

## A Revised List of Amphibia and Reptiles of Chase and Lyon Counties, Kansas

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Since the publication of the 1936 list<sup>1</sup> of amphibia and reptiles of Chase and Lyon counties, much revision has become necessary, because of taxonomic changes and added collection in the area.

The terrain of these two counties varies considerably, ranging from Flint Hills prairie through flood plains to wooded hills. The Flint Hills occupy most of Chase county and extend into the southwest and northeast part of Lyon and are for the most part in the Osage watershed. In central Lyon county and northern Chase county lie the flood plains of the Neosho and Cottonwood rivers, which join in east central Lyon. A small section to the extreme south of the area belongs to the Verdigris watershed.

The Flint Hills are devoted almost exclusively to grazing. The flood plains are farmed intensively. Northern Lyon county has general farms and many large pastures.

Except in the flood plains there are many springs, from which small streams make their way through rocky gullies. It is among these that some of the most successful collecting has been done.

Fifty-three species of 37 genera have been taken. Unless otherwise specified, each form has been found in both counties.

The technical names of the species are, with one exception, in accord with Smith's 1950 publication on the Amphibia and reptiles of Kansas<sup>2</sup>, in which all are described in detail. This book should be consulted by anyone interested in the identification, life history or distribution of Kansas amphibia and reptiles.

### AMPHIBIA

1. *Ambystoma Texanum* (matthes), Narrow-mouthed, or Texas salamander, Lyon, fairly common.
2. *Ambystoma tigrinum mavortium* Baird, Tiger salamander, common in Lyon, occasional in Chase.
3. *Necturus maculosus maculosus* (Rafinesque), Mudpuppy, fairly common.
4. *Bufo terrestris americanus* Holbrook, American toad, fairly common.
5. *Bufo woodhousii woodhousii* Girard, Garden toad, common.
6. *Acris crepitans blanchardi* Harper, Northern cricket frog, abundant.
7. *Pseudacris clarkii* (Baird), Spotted chorus frog, occasional in Lyon.

8. *Pseudacris nigrita triseriata* (Wied), Striped chorus frog, abundant.
9. *Hyla versicolor versicolor* Le Conte, Common tree frog, fairly common in Lyon, heard in Chase, Diamond creek near Elmdale.
10. *Rana catesbeiana* Shaw, Bullfrog, common.
11. *Rana pipiens brachycephala* Cope, Leopard frog, abundant.
12. *Rana sylvatica cantabrigensis* Baird, Wood frog, one specimen from Lyon, K.U. Mus. Nat. Hist. 23,149; this is the only Kansas record. Its taxonomic and distributional status has been discussed in another paper<sup>3</sup>.
13. *Microhyla olivacea* (Hallowell), Western narrow-mouthed frog, common.

## REPTILIA

### Turtles

1. *Kinosternon flavescens flavescens* (Agassiz), Yellow mud turtle, occasional in Lyon, one specimen from Chase.
2. *Chelydra serpentina serpentina* (Linnaeus), Common snapping turtle, common.
3. *Terrapene ornata* (Agassiz), Ornate box turtle, common.
4. *Chrysemys picta bellii* (Gray), Western painted turtle, common.
5. *Pseudemys scripta elegans* (Wied), Elegant slider, occasional.
6. *Amyda spinifera hartwegi* Conant and Goin, Spiny soft-shelled turtle, occasional.

N. B. After the type for this article had been set, a proposed change in the name of this turtle was noted. Neill (1951)<sup>5</sup> has designated it as *Amyda ferox hartwegi* Conant and Goin.

### Lizards

1. *Holbrookia maculata maculata* Girard, Earless lizard, common in Chase and southwestern Lyon.
2. *Crotaphytus collaris collaris* (Say), Collared lizard, abundant in Chase, common in southwestern Lyon.
3. *Sceloporus undulatus garmani* (Boulenger), Rough-scaled, or Western fence lizard, occasional in western Chase.
4. *Phrynosoma cornutum* (Harlan), Texas horned lizard, common in Chase and southwestern Lyon.
5. *Scincella laterale* (Mittleman), Brown skink, occasional in northeastern Lyon.
6. *Eumeces fasciatus* (Linnaeus), Common five-lined skink, common in Lyon, rare in Chase.
7. *Eumeces obsoletus* (Baird and Girard), Sonoran skink, common in Chase and western Lyon.

8. *Eumeces septentrionalis septentrionalis* (Baird), Northern prairie skink, occasional.
9. *Cnemidophorus sexlineatus* (Linnaeus), Six-lined racerunner, occasional.
10. *Ophisaurus ventralis ventralis* (Linnaeus), Glass snake lizard, rare, six specimens from vicinity of Emporia.

#### Snakes

1. *Carphophis amoena vermis* (Kennicott), Worm snake, common in Lyon, occasional in Chase.
2. *Diodophis punctatus arnyi* (Kennicott), Prairie ring-necked snake, abundant in Lyon, common in Chase.
3. *Heterodon platyrhinos platyrhinos* Latreille, Common hog-nosed snake, one record, 14 miles northeast of Emporia, Lyon.
4. *Heterodon nasicus nasicus* Baird and Girard, Western hog-nosed snake, one record, on K150 five miles west of U. S. 50s Junction, Chase.
5. *Coluber constrictor flaviventris* (Say), Blue racer, abundant.
6. *Masticophis flagellum flagellum* (Shaw), Eastern coachwhip, one record, 1 mile east of Elmdale, Chase.
7. *Elaphe emoryi emoryi* (Baird and Girard), Emory's rat snake, fairly common. This is the form referred to by Smith<sup>2</sup> as *Elaphe laeta laeta* (Baird and Girard). Dowling<sup>4</sup> has recently changed the name of this rat snake to *Elaphe emoryi emoryi* (Baird and Girard).
8. *Elaphe obsoleta obsoleta* (Say), Pilot black snake, fairly common in Lyon, occasional in Chase.
9. *Pituophis catenifer sayi* (Schlegel), Bull snake, common.
10. *Lampropeltis calligaster calligaster* (Harlan), Blotched king snake, fairly common.
11. *Lampropeltis getulus holbrooki* (Stejneger), Speckled king snake, fairly common in Lyon, occasional in Chase.
12. *Lampropeltis doliata gentilis* (Baird and Girard), Red king or Western milk snake, fairly common in Chase, occasional in Lyon. Practically all specimens from this area show intergradation with *L. d. sypila*. Specimens from Osage county are more like *sypila* than like *gentilis*.
13. *Tantilla gracilis ballowelli* Cope, Slender tantilla, or Miter snake, fairly common in Chase.
14. *Natrix erythrogaster transversa* (Hallowell), Yellow-bellied water snake, abundant.
15. *Natrix Grahamii* (Baird and Girard), Graham's water snake, common in Lyon, occasional in Chase.

16. *Natrix rhombifera rhombifera* (Hallowell), Diamond-backed water snake, common in Lyon, occasional in Chase.
17. *Natrix sipedon sipedon* (Linnaeus), Common water snake, abundant.
18. *Storeria dekayi texana* Trapido, DeKay's snake, fairly common in northeastern Lyon.
19. *Thamnophis radix haydenii* (Kennicott), Plains garter snake, fairly common in Lyon, occasional in Chase.
20. *Thamnophis sirtalis proximus* (Say), Western ribbon snake, fairly common.
21. *Thamnophis ordinatus parietalis* (Say), Common, or Red-sided garter snake, abundant.
22. *Tropidoclonion lineatum* (Hallowell), Lined snake, common in Lyon, occasional in Chase.
23. *Agkistrodon contortrix mokeson* (Daudin), Northern copperhead, occasional in Lyon.
24. *Sistrurus catenatus tergeminus* (Say), Western massasauga, common in Chase and southwestern Lyon, occasional in other parts of Lyon.

#### LITERATURE CITED

1. BREUKELMAN, JOHN, and ALLEN DOWNS, A List of Amphibia and Reptiles of Chase and Lyon Counties, Kansas, *Tran. Kan. Acad. Science*, 39:267-8, 1936.
2. SMITH, HOBART M., *Handbook of Amphibians and Reptiles of Kansas*, University of Kansas Museum of Natural History, Lawrence, Kansas, Mis. Pub. No. 2. 336 pp. illus. 1950. 25¢.
3. BREUKELMAN, JOHN, and HOBART M. SMITH, Selected Records of Reptiles and Amphibians from Kansas, *U. of Kan. Pub. Mus. of Nat. His.* 1:101-112, 1946.
4. DOWLING, HERNDON G., A Taxonomic Study of the Rat Snakes, genus *Elaphe* Fitzinger. I. The Status of the Name *Scotophis laetus* Baird and Girard (1853). *Copeia* 1951 (1): 39-44.
5. NEILL, WILFRED T., The Taxonomy of North American Soft-shelled Turtles, Genus *Amyda*, *Pub. Res. Div. Ross Allen's Reptile Institute*, Vol. 1, No. 2, Jan. 1951