Ballinger et al. (2010) and Fogell (2010) recently updated distributional accounts of herpetofauna in Nebraska, improving our overall understanding of species’ ranges since the last comprehensive account published by Lynch (1985). One region of the state still lacking many county records of occurrence is south-central Nebraska. Counties such as Furnas, Gosper, Harlan, Kearney, and Phelps have fewer records of species than many others in Nebraska, including the lack of documentation for some of the more common and widespread species in the state.

Herein, I report on 16 county records of herpetofauna collected from April to October 2011 in south-central Nebraska. Most individuals were collected late in the year while driving roads during unseasonably warm days in the afternoon. For example, daytime high temperatures were 26.7°C (6 October), 26.1°C (15 October), and 27.2°C (24 October) on days I searched for herpetofauna, whereas average temperatures for those days were 20°C, 18.3°C, and 16.1°C, respectively, based on averages from the Kearney Airport, Buffalo County (Wunderground.com). Numbers of snakes observed on 6 October also were likely enhanced by morning rains throughout the region. On 6 October, I estimated that I observed at least 40 snakes on 5 km of paved and gravel roads in Hall County along grasslands and woodlands on lands managed by The Crane Trust south of Alxa, Nebraska. On 15 October, I documented 35 snakes representing 5 species and 4 Plains Leopard Frogs (Lithobates blaini) on roads while driving 233 km in Franklin, Harlan, Kearney, and Phelps counties. On 24 October, I documented 19 snakes representing 4 species and 1 Woodhouse’s Toad (Anaxyrus woodhousii) while driving 212 km in Adams, Franklin, Harlan, Kearney, and Phelps counties. An effective strategy to obtain distributional and late-seasonal information on reptiles appears to be to conduct late-seasonal searches on roadways during unseasonably warm days.

For distributional records presented below, voucher specimens were deposited in the herpetology collection at the Sternberg Museum of Natural History (FHSN), Fort Hays State University, Hays, Kansas. Many vouchers also included preserved tissues. All specimens were verified by Curtis J. Schmidt. Coordinates were taken with a handheld GPS unit using map datum NAD83. Voucher specimens were collected under the authorization of the Nebraska Game and Parks Commission (Scientific and Educational Permit No. 1031). Order of accounts and names (scientific and common) follows Fogell (2010).

**Anura-Frogs**

**Pseudacris maculata** (Boreal Chorus Frog). USA: NEBRASKA: BUFFALO CO.: 4.1 km S, 0.5 km E Gibbon, Windmill State Recreation Area (40.70985°N, 98.83717°W). 6 April 2011. FHSN 15724-15727, 15841. First county records. Records fill in distributional gap in south-central Nebraska; prior records are known from all surrounding counties including Custer, Hall, Kearney, Phelps, and Sherman (Ballinger et al. 2010, Fogell 2010). Individuals were captured at night in a grassy flooded area surrounded by scattered deciduous trees.

USA: NEBRASKA: GOSPER CO.: 6.5 km S, 0.9 km W Bertrand (40.4667°N, 99.6441°W). 19 June 2011. FHSN 15846-15849. First county records. Records fill in distributional gap in south-central Nebraska between Dawson, Furnas, and Phelps counties (Ballinger et al. 2010, Fogell 2010). Individuals were captured in flooded roadside along the edge of agricultural field with center-pivot irrigation.

USA: NEBRASKA: HARLAN CO.: 6.7 km S, 2.3 km W Atlanta (40.3070°N, 99.4996°W). 19 June 2011. FHSN 15845. First county record via a voucher specimen. Record fills in distributional gap in south-central Nebraska between Franklin, Furnas, and Phelps counties (Ballinger et al. 2010, Fogell 2010, Geluso 2011). Individual was captured in small pool of water along NE Hwy 4 in corner of agricultural field with center-pivot irrigation. Hubbs (2012) recently reported the spe-
cies from the county via a photographic voucher.


**Squamata-Lizards**

*SCELOPORUS CONSOBRINUS* (Prairie Lizard). USA: NEBRASKA: DAWSON CO.: 7.2 km S, 3.9 km E Lexington (40.70993°N, 99.69467°W). 14 July 2011. FHSM 15850. First county record. Individual represents the farthest east that *S. consobrinus* has been documented along the Platte River in south-central Nebraska (Ballinger et al. 2010), along with a record from Gosper County (this study, see next account); distributional records from Buffalo and Hall counties are from sandy habitats south of the South and Middle Loup rivers (Ballinger et al. 2010). Voucher specimen fills in distributional gap in south-central Nebraska between Gosper (this study), Buffalo, Custer, Frontier, and Lincoln counties (Ballinger et al. 2010, Fogell 2010). I captured the individual under a wooden board in an open woodland in the flood plain of Platte River; the soils were sandy.

USA: NEBRASKA: GOSPER CO.: 13.5 km N, 4.4 km E Smithfield (40.6939°N, 99.6899°W). 21 October 2011. FHSM 16158 and 16159. First county records. Specimens represent the farthest east that *S. consobrinus* has been documented along the Platte River in south-central Nebraska (Ballinger et al. 2010), along with the record from Dawson County (this study, see above account). Voucher specimen fills in distributional gap in south-central Nebraska between Dawson (this study), Frontier, and Furnas counties (Ballinger et al. 2010, Fogell 2010). Lizards were captured along a wooded linear strip consisting mainly of Siberian elms (*Ulmus pumila*) on north side of a large canal in flood plain of Platte River.

**Squamata – Snakes**

*LAMPROPELTIS TRIANGULUM* (Milk Snake). USA: NEBRASKA: HARLAN CO.: 5.0 km S, 1.1 km E Republican City (40.05268°N, 99.2079°W; NAD1983), 29 April 2011. FHSM 15844. First county record. Record adds to counties in south-central Nebraska with prior records of occurrence for the species (Ballinger et al. 2010, Fogell 2010). Franklin County is the only adjacent county in Nebraska with a previous record (Ballinger et al. 2010, Fogell 2010), but *L. triangulum* also is known to the south from adjacent Phillips County, Kansas (Collins et al. 2010). Based on location of capture and coloration (Figure 1), the individual is best referred to as *L. t. gentilis* of the three subspecies in the state (Ballinger et al. 2010). The individual was captured under discarded concrete block on small hill surrounded by grasses and scattered trees.

**LIOCHLOROPHIS VERNALIS** (Smooth Green Snake). USA: NEBRASKA: PHELPS CO.: 17.6 km N, 0.4 km W Funk P.O., Funk-Odessa Road (40.6215°N, 99.2560°W). 15 October 2011. FHSM 16152. First county record. Most counties with records of occurrence for *L. vernalis* are from central and south-central Nebraska (Geluso and Wright 2009, Fogell 2010, Ballinger et al. 2010). Adjacent counties with records of occurrence include Franklin and Kearney counties (Ballinger et al. 2010, Fogell 2010). The individual was found dead on a road adjacent to rolling hills with sandy soils that have been mostly converted to agricultural fields with cen-
ter-pivot irrigation. This site is best described as an upland grassland; however, Ballinger et al. (2010) and Fogell (2010) state that this species inhabits mesic and wet prairies, meadows, and wet grasslands. This individual might have been moving to a hibernaculum. Triangular-shaped corners of fields with pivots might represent refugia for this species and sand-loving species in the area. Fogell (2010) reports that Smooth Green Snakes are active from mid-April to September. This specimen represents the latest seasonal date of aboveground activity for *L. vernalis* in Nebraska.

**DIADOPHIS PUNCTATUS** (Ringneck Snake). USA: NEBRASKA: ADAMS CO.: 0.1 km N, 3.1 km W Holstein (40.4663°N, 98.6890°W). 4 October 2011. FHSM 16148. First county record. This record fills in a distributional gap in south-central Nebraska between Buffalo, Hamilton, and Webster counties (Ballinger et al. 2010, Fogell 2010, Bridger and Geluso In review). The individual was captured along a dirt road in an upland grassland with sandy soils.

USA: NEBRASKA: PHELPS CO.: 13.4 km N, 0.4 km W Funk P.O., Funk-Odessa Road (40.5835°N, 99.2555°W). 15 October 2011. FHSM 16152. First county record. This record fills in distributional gap in south-central Nebraska between Harlan (Fogell and Taggart 2010), Dawson, and Buffalo counties (Ballinger et al. 2010, Fogell 2010). The individual was found dead on a road in area mostly converted to agricultural fields with center-pivot irrigation.

**STORERIA DEKAYI** (Brown Snake). USA: NEBRASKA: ADAMS CO.: 6.3 km S, 2.0 km W Holstein (40.4082°N, 98.6747°W). 24 October 2011. FHSM 16162. First county record. This individual represents the most westward record of *S. dekayi* in Nebraska, extending its distribution 50 km northwest of a record from southeastern Webster County (5.5 mi S, 6 mi E Red Cloud; University of Nebraska State Museum #15014; Ballinger et al. 2010); Ballinger et al. (2010) reported that a locality record from Lincoln County potentially is in error. Individual was found dead on a road in area with a patchwork of upland grasslands and agricultural fields with center-pivot irrigation.

**STORERIA OCCIPITOMACULATA** (Redbelly Snake). USA: NEBRASKA: KEARNEY CO.: 19.4 km N, 0.2 km E Axtell (40.6549°N, 99.1245°W). 24 October 2011. FHSM 16161. First county record. This specimen adds to those counties with known occurrences in the Big Bend Reach of the central Platte River for this disjunct population of *S. occipitomaculata* in Nebraska (Ballinger et al. 2010, Fogell 2010). Individual was found dead on a road that bordered a wooded area along the Platte River on one side and an agricultural field on the other side. This appears the latest seasonal observation for this species in Nebraska based on specimens housed at the University of Nebraska State Museum.

**THAMNOPSIS RADIX** (Plains Garter Snake). USA: NEBRASKA: HARLAN CO.: 2.9 km N, 7.6 km E Ragan (40.3364°N, 99.2015°W). 24 October 2011. FHSM 16164 and 16165. First county records. These specimens represent documentation from one of the last counties without records for *T. radix* in south-central Nebraska (Ballinger et al. 2010, Fogell 2010, Lingenfelter et al. in review). This species is known from all surrounding counties except for Furnas County (Ballinger et al. 2010, Fogell 2010, Lingenfelter et al. in review). Individuals were found dead on a road in an area with many agricultural fields.

**THAMNOPSIS SIRTALIS** (Common Garter Snake). USA: NEBRASKA: PHELPS CO.: 5.0 km S, 4.5 km E Odessa (40.6565°N, 99.2037°W) and 5.0 km S, 3.7 km E Odessa (40.6568°N, 99.2129°W). 6 October 2011. FHSM 16149 and 16150. First county records. These specimens fill in a distributional gap in south-central Nebraska between Buffalo, Dawson, Gosper, Harlan, and Kearney counties (Ballinger et al. 2010, Fogell 2010, this study). Individuals were found dead on road in agricultural area near woodlands in flood plain of Platte River.

USA: NEBRASKA: FURNAS CO.: 0.8 km S, 3.7 km E Edison P.O., Hwy 136 (40.2708°N, 99.7328°W). 15 October 2011. FHSM 16154. First county record. Record fills in distributional gap in south-central Nebraska between Frontier, Gosper, Harlan, and Red Willow counties (Ballinger et al. 2010, Fogell 2010, this study). Snake was found dead on roadway in agricultural area.
near a farmstead in the flood plain of Republican River.

USA: NEBRASKA: GOSPER CO.: 13.5 km N, 4.4 km E Smithfield (40.6940°N, 99.6898°W). 21 October 2011. FHSM 16160. First county record. Record fills in distributional gap in south-central Nebraska between Dawson, Frontier, Furnas, and Phelps counties (Ballinger et al. 2010, Fogell 2010, this study). Snake was captured under log along wooded linear strip consisting mainly of Siberian elms (Ulmus pumila) on north side of a large canal in the flood plain of Platte River.

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LITERATURE CITED


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STORERIA OCCIPITOMACULATA (RED-BELLY SNAKE). BEHAVIOR: LIP-CURLING.


In the course of our field study of this species in Kansas we have observed the behavior several times, performed by different animals—all of them female. On 17 May 2012 we captured and examined a gravid female, in Franklin Co., KS, and photographically documented the behavior (Figs. 1, 2). In all respects the display corresponds to doAmaral’s illustrations.

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