rana pipiens*	A	0	1	NE Depression @ RR/S-tone Outcrop			0308909	4651548	19	4-6 males heard calling on SE-side of depression.
63	4	3/28/2004	*Rana pipiens*	V	0	1	NE Depression @ RR/S-tone Outcrop			0308909	4651548	19	55-60 egg masses counted within a 15-foot diameter area of shallow open water on SE-side of pond.
68	5	4/3/2004	*Rana pipiens*	V	0	8	Floodplain depression.			0308075	4651808	16	8 adult *R. pipiens* captured in traps, all alive & released; A few calling infrequently; Also, 10 *P. acutus* & 2 P. *gracilis*.
71	5	4/3/2004	*Rana pipiens*	V	0	1	W-side Daysville Rd.			0307919	4651897	21	1 individual seen by T. Anton at surface.

Appendix II
Kyte River Bottoms Survey
Records Sorted By Species

74	5	4/3/2004	*Rana pipiens*	V	0	11	NE Depression @ RR/S-tone Outcrop	12849		0308875	4651559	23	11 adult *R. pipiens* caught in minnow traps; 1 dead & saved as voucher; Plus crayfish, 1 *C. diogenes* & 1 *P. acutus*.
75	5	4/3/2004	*Rana pipiens*	V	0	1	NE Depression @ RR/S-tone Outcrop			0308875	4651559	23	1 adult R. pipiens found dead, floating in water on SE-end, bitten in 2 halves, not salvageable.
86	7	5/21/2004	*Rana pipiens*	V	0	1	Floodplain depression.						Seen on log on SW-side of core floodplain depression on E-side Daysville Rd.
56	4	3/28/2004	*Rana pipiens*	DR	2	1	Prairie & Watertown Roads						Adult DOR S-side intersection; Poor condition & not salvageable.
66	5	4/3/2004	*Rana pipiens*	DR	2	1	Prairie Rd, ca 0.5 S of Watertown Rd						An adult female with eggs on E-side of Prairie Rd, not salvageable.
78	6	5/14/2004	*Rana pipiens*	DR	2	1	Prairie & Watertown Roads						Pulverized remains W-side Prairie 0.4 S of int. with Watertown Rd.
10	1	6/20/2003	*Storeria dekayi*	V	0	1	Railroad			0308833	4651661	18	Large, gravid female under piece RR tie, ca 75-85 ft W of sandstone outcropping; Anton holds until she gives birth & put in Field Museum coll.
11	1	6/20/2003	*Storeria dekayi*	V	0	1	Railroad	12817		0309321	4651555	17	Large, presumably gravid female under piece RR tie along S-side, well E of sandstone outcropping & only ca 100 ft W bend in River at NE corner of site.
41	3	10/9/2003	*Storeria dekayi*	DR	0	4	Daysville Rd. 0.3 N of Kyte to 0.1 S of BNSF railroad.						1st W-shoulder 0.3 N of Kyte River, 2nd E-shoulder 75 ft N of previous, 3rd E-shoulder 150 ft N of 1st, 4th W-shoulder 0.1 S of BNSF railroad.
42	3	10/9/2003	*Storeria dekayi*	DR	0	1	Daysville Road ca 0.1 S of BNSF railroad.	12838		0308042	4652077	14	Adult DOR on E. shoulder.
43	3	10/9/2003	*Storeria dekayi*	V	0	1	BNSF railroad tracks ca 0.3 E Daysville Rd.						Sub-adult under small piece rr tie along N-side tracks.
48	3	10/9/2003	*Storeria dekayi*	V	0	1	BNSF railroad ca 0.2 W of NE corner.						YOY active at surface along S-side tracks W of NE corner subject parcel.
40	3	10/9/2003	*Storeria dekayi*	DR	2	1	Daysville Rd. 1.0 mi. S of Lowden Rd.	12832		0308309	4648614	21	Adult DOR on E. shoulder.
IN	3	10/9/2003	*Storeria dekayi*	DR	9	1	Flagg Rd. 0.25 W Skare Rd; ca 8.4 mi. SE of KRB site.	FMNH		0321246	4645071	14	Adult DOR N-side Flagg Rd. @ bridge crossing a small stream; Outside general site search area, but nice cond. Ogle County specimen; T. Anton to deposit in Field Museum collection.
49	3	10/9/2003	*Storeria dekayi*	DR	P	2	Honey Creek Rd ca 0.1 N of Prairie Rd.						2 adults DOR E-side road 0.1 E of int. Honey Crk & Prairie Rds, just to N-side bridge crossing Kyte River on Honey Crk. Rd., unsalvageable.
50	3	10/9/2003	*Storeria dekayi*	DR	P	1	Honey Creek Rd ca 0.25 W of Prairie Rd.						Adult live in middle of Honey Creek Rd., released on S-side road.
51	3	10/9/2003	*Storeria dekayi*	DR	P	1	Honey Creek Rd ca 0.35 W of Prairie Rd.	12840		0309356	4650667	25	Adult DOR on N-side Honey Crk. Rd. too nice condition to not salvage.
55	3	10/9/2003	*Storeria dekayi*	DR	P	1	Honey Creek Rd. W of int. Blackhawk Rd.						Adult DOR on N-side Honey Crk. Rd. ca 200 ft W of Blackhawk Rd., not salvageable.
7	1	6/20/2003	*Thamnophis sirtalis*	V	0	1	Railroad	12816		0308135	4652207	15	Captured by Anton under piece of RR tie along S-side of ROW.
8	1	6/20/2003	*Thamnophis sirtalis*	V	0	2	Railroad						Large, gravid female under piece RR tie, then a sub-adult under another piece, along S-side ca 600 ft W of big bend in RR.
9	1	6/20/2003	*Thamnophis sirtalis*	V	0	2	Railroad						2 sub-adults under small piece RR tie along S-side ca 50 ft W of section line.
72	5	4/3/2004	*Thamnophis sirtalis*	V	0	1	E-side Daysville Rd.			0308051	4651915	33	Adult female captured active at surface near base of embankent along E-side of Daysville Rd.
85	7	5/21/2004	*Thamnophis sirtalis*	V	0	1	W-side Daysville Rd.						Found by Anton along embankment on W-side Daysville Rd; Released.

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C = Collected voucher specimen.
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EPE = Horizontal Accuracy in feet.

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