

***JOURNAL OF* KANSAS HERPETOLOGY**

NUMBER 34 JUNE 2010



Published by the Kansas Herpetological Society



<http://www.cnah.org/khs>

NOTES

HISTORY AND DISTRIBUTION OF THE WESTERN GREEN LACERTA, *LACERTA BILINEATA*
(REPTILIA: SQUAMATA: LACERTIDAE), IN TOPEKA, KANSAS

JOSEPH T. COLLINS
Kansas Biological Survey
University of Kansas
 2101 Constant Avenue
 Lawrence, Kansas 66047

JAMES E. GUBANYI
 2501 Burnett Road
 Topeka, Kansas 66614

Three non-native species of lizards are known to be established and maintaining breeding populations in Kansas. They are the Italian Wall Lizard, Western Green Lacerta, and Mediterranean Gecko. The Italian Wall Lizard (*Podarcis siculus*) was observed in Topeka, Kansas, as early as 1962 (JEG pers. observ.) and has spread widely throughout the city from its original colonization at 21st Street and Gage Boulevard. The species is now known to have migrated north to the Topeka Zoo and west to Fairlawn Avenue (JEG & JTC pers. observ.). The Mediterranean Gecko (*Hemidactylus turcicus*), discovered in 2005 (Hare, 2006), has a more restricted range in Lenexa (Johnson County), Kansas, where it lives on the walls of a number of warehouses.

The Western Green Lacerta (*Lacerta bilineata*) was first recorded in Kansas from within the city limits of Topeka by Collins (1974), based on a single specimen (KU 153040) obtained on 22 July 1973 by Vincent von Frese, then a keeper at the Topeka Zoological Gardens. Since that initial report, numerous articles have referenced this lizard in Kansas (Smith and Kohler 1977; Behler and King 1979; Collins 1982; Clarke 1986; Conant and Collins, 1991; Collins and Collins 1993; Gubanyi 1996; Miller 1997; Conant and Collins, 1998; Deichsel and Miller 2000; Gubanyi 2000a, 2000b, 2001; Corti and Lo Cascio 2002; Gubanyi 2002, 2003; Bartlett and Bartlett 2006; Taggart 2006; and Burke and Deichsel, 2008), but none has detailed its distribution within the city of Topeka.

Through the efforts of one of us (JEG), a compilation of known Topeka localities for the Western Green Lacerta (based on both preserved specimens and sightings by JEG and colleagues since 1962) was mapped (Figure 1). The distribution of *Lacerta bilineata* appears to be much more restricted than that of the other non-native lizard (*Podarcis siculus*) found in Topeka. The group of seven dots noted on the map by an arrow is the point of origin of the population of Western Green Lacertas in Topeka. The lizards escaped or were released from a biological supply house called Quivira Specialties Company that was founded in 1944 and located at 40101 West 21st Street in Topeka. The director and owner of Quivira Specialties Company was the late Dr. Charles E. Burt, who received his doctoral degree from the University of Michigan.

To date, only nine preserved specimens of *Lacerta bilineata* were located in academic collections, all from

Shawnee County, Kansas. In chronological order by date of capture, they are (MHP = Sternberg Museum of Natural History, Fort Hays State University; KU = Natural History Museum, University of Kansas) as follow:

KU 153040 (39.04833°N, 95.67778°W) South Topeka. 22 June 1973. Collector: Vincent von Frese

MHP 7927 (39.0204°N, 95.7368°W) Topeka, 24th Street & Burnett Road. 2 August 1996. Collector: James E. Gubanyi

KU 224642 (39.0295°N, 95.7367°W) Topeka, at 4709 SW 21st Street. 29 June 1997. Collector: C. Bayless

KU 224643 (39.0262°N, 95.7305°W) Topeka, 2313 SW Moundview. 17 October 1997. Collector: H. Willyard

MHP 7248 (39.0257°N, 95.7361°W) Topeka, 23rd Street and Burnett Road. 4 September 1999. Collector: James E. Gubanyi

MHP 7923 (39.0288°N, 95.7271°W) Topeka, 21st Street & Mission. 22 April 2003. Collectors: James E. Gubanyi & Carl Michaels

MHP 10183 (39.02955°N, 95.724954°W) Topeka, SW of 21st Street & Gage Boulevard. 15 August 2004. Collector: Tyler Lambrecht

MHP 9745 (39.02934°N, 95.73301°W) Topeka, near 4600 block of 21st Street. 15 September 2004. Collector: Tyler Lambrecht

MHP 14719 (39.02955°N, 95.724954°W) Topeka, NW corner of 21st Street and Gage Boulevard. 6 September 2009. Collectors: Joseph T. Collins & Suzanne L. Collins. Juvenile.

Although the Western Green Lacerta has been known from Topeka, Kansas, since at least 1962 (JEG, pers. observ.), it was not verified until 1973, and has not spread much from the origin of its release/escape, although its numbers have apparently remained stable over that time. Its presence in Topeka for nearly half a century confirms that this lizard is breeding and is an established member of the Kansas herpetofauna. Factors limiting its colonization success, when compared to that of *Podarcis siculus*, are unknown.

Acknowledgements: We thank Curtis J. Schmidt, Travis W. Taggart, and Suzanne L. Collins for their helpful suggestions, and the many observers that assisted us in locating and recording lizards for this project. The list of known voucher specimens was obtained (in part) from the *Kansas Herpetofaunal Atlas*.

Literature Cited

- Bartlett, Richard D. and Patricia P. Bartlett. 2006. Guide and Reference to the Crocodylians, Turtles, and Lizards of Eastern and Central North America (North of Mexico). Univ. Press Florida, Gainesville. xviii + 316 pp.
- Behler, John L. and F. Wayne King. 1979. The Audubon Society Field Guide to North American Reptiles and Amphibians. A. A. Knopf, New York. 719 pp.
- Burke, Russell L. and Guntram Deichsel. 2008. Lacertid lizards introduced into North America: History and future. Pp. 347–353. *In: Urban Herpetology* (Mitchell, J. C., R. E. Jung Brown and B. Bartholomew, editors). Herpetol. Conserv. 3: xvii + 586 pp.
- Clarke, Robert F. 1986. The invaders. *Kansas School Naturalist* 33(2): 1–16.
- Collins, Joseph T. 1974. Amphibians and Reptiles in Kansas. *First Edition*. Univ. Kansas Mus. Nat. Hist. Pub. Ed. Ser. 1: 1–283.
- Collins, Joseph T. 1982. Amphibians and Reptiles in Kansas. *Second Edition*. Univ. Kansas Mus. Nat. Hist. Pub. Ed. Ser. 8: 1–356.
- Collins, Joseph T. and Suzanne L. Collins. 1993. Amphibians and Reptiles in Kansas. *Third Edition*. Univ. Press Kansas, Lawrence. xx + 397 pp.
- Conant, Roger and Joseph T. Collins. 1991. Peterson Field Guide to Reptiles and Amphibians of Eastern and Central North America. *Third Edition*. Houghton Mifflin Co., Boston. xviii + 450 pp.
- Conant, Roger and Joseph T. Collins. 1998. Peterson Field Guide to Reptiles and Amphibians of Eastern and Central North America. *Third Edition Expanded*. Houghton Mifflin, Boston. xviii + 616pp.
- Corti, C. and P. Lo Cascio. 2002. The Lizards of Italy and Adjacent Areas. Andreas S. Brahm, Frankfurt am Main, Germany. 165 pp.
- Deichsel, Guntram and Larry L. Miller. 2000. Change of specific status for the Green Lacerta, an alien lizard introduced in Topeka. *Kansas Herpetol. Soc. Newsl.* 119: 10–11.
- Gubanyi, James E. 1996. Green Lacerta rediscovered in Topeka, Kansas. *Kansas Herpetol. Soc. Newsl.* 106: 15.
- Gubanyi, James E. 2000a. A breeding colony of Western Green Lacertas (*Lacerta bilineata*) confirmed in southwestern Topeka (Kansas). *Trans. Kansas Acad. Sci.* 103(3–4): 191–192.
- Gubanyi, James E. 2000b. Update on *Lacerta* in Topeka, Kansas. *Kansas Herpetol. Soc. Newsl.* 118: 13–14.
- Gubanyi, James E. 2001. Notes on reproduction of the Western Green Lacerta (*Lacerta bilineata*) and the Italian Wall Lizard (*Podarcis sicula*) in Kansas. *Kansas Herpetol. Soc. Newsl.* 126: 15.
- Gubanyi, J. E. 2002. Size maxima: *Lacerta bilineata*. *Journ. Kansas Herpetol.* 4: 14.
- Gubanyi, J. E. 2003. *Lacerta bilineata*: New maximum size. *Journ. Kansas Herpetol.* 8: 22.
- Hare, Andrew. 2006. Exotic lizard discovered in Kansas. *Journ. Kansas Herpetol.* 19: 9.
- Miller, Larry L. 1997. Topeka Collegiate School summer research class yields specimen of Green Lacerta. *Kansas Herpetol. Soc. Newsl.* 109: 13.
- Smith, Hobart M. and A. J. Kohler. 1977. A survey of herpetological introductions in the United States and Canada. *Trans. Kansas Acad. Sci.* 80(1–2): 1–24.
- Taggart, Travis W. 2006. Distribution and status of Kansas herpetofauna in need of information. Final Report. Kansas Dept. Wildlife and Parks State Wildlife Grant T-7, Pratt, Kansas. vii + 106 pp.

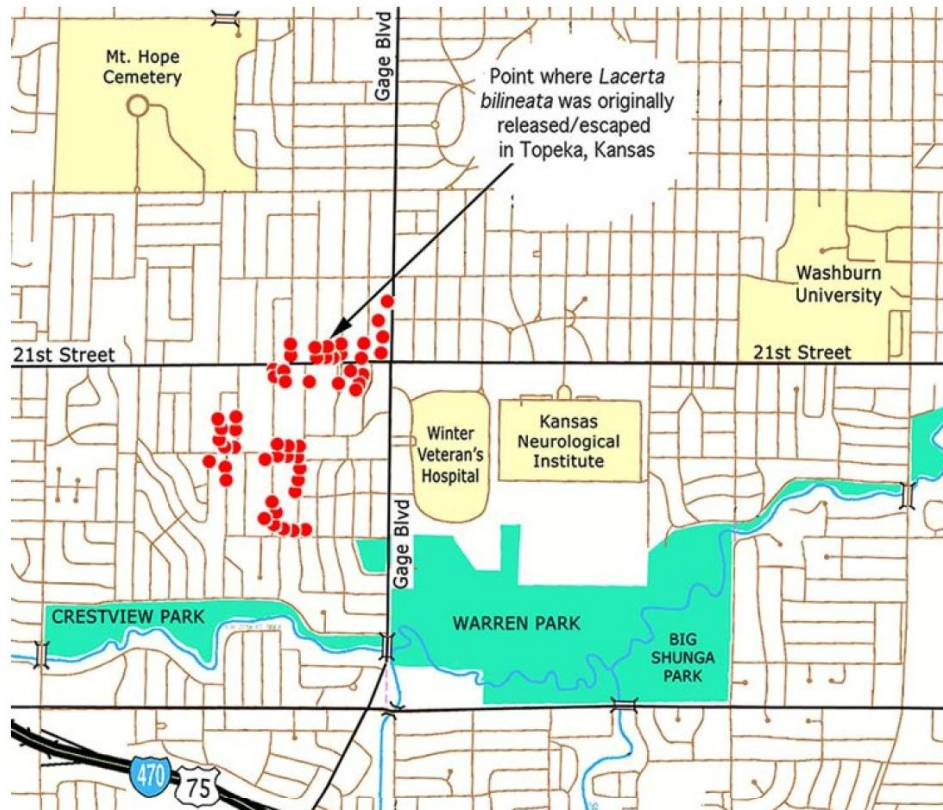


Figure 1. Distribution of the Western Green Lacerta (*Lacerta bilineata*) in urban Topeka, Shawnee County, Kansas. Dots represent localities where this species was observed by one of us (JEG) or for which there is a preserved voucher specimen in an institutional collection.