

## Short Notes

### A Range Extension and Addition to the Herpetofauna of Kansas

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The lined snake (*Tropidoclonion lineatum*) is represented in Kansas by two subspecies, *T. l. lineatum* from extreme northeast Kansas and *T. l. annectans* to the south and west (Smith, 1956). The most western records for this species in Kansas are for two specimens recorded by Legler (1960) from Barber County in south-central Kansas, and for one from Rooks County in the north-central part of the state (Smith, 1956).

On the weekend of 2-3 September 1972, Richard Plumlee and Ronald Clendenin (both students at the University of Kansas) collected an adult male *Tropidoclonion lineatum* ca. 7 mi N Ashland on Kansas Rt. 94 in Clark County, southwestern Kansas. Other reptiles found in association with this specimen at the Clark County locale were *Diadophis punctatus arnyi*, *Sonora e. episcopa*, and *Sceloporus undulatus garmani*. The specimen of *T. lineatum* (Museum of Natural History at the University of Kansas—KU 148462) represents a range extension for the species of ca. 150 mi (airline) SSE of the Rooks County record, over 75 mi (airline) W of the Barber County locality, and ca. 125 mi (airline) NW of the nearest known record in Oklahoma (Webb, 1970). In addition, the Clark County locality is ca. 175 mi (airline) E of the nearest record for the disjunct populations of this species found in New Mexico, Colorado, and the extreme western Oklahoma panhandle.

Thus, the Clark County specimen establishes the presence of *Tropidoclonion lineatum* in southwestern Kansas and helps fill the hiatus of of 200-250 miles which has separated the disjunct western population of this species from the main body of its range in Kansas, Oklahoma, and Texas.

Pertinent data for KU 148462 are: ventrals 142, caudals 39, ventrals + caudals 181, ventrals — caudals 103, snout-vent length 195 mm, and tail length 37 mm. In addition, I examined the two juvenile female specimens (KU 43607-8) recorded by Legler (1960) from Barber

County and obtained the following respective pertinent scutellation data: ventrals 147 and 145, caudals 33 and 32, ventrals + caudals 180 and 177, and ventrals — caudals 114 and 113.

Ramsey (1953) divided *Tropidoclonion lineatum* into three subspecies in his key (p. 22) on the basis of number of ventrals and caudals, and their combined total. His ventral counts were made according to the method used by Schmidt and Davis (1941). In addition, his caudal counts included the terminal spine. I have followed this counting technique to compare my data with his. He diagnosed the subspecies *lineatum* as having less than 143 (144 in females) ventrals and more than 41 (34 in females) caudals (ventrals + caudals not given), the subspecies *annectans* as having more than 143 (144 in females) ventrals and more than 41 (34 in females) caudals (ventrals + caudals more than 185 in males and 178 in females), and the subspecies *texanum* as having less than 144 (145 in females) ventrals and less than 41 (34 in females) caudals (ventrals + caudals fewer than 185 in males and 178 in females). Smith (1965) described an additional subspecies (*T. l. mertensi*) from central northeastern New Mexico characterized by more than 40 caudals in males and less than 34 in females, and ventrals — caudals less than 98 in males and less than 106 in females.

Comparison of the specimen of *Tropidoclonion lineatum* (KU 148462) from Clark County with Ramsey's (1953) key and Smith's (1965) description assigns it to the subspecies *texanum* and represents an addition to the herpetofauna of Kansas. This extends the known range of *T. l. texanum* ca. 200–250 mi (airline) N from its previously defined range in central Texas. The two specimens from Barber County (KU 43607–8) have characteristics shared by three subspecies—*texanum*, *mertensi*, and *annectans*. Both specimens exhibit the low caudal counts for females of *texanum* and *mertensi*, and one (KU 43608) has a combined ventral + caudal count typical of *texanum*. The other specimen (KU 43607) has a ventral + caudal count of *annectans*, and both have ventral counts typical of *annectans*.

Collection of additional specimens throughout southwestern Kansas is needed to determine whether the subspecies *annectans*, *texanum*, and *mertensi* range into this area and intergrade with each other.

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