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**AN ANNOTATED CHECK LIST OF THE
AMPHIBIANS AND REPTILES OF COLORADO**

BY
T. PAUL MASLIN

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AN ANNOTATED CHECK LIST OF
THE AMPHIBIANS AND REPTILES
OF COLORADO

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AN ANNOTATED CHECK LIST OF THE AMPHIBIANS AND REPTILES OF COLORADO

INTRODUCTION

The last check list and herpetological, faunal study of Colorado was published in two parts by Max M. Ellis and Junius Henderson in 1913 and 1915. Since then, numerous changes in nomenclature have occurred, and a number of species not then known from Colorado have been discovered. Ellis and Henderson (1913, 1915) recognized 61 species and subspecies. Six of these, *Dipsosaurus d. dorsalis*, *Phrynosoma modestum*, *Storeria dekayi texana*, *Thamnophis marcianus nigrolateris*, *Crotalus cerastes*, *Crotalus atrox*, and *Terrapene carolina triunguis*, are herein tentatively or definitely removed from the faunal list of the state. Four additional forms have proved to be conspecific with other species in the state. These are *Bufo americanus* = *Bufo woodhousei*, *Eumeces guttulatus* = *Eumeces obsoletus*, *Eumeces leptogrammus* = *Eumeces multivirgatus*, and *Natrix sipedon fasciatus* = *Natrix sipedon sipedon*. In this present check list 77 species and subspecies are recognized.

Schmidt's (1953) check list of North American amphibians and reptiles has been followed in the phylogenetic arrangement of classes down through genera. Species and subspecies within genera, however, have been arranged alphabetically. For each such taxon the following format has been followed: 1. Scientific name and author; 2. Common name; 3. Location and number of the type specimen; 4. Type locality; 5. Range in Colorado; 6. Reference to original description; 7. Citation of papers which mention or discuss the taxon in Colorado; 8. The localities from which specimens now located in the University of Colorado Museum have been collected, the number of individuals, in parentheses, from these localities, and the University of Colorado Museum registry numbers which these specimens bear.

The scientific name and author are in general the same as those listed in Schmidt's (1953) check list, but the practice of including the author's name in parentheses has been reverted to if the generic name has changed subsequent to the original description. New name combinations resulting from revisions subsequent to 1953 and new names are, of course, included. The common names are adopted without change from the list of common names published in Copeia, 1956(3): 172-185, with the exception of *Phrynosoma douglassi ornatissimum* and *P. d. hernandesi*, whose common names have been interchanged to Mountain and

Desert Short-horned Lizard, respectively. In those forms named subsequent to 1956, the author's choice has been followed.

Several interesting problems have arisen in connection with determining the type specimens. Some of the problems have, as far as I am aware, no precedents and are not adequately covered by the current rules, published decisions, and proceedings of the International Congresses of Zoology. Most early workers in zoology were not concerned with types *per se* and based their descriptions on series or frequently on a single specimen. If the word "typical" appears at all it is used in the etymological sense; or later, when several subspecies are recognized, it refers to the first described race of the species. As the type concept slowly developed many workers selected a type, which frequently was registered as such in the home registers but which frequently was not indicated in the original description. During the past 75 years it has become increasingly more common to find workers designating types subsequent to the original description of the species. While such action has often proved invaluable in taxonomic work, there were no official rules covering the procedure. It was not until the publication of the decisions and proceedings of the XIII and XIV International Congresses of Zoology of 1948 and 1953 that such actions were recognized. The current procedures (see Hemming, ed., *Copenhagen Decisions*, 1957: 73-74) may be interpreted and paraphrased as follows. If, prior to 1931, an author of a new species name which was based on more than one specimen failed to designate an individual specimen as a holotype of the species recognized, any subsequent worker may select one of the syntypes and designate it as the lectotype of that species. Furthermore such action is final, and no worker at a still later time may alter this designation. But if it is clearly implied or indicated that the original description was based on a single specimen, this specimen is the holotype of the species.

With this procedure in mind, there is no difficulty in determining the type of a species when a later author formally states "I hereby designate" such a specimen as the lectotype. Problems arise, however, in interpreting what constitutes a designation when such a statement is not made. Frequently a revisor of a species, with the full knowledge that a type exists and is duly registered as such in some repository, will state that "the type of this species is . . ." or words to such effect. He may not be aware of the fact that his is the first published indication that a type exists and bears an identifiable label or number. I deem that this constitutes a designation even though such a designation is made inadvertently. It is possible that the original author himself or someone intimately associated with him at the time he named the species may have indicated in the register of the repository or on a specimen that this specimen was the type. If this information is not published, it has no legal standing, and a subsequent worker could, though it would in my opinion be unethical if it were deliberate, select a different syntype as the lecto-

type. In this check list the mere publication of a type number is considered a designation if the word "type" appears associated with this number and if the original description is based on more than one specimen. When such has occurred, the notation "Designated through publication by . . ." is inserted after the lectotype number.

If it is evident in the original description or from some other source that the author of a new name based his description on a single specimen, this specimen is the holotype. The provision of a number by some later worker or the statement that this specimen is the type does not constitute a designation. When this has occurred, the notation "Type number provided by . . ." follows the holotype number. An example of this sort is seen in connection with the type of *Crotalus viridis concolor* Woodbury. The original description (1929) by implication was based on a single specimen, and this specimen is referred to several times as the holotype. Furthermore, photographs of the holotype are included and the museum in which it is located is named, but the number of the specimen is nowhere given. As far as I am aware this number was never published until Gloyd (1940:216) included it in the synonymy of *Crotalus viridis decolor* Klauber. Previously this might have been considered as a designation of a lectotype if a designation were interpreted as the actual publication of a number and not the designation of a specimen the identity of which could at any time be corroborated by locality and photographs. One might ask: What is more important from a taxonomic point of view, a bookkeeping number or the specimen itself? Obviously the specimen is more important, and in this case it is the holotype, the number of which was merely provided by Gloyd.

An example of designation through publication is seen in the determination of the type of *Cnemidophorus velox* Springer. In the original description no holotype was indicated. Burt (1931) discovered that one of the four syntypes was in Butler University and bore the number 848, which fact he published, stating that it was the type. Then Barbour and Loveridge (1946:92), in their list of typical amphibians and reptiles, listed as the "holotype" of this species M. C. Z. 37208. Extensive correspondence finally revealed the fact that B. U. 848 and M. C. Z. 37208 were one and the same specimen and not two different syntypes, as one might have assumed. Here the number of the institution now holding the type should be cited and the original number suppressed. Furthermore this specimen should be considered a lectotype designated inadvertently by Burt through publication, because Springer (1928) clearly stated in his original description that the description was based on four specimens.

Another process whereby a specimen may be indirectly designated as a lectotype involves the restriction of the type locality. As an example, Kennicott (1859b:22) recognized *Sonora episcopa*, basing his description on two specimens without desig-

nating a type. One of the specimens came from Eagle Pass and the other from between San Antonio and the Rio Grande. Stickle (1938), in reviewing the genus, gave the type locality of *Sonora episcopa* as "Eagle Pass, Maverick Co., Texas", but without citing the type. Later Smith and Taylor (1950a:362) formally reiterated this restriction. Inasmuch as there is only one syntype from that locality, this specimen indirectly becomes the lectotype of the species. The restriction of the type locality in itself under the old rules of nomenclature had no legal standing, but the Copenhagen decisions (Hemming, ed., 1957:26-27) now provide rules for the restriction and designation of type localities. It seems to me that when a restriction indicates a lectotype this action is final and hence the restriction itself becomes irreversible. This has occurred in several species in this check list, and when a type is so designated the annotation "Designated through restriction (or designation) of the type locality by . . ." follows the number of the lectotype.

The type localities of species are usually those indicated in the original description. Frequently, however, place names alone are cited by the original authors. When there seems to be no question of doubt as to the present political boundary of state and county within which the locality lies, these have been added without comment and are not considered to be restrictions. But certain place names of type localities have changed over the years. When these have been corrected by later workers a citation to the worker concerned is included, preceded by the notation "Corrected by . . ." A correction of this sort does not constitute a restriction in that the geographic position of the locality remains unchanged in any way, nor, by the same reasoning, is it a designation. In those instances where the type locality is confined to one of several mentioned in the original description, or when it is located with greater precision, the notation "Restricted by . . ." follows the restricted locality. If it is still further restricted by a subsequent worker, a citation to this work is also given. Then finally, if no specific locality is mentioned in the original paper or if the locality mentioned is patently wrong and a subsequent worker provides a correct or precise locality, then the notation "Designated by . . ." follows the designated locality.

Minor emendations of names have been ignored in the synonymy. It seems of little significance to list separately *Scaphiopus hammondi* and *Scaphiopus hammondii*, but major emendations and errors, even if obviously typographical, have been listed separately. Only works specifically mentioning localities or species in Colorado have been included in the lists of published accounts and records. General works which incidentally mention Colorado, as say in the delineation of ranges, are not usually included, but important monographs and check lists are. Furthermore, papers which are not primarily taxonomic are excluded such as those in the field of experimental embryology.

At the close of the check list proper a complete bibliography of all papers cited

has been included. This bibliography includes the citations to original descriptions and those papers concerned with the designation of types and the restriction of type localities, even though these may not be directly concerned with Colorado.

I wish to take this opportunity to express my appreciation of the generous aid provided me by the Council on Research and Creative Work of the University of Colorado, and for the grant of a Faculty Fellowship permitting me to devote all my time to this check list and to research concerned with the monograph to follow. I also wish to thank the many people with whom I have corresponded who have provided me with much factual material, and I especially wish to acknowledge the assistance rendered me by Messrs. William L. Witt and Alvin M. Earle, and finally for the continuous interest and innumerable acts of courtesy and aid rendered me by the Director of the University of Colorado Museum, Dr. Hugo G. Rodeck.

Class AMPHIBIA Linnaeus

Order CAUDATA Oppel

Suborder AMBYSTOMATOIDEA Noble

Family AMBYSTOMATIDAE Hallowell

Genus AMBYSTOMA Tschudi

Ambystoma tigrinum mavortium Baird

Common name: Barred Tiger Salamander.

Type: Unknown; Dr. Wislizenus, collector, while attached to Col. Doniphan's expedition. See Dunn, 1940: 158.

Type locality: New Mexico.

Range: The plains of eastern Colorado west to the Rocky Mountains where intergradation with *A. t. utahense* Lowe occurs between 6,000' and 8,000'.

Published accounts and records:

Ambystoma mavortia BAIRD, 1850: 292-293, (original description).

Amblystoma mavortium, YARROW, 1875: 519, part, (**Denver Co.** — Denver).

Amblystoma tigrinum, CARY, 1911: 22, (**Larimer Co.** — Loveland). STEJNEGER and BARBOUR, 1917: 12, part, (range). 1927: 7, part, (range). 1933: 7, part, (range). 1939: 10, part, (range). ELLIS and HENDERSON, 1913: 49, part, (general account; description. **Boulder Co.** — Boulder; Broomfield. **Denver Co.** — Denver. **Larimer Co.** — Cache la Poudre River. **Las Animas Co.** — Trinidad). 1915: 253-254, part, (**El Paso Co.** — Colorado Springs. **Fremont Co.** — Canyon City). COCKERELL, 1927: 112, part, (list; derivation of name "axolotl"). BURT, 1933b: 350, (**Denver Co.** — Denver).

Ambystoma tigrinum mavortium, DUNN, 1940: 158, (range; rediagnosis). BISHOP, 1943: 113, 165-168, fig. 44, map 20, (key; general account; range). RODECK, 1943: 2, (range). STEJNEGER and BARBOUR, 1943: 12-13, (range). STEBBINS, 1951: 40-49, pl. 5, color pl. 6, fig. 8, (general account including all western subspecies). 1954: 37-38, 79, pl. 7 map, (general account and description). SCHMIDT, 1953: 22-23, (range). BEIDLEMAN, 1954: 60-61, (peculiar habitat. **Larimer Co.** — Pinyon grove 14 mi. NW Fort Collins).

University of Colorado Museum Specimens

Adams Co. — 7 mi. NE Byers (10), 71801-71808. **Boulder Co.** — Boulder (16), 177, 524, 529, 5826, 5856, 5858-9, 6984-6, 7406, 7408, 9639, 10203-4, 10222; E side Sugarloaf Mt. (1), 1035; nr. Marshall (2), 10858-9; E Lyons, St. Vrain Canyon (1), 10860. **Denver Co.** — Denver (2), 9540, 10779. **Douglas Co.** — 4 mi. NE Parker (49), 5877-927; Cherry Creek, Franktown (1), 9541. **Elbert Co.** — 5 mi. N Elbert (1), 9542. **El Paso Co.** — 5 mi. SSE Colorado Springs (3), 2582-4. **Huerfano Co.** — 9 mi. N Walsenburg (2), 6785-6. **Jefferson Co.** — E Denver (17), 5860-76; 3 mi. SE Broomfield (1), 10857. **Kiowa Co.** — nr. Arlington (1), 2585. **Larimer Co.** — ¼ mi.

W Ted's Place, nr. Fort Collins (1), 1464. **Las Animas Co.** — 28 mi. NE Trinidad, Trinchera Creek (1), 9862. **Phillips Co.** — 7 mi. S Holyoke (1), 4016. **Pueblo Co.** — nr. Pueblo (1), 2584. **Weld Co.** — Battle Canyon, 24 mi. N Stoneham (2), 1465-6; 1 mi. N Roggen (1), 1467; 7 mi. S Kersey, 4,800' (1), 1468; 5 mi. E and 2 mi. N Platteville (2), 4009, 5857.

Ambystoma tigrinum utahense Lowe

Common name: Utah Tiger Salamander.

Type: Holotype, Univ. California Mus. Vert. Zool. 29481; D. Lewis Bells, collector, May, 1935.

Type locality: Lapoint, Uintah Co., Utah.

Range: Western Colorado east through the Rocky Mountains to the eastern foothills at elevations of 8,000' where intergradation occurs with *A. t. mavortium* Baird.

Published accounts and records:

Ambystoma tigrinum utahense LOWE, 1955b: 246-248, figs. 3, 4, (original description).

Amblystoma mavortium, YARROW, 1875: 150, (South Park. San Luis Valley).

Amblystoma trisruptum, YARROW, 1882: 150, (South Park).

Ambystoma tigrinum, COPE, 1889: 85, (list). ELROD, 1895: 263, (**El Paso Co.** — Pike's Peak; Lake at base of Old Baldy nr. Colorado Springs). OSBORN, 1901: 887, 888, etc., figs. 1-5 (habitat; metamorphosis. **Mineral Co.** — Creede. Nr. Garrison [?]. San Luis Valley). GADOW, 1908: 14, (neoteny). COCKERELL, 1910: 130, (**Rio Blanco Co.** — Meeker). PROSSER, 1911: 257-263, 1 pl., 2 maps (metamorphosis; habitat of larvae. **Gilpin Co.** — Tolland, 18 mi. SW Boulder; Park Lake, 8,889').

Ambystoma tigrinum, CARY, 1911: 40, (**Larimer Co.** — Estes Park). ELLIS and HENDERSON, 1913: 49, part, (general account. **Boulder Co.** — Red Rock Lake nr. Ward; Beaver Reservoir. **Delta Co.** — Alexander Lake above Delta. **Gilpin Co.** — Tolland. **Gunnison Co.** — Ohio City. **La Plata Co.** — Durango. **Rio Blanco Co.** — Meeker). 1915: 253-254, part, (**Boulder Co.** — Nederland, 9,000'. **El Paso Co.** — Lake Moraine. **Gunnison Co.** — Crested Butte, 7,000'. **Park Co.** — Alma, 10,000'). STEJNEGER and BARBOUR, 1917: 12, part, (range). 1923: 7, part, (range). 1933: 7, part, (range). 1939: 10, part, (range). DUNN, 1918: 458, (**Boulder Co.** **El Paso Co.** — Pike's Peak. Heart Lake, 11,000'. South Park). COCKERELL, 1927: 112, part, (list). MYERS and ALEXANDER, 1945: 46, (erythrocyte count. **Boulder Co.** — 6,000'-10,000'). BISHOP and HAMILTON, 1948-69, abstract, (polydactylism and limb duplication. **Boulder Co.** — Muskee Lake, 8,350'). ROSINE, 1952: 100, abstract, (polydactylism. **Boulder Co.** — Muskee Lake, 8,350').

Ambystoma tigrinum mavortium, DUNN, 1940: 155, (neoteny. **Larimer Co.** — Estes Park). DUNDEE, 1947: 117, (breeding. **Larimer Co.** — Estes Park).

Ambystoma tigrinum nebulosum, DUNN, 1940: 158-159, (redagnosis; range. **Archuleta, Lake, Routt Cos.** and San Luis Valley). BISHOP, 1943: 115, 168-171, fig. 45, map 20, (general account. Western Colorado. **Boulder Co.**). RODECK, 1943: 2, (general account and range). STEJNEGER and BARBOUR, 1943: 13, part, (range). HAMILTON, 1948: 212-213, (egg-laying. **Boulder Co.** — Muskee Lake, 8,350', 15 mi. W Boulder). BURGER, 1950a: 252-257, (two-year breeding cycle; cannibalism; food. **Gunnison Co.** — Crested Butte; Emerald Lake, 11,500', head of East River Valley). BLAIR, 1951: 240, (ecology. **Gunnison Co.** — Axolotl Lake nr. Gothic). STEBBINS, 1951: 40-49, pls. 5, 52 map, fig. 8, (general account including all

western subspecies). 1954: 37-38, 79, pl. 7 map, (general account and description). SCHMIDT, 1953: 23, (range). LEVI and LEVI, 1955: 309, (neoteny. Lakes in Mexican Cut mining area, 11,000', Galena Mountains, White River Nat'l. Forest).

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Boulder Co. — Eldora Road, 9,000' (2), 3049-50; Muskee Lake, 8,350' (63), 5808-55, 9863-7, 9544, 1061-2, 1097-1105; Minnie Lake, 9 mi. NE Ward, 10209-10, 10212, 10215-21, 10231; Four Lakes, 10 mi. NE Ward (9), 10213-4, 10223-9; Foothills Highway, 1 mi. N Lefthand Canyon cutoff (1), 10230. **Conejos Co.** — Spectacles Lake Campground (1), 5955. **Garfield Co.** — Coffin Lake, 31 mi. NE Buford, White River Nat'l. For. (4), 10205-8. **Gilpin Co.** — 5 mi. N Rollinsville, Las Lagas Lakes 8,600' (1), 3068. **Gunnison Co.** — 1 mi. E Ohio City (1), 133. **Larimer Co.** — Red Feather Lakes, West Lake (1), 9543. **Montezuma Co.** — 5 mi. S Towaoc (1), 4258. **Ouray Co.** — 6 mi. S Telluride, Columbine Campground (1), 7407. **Park Co.** — Hartsel (1), 7521. **Pitkin Co.** — Hallow Pond, Aspen (2), 9224-5. **Rio Blanco Co.** — Meeker (1), 64; 20 mi. S Meeker (1 lot larvae), 4066. **San Miguel Co.** — 1.5 mi. N Gypsum Gap (eggs), 4257.

Order SALIENTIA Laurenti

Suborder ANOMOCOELA Nicholls

Family PELOBATIDAE Lataste

Genus SCAPHIOPUS Holbrook

Scaphiopus bombifrons Cope

Common name: Plains Spadefoot Toad.

Type: Holotype, U. S. Nat'l. Mus. 3704; E. J. Denis, collector.

Type locality: Fort Union, Roosevelt Co., Montana.

Range: Eastern plains of Colorado and the San Luis Valley.

Published accounts and records:

Scaphiopus bombifrons COPE, 1863: 53, (original description). BRAGG, 1941: 93, (mentioned from Colorado). RODECK, 1943: 4, fig. 2, (brief description and range. **Denver Co.** — Denver. **El Paso Co.** — E Colorado Springs. **Weld Co.** — Greeley). LIVEZEY and WRIGHT, 1947: 199, (eggs; range). STEBBINS, 1951: 202-207, pls. 14, 27, 28, 55, (general account and description). 1954: 93, 141, pls. 11, 17, fig. 13, (general account and description). SCHMIDT, 1953: 59, (range).

Scaphiopus hammondi bombifrons, DICKERSON, 1906: pl. 9, (figure of specimen from Denver, **Denver Co.**). ELLIS and HENDERSON, 1913: 51, (general account and description. **Weld Co.** — Greeley and nr. Greeley). GILMORE, 1924: 1-12, (ecology; breeding. **El Paso Co.** — rolling hills E Colorado Springs). WRIGHT and WRIGHT, 1949: 116-120, pl. 19, map 6, (description).

Scaphiopus hammondi, STEJNEGER and BARBOUR, 1923: 23, part, (range). 1933: 27, part, (range). GOLDSMITH, 1926: 369-370, (ecology: reaction to moisture). COCKERELL, 1927: 112, (list: **Weld Co.** — Greeley). BURT, 1933b: 351, (**Denver Co.** — University Park, Denver. **Arapahoe Co.** — 2 mi. E Strasburg). 1935: 313, (**Denver Co.**, Denver).

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Adams Co. — Brighton (3), 11247-9. **Alamosa Co.** — Great Sand Dunes Nat'l. Monument, HQ (11), 3777-87. **Baca Co.** — Confluence of Sand and Gallinas canyon, 27 mi. S Pritchett (1), 3127. **Elbert Co.** — 6 mi. N Riverhead (2), 5947-8. **Huerfano Co.** — 9 mi. N Walsenburg (4), 6767-70. **Logan Co.** — 5 mi. S Sterling (1), 4032. **Morgan Co.** — 1 mi. S and 4 mi. W Fort Morgan, 4350' (1), 11779. **Weld Co.** — 2 mi. E Platteville (5), 9649-53; Fort Lupton (7), 9996-10002. **Yuma Co.** — 5 mi. N Wray (4), 3219-3222; Bonny Reservoir (1), 11246.

Scaphiopus hammondi Baird

Common name: Hammond's Spadefoot Toad.

Type: Holotype, U. S. Nat'l. Mus. 3695. Holotype by monotypy, type number provided by Cope, 1889: 306.

Type locality: Fort Reading, near Redding, Shasta Co., California.

Range: Western Colorado at low elevations.

Published accounts and records:

Scaphiopus hammondii BAIRD, 1857 (1859): 12, pl. 28, fig. 2, (original description). CARY, 1911: 27, (list. **Garfield Co.** — Morris, W Rifle). *Stejneger* and *Barbour*, 1923: 23, part, (range). 1933: 27 part, (range). TANNER, 1939: 17, pl. 3, map, (review. **La Plata Co.** — Oxford). BRAGG, 1941: 93, (mentioned from Colorado). RODECK, 1943: 4, (brief description and range).

Scaphiopus hammondi hammondi, ELLIS and HENDERSON, 1913: 51, (description) LIVEZEY and WRIGHT, 1947: 192, (eggs; range). WRIGHT and WRIGHT, 1949: 113-116, pl. 18, map 6, (general discussion and description). STEBBINS, 1951: 207-218, pls. 14, 15, 27, 28, 40, 55, fig. 25, (general account of species including subspecies; description; ecology). 1954: 93-94, 141, 143, pls. 11, 17, fig. 13, (general account and description). SCHMIDT, 1953: 59, (range).

Scaphiopus hammondii bombifrons, BURNETT, 1926: 1, (**Montezuma Co.** — nr. Cortez).

Scaphiopus bombifrons, RODECK, 1943: 4, fig. 2, (brief description and range).

Scaphiopus hammondii intermonlanus, WRIGHT and WRIGHT, 1949: 120-123, pl. 20, map 6, (description and range).

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La Plata Co. — Oxford (1), 535. **Montezuma Co.** — McElmo Creek, 5 mi. W Cortez (30), 4290-4319.

Suborder PROCOELA Nicholls

Family BUFONIDAE Hogg

Genus BUFO Laurenti

Bufo boreas boreas Baird and Girard

Common name: Boreal Toad.

Type: Four syntypes, U. S. Nat'l. Mus. 15467-15470, males; C. J. Pickering collector. Numbers provided by Doris M. Cochran (*in lit.*)

Type locality: Puget Sound, Washington.

Range: Mountains of Colorado from 7,000 to 11,000'.

Published accounts and records:

Bufo boreas BAIRD and GIRARD, 1852c: 174–175, (original description). ELLIS and HENDERSON, 1913: 53, (general account and description; **Boulder Co.** — Red Rock Lake above Ward; Copeland Park. **Conejos Co.** — Cumbres Pass. **Delta Co.** — Grand Mesa. **Gilpin Co.** — Park Lake nr. Tolland; Black Canyon nr. Tolland. **Larimer Co.** — Chamber's Lake. 1915: 254–255, (ecology; **Chaffee Co.** — Buena Vista, 8,500'; Cottonwood Springs nr. Buena Vista, 9,000'; Hortense Springs nr. Buena Vista, 8,500'. **Gilpin Co.** — Tolland, 9,000'. **Lake Co.** — nr. Twin Lakes. **Larimer Co.** — Estes Park. **Park Co.** — nr. Alma, 10,000'). BURNETT, 1926: 2, **Jackson Co.** — Wyocola; Rabbit Ears Pass. **Larimer Co.** — Pingree Park). COCKERELL, 1927: 112, (**Boulder Co.** — Red Rock Lake). RODECK, 1943: 5, fig. 3, (general account; range). BLAIR 1951: 240, (ecology; larvae; **Gunnison Co.** — nr. Gothic up to 10,000').

Bufo lentiginosus frontosus, YARROW, 1875: 520, part, (Twin Lakes, **Lake Co.**).

Bufo microscaphus, YARROW, 1875: 523, (South Park). 1882: 163, (South Park).

Bufo columbiensis, COPE, 1889: 271, (South Park). YOUNG, 1909: 298, (**Boulder Co.** — East slopes Arapahoe Peaks, 3,100 m., 28 km. W Boulder).

Bufo boreas boreas, STEJNEGER and BARBOUR, 1917: 27, (range). 1923: 24, (range). 1933: 27, (range). 1939: 31, (range). 1943: 40, (range). BURGER, 1947: 61–65, (behavior; habitats; food; tadpoles. **Gunnison Co.** — nr. Gothic, 9,000'–10,000'; Taylor Reservoir; warm spring-fed pond nr. Cement Creek). JAMES and MASLIN, 1947: 366, (myiasis. **Routt Co.** — Columbine Campground, 9,500', **Routt Nat'l. For.**, Hwy. 40). 1948: 67, abstract, (myiasis. **Jackson Co.** — 9,500'). LIVEZEY and WRIGHT, 1947: 195, (key to eggs). WRIGHT and WRIGHT, 1949: 146–150, pl. 27, maps 10, 11, (description and range). STEBBINS, 1951: 234–245, 427, 477, pl. 16, (general account. **Jackson Co.** — Hebron; 10.9 mi. W Hebron. **San Juan Co.** — 2 mi. W and 4 mi. N Silverton). 1954: 102–104, 143, pl. 12D (Calif.), pl. 18 map, (general account). SCHMIDT, 1953: 61, (range). TONN, 1955: 63, abstract, (parasitism. **Boulder Co.** — 5 mi. SW Ward, Science Lodge).

Bufo cangicus cangicus, BURT, 1933b: 351, (distribution records. **Delta Co.** — cold stream N Barren Lake, Grand Mesa Resort, Grand Mesa; Englestone Lake, Grand Mesa Resort, Grand Mesa. **Gunnison Co.** — nr. Gothic).

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Boulder Co. — Red Rock Lake above Ward (33), 179, 10876–10907; Copeland Park (3), 180; Rainbow Lake (16), 1088–94, 7409–17; Eldora Lake (6), 3051–6; Pineglade Lake, 6 mi. SW Magnolia, 8,500' (2), 3069–70; Glacier Lake (2), 7522–3; Albion Lake (2), 10827–8; 1 mi. S Ward (2), 10908–9. **Chaffee Co.** — Buena Vista (15), 459, 460. **Conejos Co.** — Junction of N and S Fork Conejos River (5), 1965–9. **Garfield Co.** — Trapper's Lake, abt. 30 mi. NE Buford, White River Nat'l. For. (1), 10234. **Gilpin Co.** — Park Lake, Tolland (1), 181; Black Canyon, Tolland (1), 182; Tolland (2), 429; Lump Gulch (6), 3083–8. **Grand Co.** Confluence of Fraser and Grand Rivers, 2 mi. W Grandy (1), 1106. **Gunnison Co.** — 13 mi. W Crested Butte, Lost Lake, 2 mi. up Trout Creek (14), 9875–88. **Jackson Co.** — Wyocola (1), 1952; Sawmill Creek, 8,500' (2), 1953.1–2; 8 mi. W Coalmont and 2 mi. N Sawmill Creek, 8,800' (3), 1954.1–2, 1981.1; 2.5 mi. SW Rabbit Ears Peak, 9,000' (4), 1955., 1956.1–3; Columbine Campground, Hwy. 40, nr. Rabbit Ears Peak (3), 1960–1, 1980; Little Grizzly Creek, Rabbit Ears Pass, 7,921' (1), 1959; 3½ mi.

NE Rabbit Ears Peak (49), 10910-10960; 10 mi. E Rabbit Ears Pass (2), 1957-8; Big Creek Lake (20), 9229-48; 2 mi. E Big Creek Lake (7), 9249-55. **Larimer Co.** — 7 mi. W and 2 mi. S Loveland (1), 1379; Pingree Park (3), 1962-4; Nymph Lake, Rocky Mountain Nat'l. Park (1), 5945; E side Black Lake, 10,800', Rocky Mountain Nat'l. Park (2), 9868-9; Blue Lake, 11,200' Rocky Mountain Nat'l. Park (1), 9870; Glacier Creek, 2 mi. E Bear Lake, 8,800', Rocky Mountain Nat'l. Park (1), 9871; 6 mi. N Chambers Lake (3), 10961-3; Chambers Lake (19), 9256-64, 10964-73. **Mesa Co.** — 20 mi. S Collbran, 4 mi. up Willow Creek (3), 9872-4. **Routt Co.** — 1 mi. N Steamboat Springs, Yampa River (1), 5942; 1 mi. N Seedhouse Campground (13), 9546-58.

Bufo cognatus Say

Common name: Great Plains Toad.

Type: Lost.

Type locality: Arkansas River, Prowers Co., Colorado. Restricted by Grinnell and Camp, 1917: 140, and Smith, 1934: 440.

Range: Eastern Plains below 6,500' and the San Luis Valley.

Published accounts and records:

Bufo cognatus SAY, 1823: 190, (original description). COPE, 1889: 277, (list. **Costilla Co.** — Fort Garland). DICKERSON, 1906: 99, pl. 32, figs. 90, 92, (general account. **Denver Co.** — Denver). COCKERELL, 1910-130, (**Costilla Co.** — Medano Ranch). ELLIS and HENDERSON, 1913: 56, pl. 1, fig. 1, (general account. **Adams Co.** — Brighton. **Costilla Co.** — Medano Ranch. **Sedgwick Co.** — Julesburg. **Weld Co.** — Greeley. **Yuma Co.** — Wray). 1915: 256, (**Costilla Co.** — Medano Ranch). COCKERELL, 1927: 113, (list. Distribution as in Ellis and Henderson, 1913). KELLOG, 1932: 42, 43, history of fate of Say's types. **Costilla**, **NE Sedgwick**, and **Weld Cos.**) BURT, 1933b: 352, (**Washington Co.** — 10 mi. E Anton). STEJNEGER and BARBOUR, 1933: 28, (range). 1939: 32, (range). 1943: 41, (range). HOLBROOK, 1942: 21-22, pl. 5, (range). RODECK, 1943: 6, (brief account and range). SMITH, 1934: 440, (restriction of type locality) LIVEZEY and WRIGHT, 1947: 194, (eggs and range). WRIGHT and WRIGHT, 1949: 165-167, pl. 32, map 10, (general account and description). SMITH and TAYLOR, 1950: 357, (type locality). STEBBINS, 1951: 249-254, pls. 17, 57 map, (general discussion and description). 1954: 105-106, 143, pls. 11 (Nevada), 18 map, (general discussion and description). SCHMIDT, 1953: 62, (range).

Bufo lentiginosus frontosus, YARROW, 1875: 520, part, (**El Paso Co.** — Colorado Springs).

Bufo lentiginosus cognatus, YARROW, 1875: 521, (**Costilla Co.** — Fort Garland). 1882: 165, (**Costilla Co.** — Fort Garland).

Bufo cognatus cognatus, GRINNELL and CAMP, 1917: 140, (restriction of type locality).

STEJNEGER and BARBOUR, 1917: 27-28, (range). 1923: 24-25, (range). PACK, 1922: 8, (distribution). BURNETT, 1926: 2, (**Sedgwick Co.** — nr. Sedgwick. **Weld Co.** — nr. Briggsdale).

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Adams Co. — Brighton (10), 188, 191. **Alamosa Co.** — San Luis Lake (6), 1257-62; 1 mi. S San Luis Lake (68), 3788-3855. **Cheyenne Co.** — 15 mi. S Burlington (1), 9565. **Costilla Co.** — Medano Ranch (1), 58. **Lincoln Co.** — Between Genoa and Flagler on Hwy. 24 (12), 1245-56. **Morgan Co.** — 1 mi. S and 4 mi. W Fort Morgan, 4350' (1), 11780. **Sedgwick Co.** — Julesburg (1), 190. **Washington Co.** — 18 mi. S Otis, Hwy. 61 (1), 6720. **Weld Co.** — 2 mi. E Platteville (4), 9561-4. **Yuma Co.** — 5 mi. E Wray (13), 10235-47.

Bufo debilis insidiosus Girard

Common name: Western Green Toad.

Type: Syntypes, U. S. Nat'l. Mus. 2622, (two specimens); Dr. Thos. H. Webb, Collector. Number provided by Smith and Taylor, 1948: 42.

Type locality: Chihuahua, Chihuahua, Mexico.

Range: Southwestern Colorado. This species is included in the fauna of the state on the basis of a single specimen collected near Trinidad, Las Animas Co., in 1883. This specimen, collected and identified by A. E. Beardsley, was originally installed in the State Teachers' College Museum at Greeley, but has subsequently been destroyed. I have not seen this specimen nor any other collected in the state; but the occurrence of the species just across the state line in southwestern Kansas strongly indicates that it will probably be found in Colorado again.

Published accounts and records:

Bufo insidiosus GIRARD, 1854: 88, (original description). RODECK, 1943: 5, (brief description and range. **Las Animas Co.** — nr. Trinidad). WRIGHT and WRIGHT, 1949: 172-175, pl. 34, map 12, (description and range).

Bufo debilis, ELLIS and HENDERSON, 1913: 53, (general account and description. **Las Animas Co.** — nr. Trinidad). STEJNEGER and BARBOUR, 1917: 28, part, (range). 1923: 25, part, (range). 1933: 28, part, (range). COCKERELL, 1927: 112, (list, **Las Animas Co.** — Trinidad).

Bufo debilis insidiosus, SANDERS and SMITH, 1951: 143-153, pl. 2 (Arizona), fig. 1 map, (range). SCHMIDT, 1953: 63, (range). STEBBINS, 1951: 259-263, pls. 15, 40 habitat, 57 map, (general account and description of species including subspecies). 1954: 107-108, 143, pls. 13-B (N. M.), 19 map, (general account and description).

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None.

Bufo punctatus Baird and Girard

Common name: Red-spotted Toad.

Type: Syntypes, U. S. Nat'l. Mus. 2618, (three specimens), lost, J. H. Clark, collector. See Smith and Taylor, 1948: 46.

Type locality: Devil's River, Val Verde Co., Texas, corrected by Smith and Taylor, 1948: 46.

Range: Southwestern and southeastern Colorado below 7,000'.

Published accounts and records:

Bufo punctatus BAIRD and GIRARD, 1852b: 173, (original description). ELLIS and HENDERSON, 1915: 255-256, (Basin Creek, 6,500', 6-8 mi. N Naturita, nr. N. Line **San Miguel Co.**). BURNETT, 1926: 2, (McElmo Creek, **Montezuma Co.**). COCKERELL, 1927: 112, (list. **San Miguel Co.**, 6,500'). KELLOGG, 1932: 61, (reidentifies type locality; range). STEJNEGER and BARBOUR, 1933: 29, (range). 1939: 34, (range). 1943: 43, (range). RODECK, 1943: 5,

(brief account and description. **Montezuma Co.** nr. McElmo Creek. **Montrose Co.** — 7 mi. from Naturita). LIVEZEY and WRIGHT, 1947: 190, 192, (eggs; range). WRIGHT and WRIGHT, 1949: 192–199, pl. 39, map 13, (general account and description). STEBBINS, 1951: 280–285, pls. 17 (Calif.), 25 egg, 29 tadpole, 30 tadpole mouthparts, 41 habitat, (general description and discussion). 1954: 111–113, pl. 11-D (Calif.), 19 map, (general account and description).

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Las Animas Co. — 2 mi. S Carrizo Mt., Bob Dodge Ranch (1), 7525; 28 mi. NE Trinidad, Trinichera Creek (10), 10974–83. **Mesa Co.** — 3 mi. SW Gateway, John Brown Creek (17), 10984–11000. **Montezuma Co.** — Mesa Verde Nat'l. Park (2), 5590, 7524; 30 mi. W Cortez, mouth of Yellow Jacket Canyon (4), 11001–4; 3 mi. W and 3 mi. S Yellow Jacket, Reed Ranch (5), 11250–54. **Montrose Co.** — Basin Creek, 6 mi. from Naturita (2), 450.

Bufo woodhousei woodhousei Girard

Common name: Rocky Mountain Toad.

Type: Holotype by monotypy, U. S. Nat'l. Mus. 2531, S. W. Woodhouse, collector. Number provided by Smith and Taylor, 1948: 40.

Type locality: San Francisco Mountain, Coconino Co., Arizona. Restricted by Smith and Taylor, 1948: 40.

Range: All of Colorado below 7,000' and in the San Luis Valley.

Published accounts and records:

Bufo dorsalis HALLOWELL, 1852: 181–182, (*nec Bufo dorsalis* Spix)

Bufo woodhousei GIRARD, 1854: 86, (substitute name for *Bufo dorsalis* Hallowell, preoccupied).

BAIRD, 1859: 20, (list. Upper Arkansas River). STEJNEGER and BARBOUR, 1917: 29, part, (range). 1923: 27, part, (range). 1933: 30, part, (range). 1939: 34–35, part, (range). KELLOGG, 1932: 74, (range). BURT, 1933b: 352, (**Delta Co.** — 4 mi. SW Delta. **Fremont Co.** — Concrete. **Montrose Co.** — 13 mi. SW Delta, Roubideau Creek). RODECK, 1943: 5, fig. 4b, (brief description and range). STEBBINS, 1951: 286–293, pls. 18, 25, 29, 30, 43, 45, 58, fig. 27, (general account and description).

Bufo americanus, LE CONTE, 1842: 5, (range). ELLIS and HENDERSON, 1913: 55, pl. 1, fig. 2, (general account and description. **Adams Co.** — Brighton. **Boulder Co.** — Boulder. **Denver Co.** — Denver. **Sedgwick Co.** — Julesburg). COCKERELL, 1927: 113, (list. **Adams Co.** — Brighton. **Boulder Co.** — Boulder. **Denver Co.** — Denver. **Sedgwick Co.** — Julesburg).

Bufo lentiginosus frontosus, YARROW, 1875: 520, part, (**El Paso Co.** — Colorado Springs. **Pueblo Co.** — Pueblo). 1882: 165, (list. **El Paso Co.** — Colorado Springs).

Bufo lentiginosus woodhousei, YARROW, 1875: 521, (range). COPE, 1889: 284, (list. **El Paso Co.** — Colorado Springs). CARY, 1911: 27, (list. **Garfield Co.** — Rifle. **Rio Blanco Co.** — Rangely).

Bufo lentiginosus lentiginosus, YARROW, 1882: 164, (list. **Costilla Co.** — Fort Garland).

Bufo lentiginosus americanus, YARROW, 1882: 167, (list. Central Park, and Platte River). COPE, 1889: 288, (list. **El Paso Co.** — Colorado Springs).

Bufo woodhousei, ELLIS and HENDERSON, 1913: 54, (general account and description. **Boulder Co.** — N Boulder. **Denver Co.** — Denver. **La Plata Co.** — Rio Florida nr. Durango. **Mesa Co.** — Grand Junction. **Montrose Co.** — Montrose, **Prowers Co.** — Lamar. **Weld Co.** — Greeley). 1915: 256, (additional records. **Montrose Co.** — Naturita; Basin Creek,

- 6 mi. W Naturita; Naturita to Gypsum Creek. **Weld Co.** — Greeley). COCKERELL, 1927: 113, (range). STEBBINS, 1954: 113-114, 146, pls. 120, 19, (general account and description of species). VAN RIPER, 1957: 296, (account of tongue action in grasping food).
- Bufo woodhousii woodhousii*, SMITH, 1934: 440, (corrects an Ellis and Henderson, 1913: 55, pl. 1, fig. 2, misidentification). STEJNEGER and BARBOUR, 1943: 44, (range). LIVEZEY and WRIGHT, 1947: 193, (eggs, range). WRIGHT and WRIGHT, 1949: 206-210, pl. 43, map, (description).
- Bufo americanus americanus*, RODECK, 1943: 6, fig. 4a, (brief description and range).
- Bufo woodhousei woodhousei*, SCHMIDT, 1953: 67, (range).

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Adams Co. — Brighton (11), 188, 10005-6. **Alamosa Co.** — Great Sand Dunes Nat'l. Monument (37), 3856-91, 7527. **Arapahoe Co.** — Box Elder Creek bottoms, Hwy. 287 (2), 1265-6. **Archuleta Co.** — Piedra River, Upper Campground NW Chimney Rock (3), 5950-2. **Boulder Co.** — nr. Boulder (14), 199, 530-1, 534, 5948, 7419-20, 9272, 9916-21; nr. Valmont (24), 1120, 9893-9915; White Rocks, 8 mi. ENE Boulder (2), 3017, 3126; Marshall (2), 3187, 11009; 6 mi. Lake, N Boulder (1), 5944; 6 to 9 mi. E Boulder, Boulder Creek (23), 9889-92, 10248, 10250-65, 10829-30; 3¼ mi. SE Niwot (2), 11007-8. **Delta Co.** — Pond nr. Bull Creek Reservoir No. 5, Grand Mesa, (1 larva), 693. **Denver Co.** — West Berkeley Lake (1), 6708. **El Paso Co.** — 15 mi. SSE Colorado Springs (2), 2593-4; N Colorado Springs (3), 10267-69. **Grand Co.** — 10 mi. SW Kremmling (1), 11010. **Jefferson Co.** — SW Denver (2), 3064-5. **Koiwa Co.** — nr. Arlington (9), 1242-4, 2595-2600. **La Plata Co.** — Rio Florida, nr. Durango (1), 185; 11 mi. S Durango (7), 7230-6. **Larimer Co.** — 6 mi. NE Estes Park (1), 1380; nr. Fort Collins (3), 1984-6. **Las Animas Co.** — Cottonwood Creek, 4,800' (2), 2908-9. **Mesa Co.** — Grand Junction (9), 183, 5156-62, 9922; 5 mi. from Grand Junction (1), 7526; Colorado Nat'l. Monument (1), 10266. **Moffat Co.** — nr. Castle Park, 10 mi. up Yampa River (40), 1981-3, 3754-66, 5221-44. **Montezuma Co.** — Cortez (1), 1264; 30 mi. W Cortez, mouth of Yellow Jacket Canyon (1), 11011; 6 mi. N McPhee, Dolores River at Dry Creek (7), 11012-8; Mancos Trading Post (2), 4259-60; Four Corners, SW of San Juan River (2), 4261-2. **Montrose Co.** — Naturita (1), 453; San Miguel Canyon, nr. Naturita (1), 1383; Basin Creek, 6 mi. W Naturita (1), 454. **Morgan Co.** — 2 mi. NW Fort Morgan, Muir Springs (1), 10249; nr. Fort Morgan (3), 11781-3. **Pueblo Co.** — nr. Pueblo (12), 1988-91, 2587-92, 10270-2; 6 mi. E Pueblo (2), 10273-4; Foothills NE Stone City (1), 2586. **San Miguel Co.** — Buckeye Reservoir, La Sal Mts. (7), 6537-43. **Sedgwick Co.** — Julesburg (28), 187; 2½ mi. SW Ovid, Parker Ranch (14), 4017-30. **Weld Co.** — 2 mi. E Platteville (21), 9566-86; 2 mi. NE Roggen (26), 528; 10 mi. NE Roggen (1), 1987. **Yuma Co.** — 11 mi. N Wray (1), 3223; 9.5 mi. N Wray (1), 3224; 5 mi. N Wray (4), 3225-8; 2 mi. E Wray (6), 3229-34, 11050; Beecher's Island (1), 11049; Bonny Reservoir (3), 11019-48.

Family HYLIDAE Gunther

Genus ACRIS Duméril and Bibron

Acris crepitans blanchardi Harper

Common name: Blanchard's Cricket Frog.

Type: Holotype, Carnegie Museum 26607, ad. ♂; Charles E. Mohr, collector, 9 June 1938.

Type locality: Meadow nr. Smallen's Cave, Ozark, Christian Co., Missouri.

Range: Plains of northeastern Colorado in the South Platte River drainage.

Published accounts and records:

Acris gryllus blanchardi HARPER, 1947: 39-40, (original description). SCHMIDT, 1953: 68, (range). STEBBINS, 1951: 296-304, pl. 19, (general account, includes all subspecies). 1954: 118-119, 146, pls. 14, 20 map, (general description; range; key).

Acris gryllus crepitans, YARROW, 1882: 169, (105 mi. W Fort Riley, Kansas). WRIGHT and WRIGHT, 1949: 220-228, pl. 46, map 15, (general account and range).

Acris gryllus, ELLIS and HENDERSON, 1913: 58-59, (description. **Yuma Co.** — Wray). 1915: 258, figs. 6-7, (*Yuma Co.* — Wray). STEJNEGER and BARBOUR, 1923: 27, part, (range). BURNETT, 1926: 3, (range extension. **Weld Co.** — nr. Briggsdale). COCKERELL, 1927: 113, (list).

Acris crepitans, RODECK, 1943: 7, fig. 5a, (description; range. **Weld Co.** — Briggsdale. **Yuma Co.** — Wray.)

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Boulder Co. — Boulder, Varsity Lake (1), 10232. **Yuma Co.** — 2 mi. E Wray (23), 3235-43, 10861-74; 5 mi. E Wray (1), 10233; Bonny Reservoir (1), 10875.

Genus *HYLA* Laurenti

Hyla arenicolor Cope

Common name: Canyon Treefrog.

Type: Syntypes, U. S. Nat'l. Mus. 11410 (four specimens); J. H. Clark, collector. Number provided by Cope, 1889: 370.

Type locality: Santa Rita Mountains, Pima Co., Arizona. Restricted by Smith and Taylor, 1950a: 354.

Range: Known only from southeastern Colorado on the Mesa de Maya of Las Animas Co. and in western Colorado from John Brown Canyon in Mesa Co.

Published accounts and records:

Hyla affinis BAIRD, 1854: 61, (*nec Hyla affinis* Spix).

Hyla arenicolor COPE, 1866: 161, (substitute name for *Hyla affinis* Baird, preoccupied). ELLIS and HENDERSON, 1913: 59, (description. **Las Animas Co.** — Mesa de Maya). STEJNEGER and BARBOUR, 1923: 29, (range). COCKERELL, 1927: 113, (list). RODECK, 1943: 7, fig. 5b, (brief description and range). LIVEZEY and WRIGHT, 1947, 189, (eggs and range). WRIGHT and WRIGHT, 1949: 287-294, pls. 60-61, map 20, (general account and description). STEBBINS 1951: 313-322, pls. 19, 25, 31, 32, 44, 59, fig. 30, (general account and description). 1954: 120-121, 146, pls. 14D, 20, (general account and description). FINLEY, 1953: 180, (ecological notes and range extension, **Mesa Co.** — 2 mi. S and 1 mi. W Gateway, John Brown Creek, 5,300').

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Mesa Co. — 3 mi. SW Gateway, John Brown Creek (57), 11051-11107.

Genus PSEUDACRIS Fitzinger

Pseudacris nigrita maculata (Agassiz)

Common name: Boreal Chorus Frog.

Type: Syntypes, Harvard Univ., Mus. Comp. Zool. 38 (two specimens).

Number provided by Barbour and Loveridge, 1929: 281.

Type locality: Vicinity of Sault Ste. Marie, Ontario, Canada. Restricted by Schmidt, 1953: 75.

Range: NE Colorado then west and southwest through the plains and mountains up to 11,000' and on the western slope in suitable habitats exclusive of the San Juan Basin of Montezuma Co.

Published accounts and records:

Hylodes maculatus AGASSIZ, 1850: 378-379, pl. 6, figs. 1, 2, 3, (original description).

Chorophilus triseriatus, YARROW, 1875: 514, (list, **Archuleta Co.** — Pagosa Springs). COPE, 1889: 343, (list. **Archuleta Co.** — Pagosa Springs. **Costilla Co.** — Fort Garland. **Larimer Co.** — Laramie River. **Park Co.** — Fairplay). CARY, 1911: 27, 40, (list. **Rio Blanco Co.** — Rangely. **Routt Co.** — 10 mi. E Slater). ELLIS and HENDERSON, 1913: 57-58, (description. **Boulder Co.** — Stapp's Lake; Copeland Park; Bluebird Mine; Boulder. **Delta Co.** — Grand Mesa. **Denver Co.** — Denver. **Grand Co.** — Kremmling. **Weld Co.** — Greeley). 1915: 257-258, figs. 1-4, (description of eggs and tadpoles; discussion of variation; additional records. **Boulder Co.** — Boulder. **Park Co.** — nr. Alma). BURNETT, 1926: 2-3, (**Larimer Co.** — Pingree Park. **Saguache Co.** — btwn. Center and Saguache).

Chorophilus triseriatus triseriatus, YARROW, 1875: 523, (list. **Archuleta Co.** — Pagosa Springs. **Costilla Co.** — Fort Garland. **Park Co.** — Fairplay). 1882: 170, (list as above).

Pseudacris triseriata, STEJNEGER and BARBOUR, 1917: 31, part, (range). 1923: 29, part, (range). COCKERELL, 1927: 113, (list and range).

Pseudacris triseriata triseriata, BURT, 1933b: 352-353, (**Delta Co.** — Cold Stream, N Barren Lake, Grand Mesa Resort, Grand Mesa. **Washington Co.** — 11 mi. E Anton).

Pseudacris nigrita triseriata, STEJNEGER and BARBOUR, 1933: 32, part, (range). 1939: 37, part, (range). 1943: 47, part, (range). RODECK, 1943: 6, fig. 5c, (brief description and range. **Boulder Co.** — Boulder. **Denver Co.** — Denver. **Weld Co.** — Greeley. Mountains of Colorado). LIVEZEY and WRIGHT, 1947: 195, 200, (eggs; range). WRIGHT and WRIGHT, 1949: 253-258, pl. 53, maps 17-18, (general account and description). BLAIR, 1951: 240, (ecology; larvae. **Gunnison Co.** — nr. Gothic up to 10,000'). STEBBINS, 1951: 305-313, pls. 19, 25, 31, 32, 45, 59, (general account and description of species including subspecies. **Jackson Co.** — 5 mi. ESE Rabbit Ears Peak; Rand). SCHMIDT, 1953: 75, (range). 1954: 119-120, pl. 14, 20, (general account and description of species including races).

Pseudacris nigrita septentrionalis, SMITH and SMITH, 1952: 166, (listed in key).

Pseudacris nigrita maculata, SMITH, P. W., 1956: 169-176, (resurrection of name; redescription; range. **Archuleta**, **Boulder**, **Costilla**, **Delta**, **Denver**, **Gunnison**, **Jackson**, **Lake Larimer**, **Mesa**, **Mineral**, **Moffat**, **Park**, **Rio Blanco**, **Routt**, **Washington**, and **Weld** cos.).

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Boulder Co. — Copeland Park (2), 193; Bluebird Mine (1), 194; Glacier Lake (7), 1055-8, 7529-30, 11119; Muskee Lake (1), 1060; a moraine lake nr. Arapahoe Falls (1), 1087; Elk Park,

2 mi. SW Netherland (1), 2874; Pineglade Lake, 6 mi. W Magnolia (1), 3072; 9 mi. E Ward, Minnie Lake (6), 10277-80, 10283, 10295; 10 mi. E Ward, Four Lakes (6), 10282, 10284-8; 2 mi. W Ward, Red Rock Lake (9), 11108-16; 2 mi. E Rainbow Lakes (2), 11117-8; Sandstone quarry, 1 mi. N Lyons (3), 2038-40; Marshall, 4 mi. SE Boulder (40), 2164-84, 3976-94; Louisville (9), 3188-96; Boulder (27), 5939, 6771-90, 9858-62, 10281; White Rocks, 8 mi. ENE Boulder (1), 5940; 9 mi. E Boulder (5), 9963-6; 8 mi. E Boulder (8), 10297-10304; 20 mi. NW Boulder, Left-hand Canyon (2), 10275-6; 6 mi. N Boulder (3), 10291-3; 6 mi. NE Boulder (1), 10296; 6 mi. SSE Longmont (10), 10289-90, 11162-9; 1½ mi. S Valmont (1), 10294; ¾ mi. SE Niwot (42), 11120-61. **Denver Co.** — Denver (2), 6709-10. **Gilpin Co.** — Lump Gulch, 8,900' (2), 3089-90. **Grand Co.** — Kremmling (1), 131; 10 mi. SW Kremmling (3), 11170-2. **Jackson Co.** — Newcomb Creek, 8,700' (1), 2003; Sawmill Creek and vicinity, 8 mi. W Coalmont (11), 8004-2014; W side Big Creek Lake (13), 9273-85; ¾ mi. NE Rabbit Ears Peak (2), 11173-4. **La Plata Co.** — 10 mi. S Durango (2), 7238-9. **Larimer Co.** — Pingree Park (2), 2017-8; 10 mi. W Bellevue, Rist Canyon, 8,500' (1), 2019; 5 mi. W Fort Collins, Horsetooth Mt. (5), 5827-31; S. end Chamber's Lake (1), 9287; 7 mi. SW Fort Collins, 5,100' (9), 2024-32; vicinity of Fort Collins (14), 2020, 2021-4, 2015-23. **Mesa Co.** — 20 mi. S Collbran, 4 mi. up Willow Creek (1), 9968. **Pueblo Co.** — ½ mi. E Pueblo (1), 2041; nr. Pueblo (2), 2602-3. **Rio Blanco Co.** — 15 mi. NW Rio Blanco (3), 1077-9; 17 mi. S junction of Rifle road and White River (1), 7528. **San Miguel Co.** — Ophir, Sunshine Campground, 9,700' (1), 9617. **Weld Co.** — 24 mi. N Stoneham, Battle Canyon (2), 2034-5; 7 mi. S Kersey, 4,800' (2), 2036-7; 2 mi. E Platteville (5), 9612-6; 3 mi. E Platteville (1), 10305; Fort Lupton (35), 9923-57. **Yuma Co.** — 2 mi. E Wray (10), 10306-14, 11175; Bonny Reservoir (3), 11176-8.

Suborder DIPLASIOCOELA Nicholls

Family RANIDAE Bonaparte

Genus RANA Linnaeus

Rana catesbeiana Shaw

Common name: Bullfrog.

Type: Probably none. See Smith and Taylor, 1948: 100.

Type locality: Charleston, Charleston Co., South Carolina. Restricted by Smith and Taylor, 1950a: 360.

Range: Plains of Colorado where permanent bodies of water may be found. Sporadically introduced into likely habitats.

Published accounts and records:

Rana catesbeiana SHAW, 1802: 106-108, pl. 33, (original description). STEJNEGER and BARBOUR, 1917: 37, (range). 1923: 35, (range). 1933: 40, (range). 1939: 44, (range). 1943: 56, (range). COCKERELL, 1927: 113, (list. South Platte Valley). RODECK, 1943: 8, (brief description and range. **Kit Carson Co.** — E Seibert). LIVEZEY and WRIGHT, 1947: 190, (eggs and range). WRIGHT and WRIGHT, 1949: 444-449, pl. 94, map 29, (general account and description). MASLIN, 1950b: 89, (**Baca Co.** — Cimarron River Drainage. **Denver Co.** — West Denver. **Yuma Co.** — Wray. Arkansas River west to Pueblo). STEBBINS, 1951: 345-351, pls. 22, 25, 33, 34, 62, fig. 31, (general account and description). 1954: 131-132, 148, pls. 15, 21, (general account and description).

Rana catesbeana, ELLIS and HENDERSON, 1915: 258-259, (ponds and reservoirs upper South Platte Valley. Introduced).

Rana catesbiana, BOULENBER, 1920: 418-421, (description and range). SWENSON and RODECK, 1948: 53, abstract, (**Baca Co.** — Cimarron River. **Denver Co.** — Denver. **Kit Carson Co.**).

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Baca Co. — Sand Canyon, 22 mi. S Prichett, 4,000' (1), 2910; below Two Buttes Reservoir (1), 11179. **Denver Co.** — Denver (5), 1123-7. **Kit Carson Co.** — Crystal Spring, 3 mi. E Flagler (4), 1229-32. **Morgan Co.** — 1 mi. NE Fort Morgan (2), 10315-6. **Yuma Co.** — 2 mi. E Wray (3), 3244-6; 9 mi. E Wray (1), 10317.

Rana pipiens brachycephala Cope

Common name: Western Leopard Frog.

Type: Syntypes, U. S. Nat'l. Mus. 3363 (5 specimens); F. V. Hayden, collector.

Type locality: Yellowstone River, Wyoming.

Range: Throughout Colorado up to 10,000'.

Published accounts and records:

Rana virescens brachycephala COPE, 1889: 403-406, fig. 101, (original description. **Costilla Co.** — Fort Garland).

Rana pipiens, COCKERELL, 1910: 130, (list. **Costilla Co.** — Medano Ranch. **Bio Blanco Co.** — Buford; 5 mi. above Buford; Meeker; 7 mi. NE Meeker). CARY, 1911: 24, (list. **Moffat Co.** — Vermillion Creek, nr. Ladore). ELLIS and HENDERSON, 1913: 60-61, (general account and description. **Alamosa Co.** — Alamosa. **Archuleta Co.** — Rio Florida, nr. Durango; **Boulder Co.** — Boulder; nr. Pineglade School, SW Magnolia; Louisville Junction; Bluebird Mine. **Chaffe Co.** — Buena Vista, 8,500'. **Costilla Co.** — Medano Ranch. **Denver Co.** — Denver; Aurora Lake nr. Denver. **Mesa Co.** — Grand Junction. **Montrose Co.** — Montrose. **Park Co.** — Lake George; Alma, above 10,000'. **Prowers Co.** — Holly. **Rio Blanco Co.** — Meeker; 7 mi. NE Meeker. **Sedgwick Co.** — Julesburg. **Teller Co.** — Florissant, 8,200'. **Weld Co.** — Greeley. **Yuma Co.** — Wray). STEJNEGER and BARBOUR, 1917: 38, (range). 1923: 37, (range). 1933: 41, part, (range). 1939:46, part, (range). COCKERELL, 1927: 113, (list). BURT and BURT, 1929: 434, (field notes. **Arapahoe Co.** — 3 mi. NW Deertail. **Denver Co.** — 3 mi. E Denver. **Kit Carson Co.** — 2 mi. E Flagler. **Routt Co.** — Bear River; 9 mi. E Craig; 1 mi. N Hayden; 1 mi. NW Steamboat Springs; 5 mi. NW Steamboat Springs). BURT, 1933b: 354, (**Delta Co.** — 4 mi. SW Delta. **Gunnison Co.** — 4 mi. W Gunnison; Gothic. **Mesa Co.** — 6 mi. SE Whitewater. In **Montrose Co.** — Roubideau Creek, 12 mi. SW Delta). 1935: 318, (**Baca Co.** — 3 mi. NE Bartlett). RODECK, 1943: 7-8, cover design, (brief account and description). MARR, 1944: 481, (**Yuma Co.**). MOORE, 1944: 363, map, (distribution of presence and absence of oviducts in males). LIVEZEY and WRIGHT, 1947: 198, (eggs and range). BLAIR, 1951: 240, (ecology: larvae from **Gunnison Co.** — nr. Gothic). STEBBINS, 1951: 355-367, pls. 23, 25, 33, 34, 45, 63, fig. 31, (general account and description. **El Paso Co.** — 4.3 mi. SE Colorado Springs. **Jackson Co.** — 10.9 mi. W Hebron; 5 mi. ESE Rabbit Ears Peak). ROSINE, 1952: 100, abstract, (polydactylism at **Boulder Co.** — Muskee Lake, 8,350'). TONN, 1955: 63, abstract, (parasites). **Boulder Co.** — 5 mi. SW Ward, Science Lodge). RUIBAL, 1957: 214, (variation in position of naris).

- Rana halecina berlandieri*, YARROW, 1957: 526-527, (Denver Co. — Denver. San Luis Valley). 1882: 181, (Costilla Co. — Fort Garland).
- Rana halecina*, BOULENGER, 1920: 433-443, (description. Yuma Co. — Wray. Boulder Co. — E Boulder).
- Rana pipiens brachycephala*, STEJNEGER and BARBOUR, 1943: 58, (range). WRIGHT and WRIGHT, 1949: 498-520, pl. 111, map 34, (discussion of *pipiens* complex; general account and description). SCHMIDT, 1953: 83, (range).
- Rana pipiens berlandieri*, WRIGHT and WRIGHT, 1949: 506-514, pl. 110, map 34, (general account and description).
- Rana pipiens pipiens*, STEBBINS, 1951: 355-367, pls. 23, 25, 33, 34, 45, 63, map, part, (general account of species including two subspecies only). 1954: 133-134, 148, pls. 16, 22 map, (general account and description).

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Adams Co. — 15 mi. NE Byers (1), 11753. **Alamosa Co.** — Alamosa (1), 201. **Archuleta Co.** — Piedra River, Upper Campground NW Chimney Rock (2), 5953-4. **Baca Co.** — Bear Creek, at Hwy. 88 S Buckeye (2), 1233-4; Sand Canyon, 22 mi. S Pritchett, 4,000' (13), 2911-23; Sand Canyon, 27 mi. S Pritchett (19), 2924-30, 3128-39. **Boulder Co.** — vicinity of Boulder (7), 196, 5934, 7422-3, 7436, 9972, 10341; Muskee Lake, 12.5 mi. W Boulder, 8,600' (18), 1071-6, 1119, 2574, 9971, 10332-40; 20 mi. NW Boulder, Lefthand Canyon (3), 10328, 10330-1; Louisville Junction (8), 198, 3197-8, 7113-7; Bluebird Mine (1), 199; Lyons (2), 1118, 9970; Eldora Lake, 9,245' (3), 3057-9; White Rocks, 8 mi. ENE Boulder (6), 3073, 3186, 7112, 10325-7; Pineglade, 6 mi. SW Magnolia (11), 3074-82, 7110-1; Louisville (2), 3197-8; Marshall (9), 3995-4003; nr. Niwot (6), 7107-9, 11180-2; nr. Lafayette (1), 7118; Boulder Creek at Hwy. 87 (7), 10318-24; 4 mi. N Allen's Park, Meeker Lodge (1), 10329; Minnie Lake, 9 mi. NE Ward (8), 10342-9; 6 mi. SE Longmont (5), 11183-7. **Chaffee Co.** — Mt. Princeton Hot Springs (9), 7240-8. **Costilla Co.** — Medano Ranch (1), 37. **Custer Co.** — 5 mi. N Westcliffe (6), 9640-5. **Denver Co.** — Aurora Lake (1), 9975. **Dolores Co.** — 20 mi. E Cahone, Glade Lake (6), 11188-93. **Douglas Co.** — 3 mi. S and 8 mi. E Littleton (1), 5933; 2½ mi. NW Franktown (1), 11194. **Eagle Co.** — 7 mi. W Wolcott (3), 11195-7. **El Paso Co.** — 15 mi. SSE Colorado Springs (4), 2615-8. **Garfield Co.** — Greenstreet Creek, on Hwy. 329, N New Castle (4), 5165-8. **Grand Co.** — Gore Pass, 3 mi. W Kremmling (3), 9637-9; 10 mi. SW Kremmling (5), 11198-202. **Gunnison Co.** — 13 mi. W Crested Butte (2), 9976-7; 6 mi. E Somerset (8), 9978-85. **Jackson Co.** — 2 mi. E Big Creek Lake (12), 9288-99; 3½ mi. NE Rabbit Ears Peak (2), 11203-4. **Jefferson Co.** — W Denver (1), 5933. **Kiowa Co.** — 14 mi. E Eads (16), 4907-22. **La Plata Co.** — Rio Florida, nr. Durango (7), 203; Durango (1), 9646; 10 mi. S Durango (1), 7249; 20 mi. N Hermosa (3), 11205-7; 8 mi. NW Hesperus (2), 11208-9. **Larimer Co.** — 6 mi. N Chamber's Lake (1), 11210. **Las Animas Co.** — Purgatoire River, 19 mi. E Model (2), 4928-9; Mesa de Maya, 15 mi S Kim (13), 4930-42; Carrizo Creek, nr. Troy (2), 1239-40; Cottonwood Creek, 2 mi. S Carrizo Mt. (13), 2931-3, 7531-8, 9647-8; 27 mi. E Trinidad (2), 9319-20; 28 mi. NE Trinidad, Trinchera Creek (9), 9987-95; Salt Creek on U. S. Hwy. 160 (1), 10782. **Mesa Co.** — Grand Junction (10), 204, 5180-4; Kahnah Creek at Gunnison River (11), 5169-79; **Moffat Co.** — Castle Park, 9 mi. up Yampa River (16), 3767-72, 3774-6, 5245-51; Bull Canyon, Dinosaur Nat'l. Mon. (1), 2772; Axial (4), 4073-6. **Montezuma Co.** — Cortez (10), 1083-6, 9315-8, 9986; McElmo Creek, 5 mi. W Cortez (24), 4263-86; Mancos Trading Post, 23 mi. SW Towaoc (3), 4287-9; 30 mi. W Cortez, mouth of Yellow Jacket Canyon (4), 11211-4; 6 mi. N McPhee, Dolores River at Dry Creek (4), 11215-8. **Montrose Co.** — Montrose (1), 202; 1 mi. N Olthe (3), 5185-7. **Morgan Co.** — Platte River, abt. 4 mi. SE Weldona (3), 9973-4, 10350. **Otero Co.** — 6 mi.

E Higbee (5), 4923-7. **Prowers Co.** — Arkansas River at Lamar (2), 1236-7. **Pueblo Co.** — nr. Pueblo (11), 2609-14; 5 mi. S Pueblo, St. Charles River (2), 10780-1. **Rio Blanco Co.** — Meeker (1), 52; 7 mi. NE Meeker (7), 54; 20 mi. S Meeker (5), 4068-72; 5 mi. above Buford (1), 69. **Routt Co.** — 1 mi. N Steamboat Springs (1), 5941; 1 mi. N Seedhouse Campground (14), 9618-31. **San Miguel Co.** — La Sal Mts., Buckeye Reservoir (2), 6560-1. **Sedgwick Co.** — Julesburg (18), 200, 9636; 2½ mi. SW Ovid, Parker Ranch (1), 4031. **Weld Co.** — N Roggen (1), 728; Battle Canyon, 20 mi. NW Stoneham (2), 30006-7; 2 mi. W Milton Reservoir (3), 5935-7; Fort Lupton (1), 9969. **Yuma Co.** — 11 mi. N Wray (1), 3247; 2 mi. E Wray (8), 3248-52, 10351-3; 10 mi. S Wray, Black Wolf Creek, May's Ranch (1), 7719; Beecher's Island, Arikaree River (9), 7120-8; Wray (15), 9300-14; Bonny Reservoir (12), 11219-30.

***Rana sylvatica cantabrigensis* Baird**

Common name: Northern Wood Frog.

Type: Uncertain; Harvard Univ., Mus. Comp. Zool., Agassiz collection. See Barbour and Loveridge, 1929: 327.

Type locality: Moose Jaw, Saskatchewan, Canada. Designated by Schmidt, 1953: 81.

Range: North Platte and Laramie River drainage in Jackson and Laramie cos. of north-central Colorado.

Published accounts and records:

Rana cantabrigensis BAIRD, 1853: 62, (original description).

Rana sylvatica cantabrigensis, MASLIN, 1947: 158-162, (description; habitat. **Jackson Co.** — 8 mi. W Coalmont and 2 mi. N Sawmill Creek, 8,800'; 8 mi. W Coalmont and 1 mi. N Sawmill Creek, 8,500'; Rand, 8,700'; 2½ mi. SE Rabbit Ears Peak). STEBBINS, 1951: 373-382, pls. 20, 25, 33, 34, 45, 64, (general account and description. **Jackson Co.** — 5 mi. ESE Rabbit Ears Peak). 1954: 135-137, 148, pls. 15, 21 map, (general account and description).

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Jackson Co. — 8 mi. W Coalmont and 2 mi. N Sawmill Creek, 8,800' (5), 2115-9; 8 mi. W Coalmont and 1 mi. N Sawmill Creek, 8,500' (4), 2120-2, 2030; Rand, 8,700' (3), 2123-4; 2.5 mi. SE Rabbit Ears Peak, 9,000' (4), 2126-9. **Larimer Co.** — 10 mi. N Chamber's Lake (2), 1377-8; 6 mi. N Chamber's Lake (14), 11231-44; Chamber's Lake (6), 9334-8, 11245.

Class REPTILIA Laurenti
Subclass ANAPSIDA Williston
Order TESTUDINES Batsch

Family CHELYDRIDAE Swainson

Genus CHELYDRA Schweigger

Chelydra serpentina serpentina (Linnaeus)

Common name: Common Snapping Turtle.

Type: Unknown. Peter Kalm, collector.

Type locality: Vicinity of New York City, N. Y. Restricted by Schmidt, 1953: 86. Smith and Taylor, 1950: 358, restricted the type locality to New Orleans, Orleans Parish, Louisiana. The type, however, since lost, was collected by Peter Kalm, and all of Kalm's material was acquired in the states of New York, New Jersey, Pennsylvania, and the province of Ontario. For this reason I follow Schmidt in that his selection of a type locality is more compatible with the known facts of its taxonomic history.

Range: Eastern Plains of Colorado in permanent bodies of water.

Published accounts and records:

Testudo serpentina LINNEAUS, 1758: 199, (original description).

Chelydra serpentina, ELLIS and HENDERSON, 1913: 113-114, fig. 37, (general account and description. **Boulder Co.** — Boulder Valley; Baseline Reservoir, SE Boulder; White Rocks, nr. Valmont. **Weld Co.** — Greeley. **Yuma Co.** — Wray). 1915: 263, (additional records; tributaries of Boulder Creek, nr. Boulder, **Boulder Co.**). STEJNEGER and BARBOUR, 1917: 113, part, (range). 1923: 129, part, (range). 1933: 140, part, (range). 1939: 157, part, (range). COCKERELL, 1927: 105, (list; range). RODECK, 1948: 54, abstract, (general distribution). 1950: 3-4, pl. 2, (brief account and description).

Chelydra serpentina serpentina, STEJNEGER and BARBOUR, 1943: 195-196, (range). CARR, 1952: 61-69, pl. 8, figs. 8, 9, map 2, (general account and description). SCHMIDT, 1953: 86, (range). STEBBINS, 1954: 164-166, 192, pls. 23, 29 map, (general account and description).

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Boulder Co. — White Rocks, E Boulder (1), 258; Sawhill Farm, 1 mi. E Valmont (1), 1919. **Las Animas Co.** — Hoehne (1), 11744. **Weld Co.** — 6 mi. E Platteville, Milton Reservoir (1), 11737. **Yuma Co.** — Wray (1), 259; Bonny Reservoir (1), 11738.

Family KINOSTERNIDAE Agassiz

Genus KINOSTERNON Spix

Kinosternon flavescens flavescens (Agassiz)

Common name: Yellow Mud Turtle.

Type: Two syntypes, Harvard Univ., Mus. Comp. Zool. 1918, Rio Grande, Texas, and 1919, Red River, Arkansas; Capt. Marcy, collector. See Barbour and Loveridge, 1946: 173.

Type locality: Agassiz (1857: 430) based his original description on a series of specimens from "Texas, near San Antonio, and upon the lower Rio Grande; others on the Red River, Arkansas; and others at Camp Yuma, on the Gila River, . . ." Some of these specimens were in the U. S. Nat'l. Mus. but apparently have been lost. Smith and Taylor (1950a: 362), unaware of the existence of the Harvard University syntypes, restricted the type locality to Waco, McLennon Co, Texas, a locality not mentioned by Agassiz in his original description. Under the circumstances Smith and Taylor's restrictions of the type locality is inadmissible, and the next revisor of the genus should select a lectotype and type locality.

Range: Extreme eastern edge of Colorado in permanent bodies of water.

Published accounts and records:

Platythyra flavescens AGASSIZ, 1857: 430, pl. 5, figs. 12-15, (original description).

Kinosternon flavescens, ELLIS and HENDERSON, 1913: 114-115, (description. **Baca Co.**; **Prowers Co.** — Lamar). STEJNEGER and BARBOUR, 1917: 111-112, part, (range). 1923: 127, part, (range). 1933: 138-139, part, (range). 1939: 155, part, (range). 1947: 193-194, part, (range). COCKERELL, 1927: 105, (list; description. **Prowers Co.** — Lamar).

Kinosternon flavescens flavescens, RODECK, 1948: 54, abstract, (range). 1950: 3, pl. 1, (description. **Baca Co.**; **Prowers Co.** — Lamar; **Yuma Co.** — Wray). MASLIN, 1950: 94-95, (description, algal symbiosis. **Yuma Co.** — Wray). CARR, 1952: 94-99, p. 15, map 5, (general account and description). SCHMIDT, 1953: 89, (range). STEBBINS, 1954: 167, 194, pl. 28 map, (general account and description).

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Prowers Co. — Lamar (1), 11739. **Yuma Co.** — Vicinity of Wray (29), 3402-16, 6039-40, 11257, 11697-707; 5 mi. E Wray (1), 10777.

Family EMYIDAE Gray

Genus CHRYSSEMYS Gray

Chrysemys picta belli (Gray)

Common name: Western Painted Turtle.

Type: Lost; originally in British Museum. See Smith and Taylor (1950b: 34).

Type locality: Manhattan, Riley Co., Kansas. Designated by Smith and Taylor, 1950a: 358.

Range: Eastern plains of Colorado in permanent bodies of water, and in the Animas River of Archuleta Co.

Published accounts and records:

Emys bellii GRAY, 1831: 31, (original description).

Chrysemys belli, ELLIS and HENDERSON, 1913, (general account and description. **Boulder Co.** — Boulder; E Boulder; Lakes E Boulder. **Denver Co.** — Denver. **Douglas Co.** — Castle Rock. **Larimer Co.** — Cache la Poudre River. **Morgan Co.** — Fort Morgan. **Weld Co.** — Platte River at Greeley; Lakes nr. Greeley; Platteville. **Yuma Co.** — Wray). 1915: 263 (**Weld Co.** — Greeley. **Yuma Co.** — Wray).

Chrysemys marginata belli, STEJNEGER and BARBOUR, 1917: 118, (range). 1923: 134, (range). COCKERELL, 1927: 105, (range; description).

Chrysemys bellii bellii, BURT and BURT, 1929: 460, (field notes. **Kit Carson Co.** — 2 mi. E Flagler). STEJNEGER and BARBOUR, 1933: 146, (range). 1939: 162, (range). 1943: 202, (range). BURT, 1935: 321, (distribution; habitat. **Baca Co.** — 3 mi. NE Bartlett).

Chrysemys picta bellii, BISHOP and SCHMIDT, 1931: 137, (revision; description; range). RODECK, 1948: 54, abstract, (range). CARR, 1952: 219-224, pl. 41, map 16, (general discussion and description). SCHMIDT, 1953: 100, (range). STEBBINS, 1954: 174-177, 192, pls. 25, 28 map, (general account and description).

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Adams Co. — 15 mi. NE Byers, Mud Creek (2), 11685-6. **Baca Co.** — Two Buttes Reservoir (2), 11255, 11774. **Boulder Co.** — Boulder (3), 125, 1052, 11684; Lake E Boulder (1), 739; On highway S Eldorado Springs (1), 1174; 9 mi. E Boulder (1), 11727; Boulder Creek, 6 mi. N Longmont (1), 1917. **Denver Co.** — Denver (2), 11742-3. **Douglas Co.** — Castle Rock (1), 261. **La Plata Co.** — 5 mi. N Durango, Animas River Drainage (1), 10778. **Morgan Co.** — Fort Morgan (2), 263, 738. **Weld Co.** — 5 mi. W Fort Lupton (1), 3467. **Yuma Co.** — vicinity of Wray (2), 260, 11256.

Genus TERRAPENE Merrem

Terrapene ornata ornata (Agassiz)

Common name: Ornate Box Turtle.

Type: Four syntypes, U. S. Nat'l. Mus. 7541, 7542, 7547(?), Harvard Univ., Mus. Comp. Zool. 1536. See Smith and Taylor, 1950b: 36.

Type locality: Council Bluffs, Pottawatomie Co., Iowa. Restricted by Smith and Taylor, 1950a: 358.

Range: Eastern plains of Colorado, predominantly in sandy areas.

Published accounts and records:

Cistudo ornata AGASSIZ, 1857: 445, pl. 3, figs. 12-13, (original description).

Terrapene ornata, ELLIS and HENDERSON, 1913: 117, (description. **Boulder Co.** — nr. Boulder. **Cheyenne Co.** — Kit Carson. **Denver Co.** — Denver. **Larimer Co.** — Box Elder. **Morgan**

Co. — Fort Morgan. Prowers Co. — Lamar. Yuma Co. — Wray). STEJNEGER and BARBOUR, 1917: 116, part, (range). 1923: 131, part, (range). 1933: 143, part, (range). 1939: 159, part, (range). 1943: 198-199, part, (range). COCKERELL, 1927: 104, (range). BURT, 1935: 320, (Prowers Co. — 3 mi. S Holly). MARR, 1944, 489, (notes on juveniles. Prowers and Yuma Cos.). RODECK, 1948: 54, abstract, (range). 1949: 32-34, (behavior; attempt to mate with *Terrapene carolina triunguis*. Baca Co. — N Campo; Sand dunes along Cimarron River. Crowley Co.). 1950: 4-5, pl. 3, (description; habits; range). CARR, 1952: 156-162, pl. 30, map 12, (general account and description). *Terrapene ornata ornata*, SCHMIDT, 1953: 95, (range). STEBBINS, 1954: 171-174, 195, pls. 24B, 29 map, (description. Weld Co. Wiggins).

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Baca Co. — 24 mi. S Pritchett (1), 3137; 12 mi. SW Pritchett (1), 11709; Below Two Buttes Reservoir (1), 11708. Bent Co. — 8 mi. SE Caddoa (1), 684. Boulder Co. — Boulder (2), 711, 11750. Cheyenne Co. — 5 mi. NW Kit Carson (1), 11746. Denver Co. — Denver (1), 280. El Paso Co. — Colorado Springs (1), 11728. Kiowa Co. — nr. Arlington (1), 2561; 10 mi. E Eads (1), 5155. Kit Carson Co. — 6.5 mi. S Stratton (1), 1373. Larimer Co. — Fort Collins 5,000' (1), 2558. Logan Co. — 15 mi. W. Sterling (1), 2560. Prowers Co. — 3 mi. S Lamar (6), 11710-1, 11729-32. Pueblo Co. — Pueblo (1), 11751. Washington Co. — 6 mi. W Akron (1), 11712; 10 mi. W Akron (3), 11713-5; 20 mi. S Otis (3), 11747-9. Weld Co. — 3 mi. E Platteville (1), 5589; 5 mi. E Platteville (1), 117450; 10 mi. NE Roggen (1), 2559. Yuma Co. — Wray (13), 262, 502, 2458, 11688-96, 11740; 9.5 mi. N Wray (4), 3375-8; 5 mi. N Wray (23), 3379-3401; Bonny Reservoir (1), 11716.

Family TRIONYCHIDAE Gray

Genus TRIONYX Geoffroy St. Hilaire

Trionyx ferox hartwegi (Conant and Goin)

Common name: Western Spiny Softshell Turtle.

Type: Holotype, Univ. of Michigan, Mus. Zool. 95365, ad. ♂; Robert Young, collector, end of May, 1954.

Type locality: Wichita, Sedgwick Co., Kansas.

Range: Eastern plains of Colorado in permanent rivers and streams.

Published accounts and records:

Amyda spinifera hartwegi CONANT and GOIN, 1948: 1-11, map 1, (original description).

Trionyx spiniferus, ELLIS and HENDERSON, 1913: 112, (description. South Platte River.

Larimer Co. — Cache la Poudre River. Weld Co. — Evans; Greeley). RODECK, 1948: 54, abstract, (range). 1950: 708, pls. 5, 6, (description; habits. Boulder Co. — Boulder Creek, E Boulder. Otero Co. — Purgatoire River at Higbee. Prowers Co. — Arkansas River at Lamar. Weld Co. — Poudre River nr. Greeley).

Amyda spinifera, STEJNEGER and BARBOUR, 1917: 125, part, (range). 1923: 141, part, (range). 1933: 153, part, (range). COCKERELL, 1927: 105, (range).

Amyda spinifera spinifera, STEJNEGER and BARBOUR, 1939: 172, part, (range). 1943: 213, part, (range).

Amyda ferox hartwegi, CARR, 1952: 433-435, pl. 78, map 22, (general account and description).

Trionyx ferox hartwegi, SCHMIDT, 1953: 110, (range). STEBBINS, 1954: 188-190, 195, pls. 26B, 29 map, (general account and description. **Logan Co.** — 8mi. NE Sterling).

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Boulder Co. — 6 mi. S and 1 mi. E Longmont, Boulder Creek (1), 1916. **Morgan Co.** — Platt^e River nr. Fort Morgan (1), 3142. **Otero Co.** — Purgatoire River at Higbee (1), 1180. **Yuma Co.** — Bonny Dam, Republican River (1), 10856.

Subclass LEPIDOSAURIA Romer

Order SQUAMATA Oppel

Suborder SAURIA Macartney

Family IGUANIDAE Gray

Genus CROTAPHYTUS Holbrook

Crotaphytus collaris auriceps Fitch and Tanner

Common name: Yellow-headed Collared Lizard.

Type: Holotype, Univ. Kan. Mus. Nat. Hist. 29934 ad. ♂ H. S. Fitch, collector, 28 June 1950.

Type locality: 3½ mi. NNE Dewey, W. side Colorado River, Grand Co., Utah.

Range: Western edge of Colorado from Garfield Co. south below 7,000'.

Published accounts and records:

Crotaphytus collaris auriceps FITCH and TANNER, 1951: 553-557, fig. 1, 2 maps, (original description. **Montezuma Co.**—Mesa Verde). SCHMIDT, 1953: 116, (range). STEBBINS, 1954: 227-229, 310, pls. 34, 49 map, (general account and description).

Crotaphytus collaris baileyi, COCKERELL, 1910: 131, (list. **Garfield Co.** — Rifle Gap. 1927: 107, part, (list. **Delta Co.** — Delta. **Garfield Co.** — Rifle Gap. **Mesa Co.** — Grand Junction). CARY, 1911: 25, (**Montezuma Co.** — McElmo; McElmo and Montezuma valleys to 6 mi. N Cortez. **Montrose Co.** — West Paradox Valley, western rim 6,500'; Salt Canyon and other branches of Dolores River; San Miguel region E to Coventry; Coventry). ELLIS and HENDERSON, 1913: 66-67, part, (description. **Delta Co.** — Delta. **Garfield Co.** — Rifle Gap. **Mesa Co.** — Grand Junction). 1915: 259, fig. 5, (**Montezuma Co.** — Mancos Spring, 5 mi. W La Plata — Montezuma Co. line. **Montrose Co.** — Paradox Valley; Naturita; Basin Creek). SMITH, 1946: 170-172, pl. 33, figs. 49, 50, 56, 69, map 8, part, (general account and description). MASLIN, 1947b: 8, (description). 1950b: 89, (**Garfield Co.** — 12 mi. N Rifle; 5 mi. E Carbonero, Douglas Pass Road; Rifle Gap. **Mesa Co.** — 5 mi. S Fruita).

Crotaphytus collaris, BURT, 1928: 15, part, (synonymizes *baileyi*; discussion of diagnostic characters. **Archuleta**, **Montezuma**, and **Montrose** cos.). 1933a: 229, (**Montrose Co.** —

10 mi. SW Delta). BARRY, 1932c: 21, fig., part, (food habits, metachrosis, geographical color variation; etc. **Montezuma Co.** — Mesa Verde Nat'l. Park; McElmo Canyon). FRANKE, 1932: 39, (key to Mesa Verde lizards). WATSON, 1939: 12-15, 1 fig., (habits; food; behavior, ecology; hibernation; diurnal activity; etc.; in vicinity of Mesa Verde National Park).

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Delta Co. — Delta (3), 9668-70. **Garfield Co.** — Rifle Gap (1), 55; 8 mi. N Rifle (4), 4079-82; 5 mi. W Rifle (1), 9667; Oil Shale Plant, nr. Rifle (1), 5190. **La Plata Co.** — nr. Bondad (4), 7264-7. **Mesa Co.** — vicinity of Fruita (5), 1001, 2688; vicinity of Colorado Nat'l. Mon. (40), 2689-2702, 2703-5, 9340-50, 10027-9, 10407-15; 17 mi. N Loma, Douglas Pass Road (2), 4077-8; 10 mi. N Grand Junction (1), 7174; 15 mi. SE Gateway, Dolores River (1), 6583. **Montezuma Co.** — Mesa Verde Nat'l. Park (2), 4462-3; 10 mi. SW Towaoc (3), 9351-3; 5 mi. SW Towaoc (1), 9354; Mancos River Trading Post, 23 mi. SW Towaoc (3), 4483-5; Four Corners, SW San Juan River (3), 4486-7, 6481; Mancos Canyon, SE Jackson's Butte (19), 4464-82; 5 mi. W Cortez, McElmo Creek (3), 4459-61; 30 mi. W Cortez, mouth of Yellow Jacket Canyon (7), 11331-7; 3 mi. S and 3 mi. W Yellow Jacket (1), 11338. **Montrose Co.** — Naturita (3), 444, 445; San Miguel River, 24 mi. E Naturita (1), 1386; 8 mi. N Olathe (1), 5191. **San Miguel Co.** — Disappointment Creek Canyon, 1 mi. above Dolores River (1), 1333; Hamm's Canyon, 10 mi. NW Gypsum Gap (3), 4448-50; vicinity of Gypsum Gap (8), 4451-8.

***Crotaphytus collaris collaris* (Say)**

Common name: Eastern Collard Lizard.

Type: Unknown.

Type locality: Verdigris River near its union with the Arkansas River, Oklahoma.

Range: Southeastern Colorado below 6,000'.

Published accounts and records:

Agama collaris SAY, 1823(2): 252, (original description).

Crotaphytus collaris, BAIRD, 1859: 17, (range). YARROW, 1875: 566, (list). CARY, 1911: 21, (list; range: Great Plains; **Baca Co.**). BURT, 1928: 15, (synonymizes *C. baileyi*; discussion of diagnostic characters. **Huerfano Co.**). BARRY, 1932c: 22, part, (geographic color variation. **Fremont Co.** — Canyon City).

Crotaphytus collaris baileyi, ELLIS and HENDERSON, 1913: 66-67, part, (description). **Las Animas Co.** — Trinidad). COCKERELL, 1927: 107, part, (list. **Las Animas Co.** — Trinidad).

Crotaphytus collaris collaris, SMITH, 1946: 168-170, p. 32, fig. 71, map 8, (general account and description). MASLIN, 1947b: 8, (description; habitat). SCHMIDT, 1953: 116, (range). STEBBINS, 1954: 227-229, 310, pls. 34, 49 map, (general account and description).

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Baca Co. — below Two Buttes Reservoir (5), 11339-43; 7 mi. SE Uteville, East Carrizo Creek (5), 9678-82. **Las Animas Co.** — 2 mi. S Potato Butte, Cottonwood Creek, Dodge Ranch (8), 7560-2, 9674-7, 11345; Chacuaco Creek, W Tobe (1), 1292; 12 mi. E Model (5), 4970-4; 19 mi. E Model, Purgatoire River (1), 4975; 15 mi. S Kim, Mesa de Maya, Maes Ranch (1), 4976; 30 mi. ENE Trinidad, Trinchera Canyon (5), 10030-4; Alkali Creek at Hwy. 160 (1), 11344. **Pueblo Co.** — foothills of Greenhorn Range, NE Stone City (1), 2622; 1 mi. E Greenhorn (1), 4969.

Crotaphytus wislizeni wislizeni Baird and Girard

Common name: Long-nosed Leopard Lizard.

Type: Holotype by monotypy, U. S. Nat'l. Mus. 2770; Dr. Wislizenus, collector. Number provided by Cope, 1900: 258.

Type locality: Near Santa Fe, Sante Fe Co., New Mexico.

Range: Extreme western Colorado below 5,000'. Known from the Four Corners area and the vicinity of Colorado Nat'l. Monument, Mesa Co.

Published accounts and records:

Crotaphytus wislizenii BAIRD and GIRARD, 1852a: 340-341, pl. 3. (original description). 1852b: 69 (intended original description). YARROW, 1882: 53, (record: Colorado?). COPE, 1900: 258, (list; type, received of H. Mollhausen, probably not from Colorado). BARRY, 1933b: 99, (Montezuma Co. — $\frac{1}{2}$ mi. E and $\frac{1}{4}$ mi. N Four Corners). STEJNEGER and BARBOUR, 1939: 55, part, (range). 1943: 69, part, (range).

Gambelia wislizenii wislizenii, SMITH, 1946: 159-164, pl. 30, figs. 57, 68, map 7, (general account and description). MASLIN, 1947b: 7, (description; habitat). 1950b: 89-90, (description; habitat; range extension: Mesa Co. — 7 mi. SSE Fruita).

Crotaphytus wislizeni wislizeni, STEBBINS, 1954: 229-232, 310, pls. 34, 49 map, (general account and description).

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Mesa Co. — 7 mi. SSE Fruita (6), 2706, 9356, 9683-5, 10416. Montezuma Co. — Four Corners, SW San Juan River (2), 4491-2; 21 mi. SW Towaoc (1), 9357.

Genus **HOLBROOKIA** Girard**Holbrookia maculata approximans** Baird

Common name: Speckled Earless Lizard.

Type: Lost.

Type locality: Upper Rio Grande River. Designated by Schmidt, 1953: 121.

Range: Extreme southwestern Colorado.

Published accounts and records:

Holbrookia approximans BAIRD, 1858: 253-254, (original description).

Holbrookia maculata approximans, BARRY, 1932b: 103, (record: Montezuma Co. — S. Ute Indian Reservation, nr, junction State Hwy. 666 and Mancos River). 1932d: 38, (Montezuma Co. — Mesa Verde Nat'l. Park). 1933b: 99, (Montezuma Co. — St. Hwy. 666 at junction with Mancos River; St. Hwy. 666, 2 mi. N New Mexico State Line). FRANKE, 1932: 39, (key to Mesa Verde lizards). SMITH, 1946: 119-122, pl. 17, map 4, (general account and description). MASLIN, 1947b: 7, (description). SCHMIDT, 1953: 121, (range). STEBBINS, 1954: 216-218, 310-312, pls. 32, 50 map, (general account and description).

Holbrookia maculata maculata, BURT, 1933a: 232-233, (distribution; subspecific status).

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Montezuma Co. — 23 mi. SW Towaoc (9), 4493-7; 20 mi. SW Towaoc (3), 9426-8; 10 mi. SW Towaoc (9), 9417-25; 3 mi. NW Jackson's Butte (1), 4508.

Holbrookia maculata maculata Girard

Common name: Lesser Earless Lizard.

Type: Unknown; two syntypes, one male and one female; William Tappan, collector, 28 June, 1848.

Type locality: "Opposite Grand Island, Platte River. Here restricted to the area in the vicinity of Old Fort Kearny, 40°40' N — 98°58' W, buffalo County, Nebraska. Elevation 2,200'." Ralph W. Axtell (*in lit.*).

Range: Eastern plains of Colorado below 6,500'.

Published accounts and records:

Holbrookia maculata GIRARD, 1851: 200-202 (original description). BAIRD and GIRARD, 1852a: 342-344, pl. 6, figs. 1-3, (Valley of the Platte River?). CARY, 1911: 21, (list; range). ELLIS and HENDERSON, 1913: 70-71, figs. 7-9, (description). **Adams Co.** — Barr. **Boulder Co.** — Boulder. **Denver Co.** — Denver. **Las Animas Co.** — Trinidad. **Otero Co.** — La Junta. **Weld Co.** — 8 mi. E Platteville. **Yuma Co.** — Wray). 1915: 260, (additional records: **Adams Co.** — Barr. **Weld Co.** — Greeley). COCKERELL, 1927: 107, (list; range).

Holbrookia maculata maculata, YARROW, 1875: 563, (**Denver Co.** — Denver. **El Paso Co.** — Colorado Springs). 1882: 49, (records). COPE, 1900: 297, (list. **El Paso Co.** — Colorado Springs). STONE, 1911: 225, (list. **Logan Co.** — Sterling). STEJNEGER and BARBOUR, 1917: 48 (range). 1923: 48, (range). 1933: 54, (range). 1939: 59, (range). 1943: 74, (range). SCHMIDT, 1922: 719-720, (review of genus; restriction of type locality; range). 1953: 120, (range). SMITH, 1946: 115-119, pl. 16, fig. 63, map 4, (general account and description). MASLIN, 1947b: 7, (description; habitat). STEBBINS, 1954: 216-218, 310-312, pls. 32, 50 map, (general account and description).

Holbrookia maculata propinqua, YARROW, 1875: 564, (record: **Lake Co.** — Twin Lakes, doubtful).

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Adams Co. — 7 mi. NE Byers, Bitzer Ranch (2), 11348-9. **Baca Co.** — Horse Creek, 1 mi. S Buckeye (1), 1275; nr. Campo (1), 1281; 11 mi. S Pritchett (1), 7564; Cimarron River, S of Lamport (7), 3147-53. **Boulder Co.** — Boulder (1), 216. **Cheyenne Co.** — 13 mi. SW Kit Carson (14), 1268-71; 11 mi. N Kit Carson (2), 3145-6. **Denver Co.** — Denver (4), 214, 10042-4. **Elbert Co.** — 6 mi. N Riverbend (1), 5949. **El Paso Co.** — 15 mi. SE Colorado Springs (2), 2619-20. **Kiowa Co.** — 1 mi. N Eads (1), 9693; 4 mi. E Eads (3), 9694-6; 10 mi. E Eads (1), 4977. **Las Animas Co.** — 28 mi. NE Trinidad (1), 10045; San Francisco Creek, 3 mi. S and 12 mi. E Trinidad (1), 10449. **Logan Co.** — 5 mi. SW Sterling (8), 4047-54; nr. Sterling (1), 9413. **Morgan Co.** — N Snyder (2), 1067-8; 14 mi. SW Wiggins, Bijou Creek (1), 7176; 7 mi. S and 1 mi. E Fort Morgan (1), 11784. **Otero Co.** — La Junta (3), 215. **Phillips Co.** — 11 mi. S Holyoke (1), 6735. **Pueblo Co.** — nr. Pueblo (2), 2210, 2621. **Sedgwick Co.** — 2.5 mi. SW Ovid, Parker Ranch (7), 4055-61; 2 mi. NW Dorsey, (11), 6826-36. **Washington Co.** — 6 mi. S Otis (1), 6736; 20 mi. S and 4 mi. W Otis, Mathias Ranch (1), 6737. **Weld Co.** — Milton Reservoir, E

of Platteville (11), 217, 2827-34, 3430, 5561; vicinity of Roggen (23), 2208-9, 5608-10, 6881-2, 9410-2, 10036-41, 10436-42, 521; Two Mile Creek, 22 mi. N Stoneham (1), 2195; Horsetail Creek, 15 mi. N Stoneham (2), 2196-7; 4 mi. E Gill (5), 2198-2202; sandhills at Nunn (1), 2203; 15 mi. ESE Greeley (1), 2204; 10 mi. N Roggen (3), 2205-7; nr. Harney (1), 7175. **Yuma Co.** — nr. Wray (3), 9691-2, 10448; abt. 10 mi. N Wray (97), 3294-3338, 6883-6928, 9416, 10443-7; 25 mi. N Wray (2), 9414-5; N side Bonny Reservoir (1), 11350.

Genus SCELOPORUS Wiegmann

Sceloporus graciosus graciosus Baird and Girard

Common name: Great Basin Sagebrush Lizard.

Type: Syntypes, U. S. Nat'l. Mus. 2877 (four specimens); Capt. Stansbury and Lt. Gunnison, collectors. Number provided by Doris M. Cochran (*in lit.*).

Type locality: Valley of the Great Salt Lake, Utah.

Range: Western Colorado below 8,000'.

Published accounts and records:

Sceloporus graciosus BAIRD and GIRARD, 1852a: 69, (original description). 1852b: 346-347, pl. 5, figs. 1-3, (description). CARY, 1911: 24, 26, (**Garfield Co.** — Rifle. **Mesa Co.** — Lower Grande Valley, N Mack. **Moffat Co.** — Bear River Bluffs, nr. Maybell; 20 mi. W Bagg's Crossing, Snake River; Escalante Hills. **Montezuma Co.** — McElmo. **Montrose Co.** — Coventry. **Rio Blanco Co.** — Valleys of Texas and Evacuation Creeks). STONE, 1911: 228, (list. **Garfield Co.** — Iron Mountain, 6,500'). ELLIS and HENDERSON, 1913: 69-70, (description. Localities of Cary, 1911). 1915: 260, (**Montrose Co.** — Bedrock. **San Miguel Co.** — Howard). COCKERELL, 1927: 107, (list).

Sceloporus graciosus graciosus, STEJNEGER and BARBOUR, 1923: 55, (range). 1933: 61, (range). 1939: 66, (range). 1943: 77, (range). BARRY, 1932a: 8-9, 1 fig., (brief description; habitat; Mesa Verde National Park). FRANKE, 1932: 39, (key to lizards of Mesa Verde). BURT, 1933a: 235-236, (comparison with *S. u. elongatus*; distribution. **Montezuma Co.** — 2 mi. NW intersection Hwy. 666 and N. M. state line; Mancos River just N of N. M. state line, Spruce Tree Canyon, Mesa Verde Nat. Park). WOODBURY and WOODBURY, 1945: 178, (extensive account of breeding; general account of habitat and feeding; range). SMITH, 1946: 248-251, pl. 60, fig. 44, map 16, (general account and description). MASLIN, 1947b: 10, (description; habitat; range). 1950a: 82, abstract, (distribution). SCHMIDT, 1953: 129, (range). STEBBINS, 1954: 244-246, 314, pl. 37, 52 map, (general account and description).

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Delta Co. — 4 mi. NW Cedaredge, Cedar Breaks (8), 7184-91. **Dolores Co.** — 7 mi. ESE Cahone, Dolores River (1), 11360. **Garfield Co.** — 5 mi. N Rifle (1), 2725; 8 mi. N Rifle (1), 4165; 3 mi. SE Glenwood Springs, Lookout Mt. Road (2), 4166-7; 4 mi. W Glenwood Springs (2), 9705-6. **La Plata Co.** — 3 mi. N Bondad (2), 7207-8. **Mesa Co.** — vicinity of Colorado Nat'l. Mon. (10), 3176-7, 10452-9; 6 mi. S Fruita (13), 2708-20; 1 mi. S Colorado Nat'l. Mon. (1), 2707; Carson Hole Road, Hwy. 141 (2), 5192-3; nr. DeBeque, 3.4 mi. from Plateau Creek (6), 5194-9; Gunnison River at Kahnah Creek (1), 5200. **Moffat Co.** — Dinosaur Nat'l. Mon. — vicinity of Castle Park (123), 3673-6, 3679-91, 3694, 3709-12, 5303-5413, 6 mi. W Hell's Canyon (2), 2259-60, Sand Canyon (1), 3672, Red Rock Canyon (21), 3692-3, 5398-5413, 3677-8,

vicinity of Bull Canyon (14), 3695-3705, 3707-8, foot of Crow's Nest (11), 5378-88, Echo Park (1), 11361; 7 mi. SE Baggs (3), 2256-8; W Maybell, 6,000' (4), 2277-80; Axial (11), 4141-52; 4 mi. N Craig (3), 6811-3. **Montezuma Co.** — Mesa Verde Nat'l. Park (37), 4539-72, 5592, 9431-2; 10 mi. NW McPhee, across Dolores River from Lone Dome (3), 11362-4; 6 mi. NW McPhee, Dolores River at Beaver Creek (1), 11365; 30 mi. W Cortez, mouth of Yellow Jacket Canyon (4), 11366-9; Yellow Jacket (1), 10060; 23 mi. SW Towaoc, Mancos River Road (15), 4575-89; 20 mi. SW Towaoc (2), 4574, 9435; 10 mi. SW Towaoc (2), 9433-4; 1 mi. W Mancos Trading Post, Mancos River (1), 10815; Four Corners, SW San Juan River (1), 4590; Hartman Gulch, 1 mi. SW Cortez (9), 1314-9; 11 mi. S and 2.5 mi. W Dove Creek (3), 1329-31; 5 mi. W Cortez, McElmo Canyon (5), 4534-8; Mancos Canyon, SE Jackson's Butte (1), 4573. **Pitkin Co.** — 7 mi. S Carbondale, 7,500' (4), 11370-3. **Rio Blanco Co.** — Meeker (1), 49; 19 mi. NW Rio Blanco (2), 1081-2; 2 mi. S Rangely (3), 4152-4; 6 mi. S Rangely (2), 4155-6; 11 mi. S Rangely (8), 4157-64. **Routt Co.** — 2 mi. WNW Steamboat Springs (1), 9704. **San Miguel Co.** — 10 mi. NW Gypsum Gap, Hamm's Canyon (1), 4511; vicinity of Gypsum Gap (22), 4512-33.

Sceloporus magister bimaculosis Phelan and Brattstrom

Common name: Twin-spotted Spiny Lizard.

Type: Holotype, University of California at Los Angeles 3816 ad. ♂; R. G. Zweifel and K. S. Norris, collectors, 24 August 1948.

Type locality: 6.6 mi. E San Antonio, Socorro Co., New Mexico.

Range: Extreme southwestern Colorado in Montezuma Co.

Published accounts and records:

Sceloporus magister bimaculosus PHELAN and BRATTSTROM, 1955: 9-10, figs. 1, 3, (original description).

Sceloporus magister, BARRY, 1932b: 103, (record: nr. junction of St. Hwy. 666 and Mancos River, **Montezuma Co.**). 1933b: 100, (list).

Sceloporus magister magister, SMITH, 1946: 211-214, pl. 47, map 14, part, (general account and description). MASLIN, 1947b: 8, (description; habitat, range). 1950a: 82, abstract, (range). SCHMIDT: 125-126, (range). STEBBINS, 1954: 238-239, 316, pls. 36, 52 map, (general account and description).

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Montezuma Co. — NE of Four Corners, bluffs on N. side San Juan River (1), 4591; Mancos River Trading Post, 23 mi. SW Towaoc (3), 4592-4; Four Corners, SW San Juan River (8), 4593-4600; 30 mi. W Cortez, mouth of Yellow Jacket Canyon (13), 11374-86.

Sceloporus undulatus elongatus Stejneger

Common name: Northern Plateau Lizard.

Type: Holotype, U. S. Nat'l. Mus. 15858; C. Hart Merriam and V. Bailey, collectors, 23 Sept. 1889.

Type locality: Mohave, Painted Desert, Coconino Co., Arizona.

Range: Western Colorado below 7,000'.

Published accounts and records:

- Sceloporus elongatus* STEJNEGER, 1890: 111-112, (original description). CARY, 1911: 26, 39 (list. **Montezuma Co.** — Plateau Creek; McElmo. **Rio Blanco Co.** — Escalante Hills, 7,000'; Meeker; Rangely. **Routt and Garfield cos.** — N. to Bear River. BURNETT 1926: 3, part, (**Montezuma Co.** — Cortez). BARRY, 1932a: 8, 1 fig., (brief description and habitat in Mesa Verde, **Montezuma Co.**). FRANKE, 1932: 39, (key to Mesa Verde lizards).
- Sceloporus undulatus*, COCKERELL, 1910: 131, (**Rio Blanco Co.** — Meeker; 4 mi. W Meeker).
- Sceloporus consobrinus*, CARY, 1911: 26, part, (**Moffat Co.** — Douglas Spring, Escalante Hills). ELLIS and HENDERSON. 1913: 68-69, part. (description. **Eagle Co.** — Basalt. **Garfield Co.** — Little Fossil Mountain, nr. Rifle. **La Plata Co.** — 2 mi. E Durango. **Mesa Co.** — Grand Junction. **Rio Blanco Co.** — 4 mi. W Meeker). 1915: 259-260, part, (parasitism by mites. **Montrose Co.** — Bedrock, Dolores River; Coventry, 6,800'. **San Miguel Co.** — Gypsum Creek; Tabegauche Creek). BURNETT, 1926: 3, part, (**Montezuma Co.** — Cortez).
- Sceloporus consobrinus consobrinus*, STEJNEGER and BARBOUR, 1923: 54, part, (range). 1933: 60, part, (range).
- Sceloporus thayerii*, COCKERELL, 1927: 107, part, (range).
- Sceloporus undulatus elongatus*, BURR, 1933a: 238-243, (relationship to other subspecies. **Montezuma Co.** — Four Corners; Mancos River Valley, just across New Mexico state line; Soda Tip-off. In **Montrose Co.** — 10 mi. SW Delta; 12 mi. SW Delta; 13 mi. SW Delta). SMITH, 1938: 14, part, (mentioned). 1946: 220-222, pl. 50, map 15, part, (general account and description). STEJNEGER and BARBOUR, 1943: 82, part, (range). MASLIN, 1947b: 8-9, part, (description; habitat; range). 1950a: 81, abstract, (range). SCHMIDT, 1953: 127, part, (range). STEBBINS, 1954: 243-244, 318, pls. 37, 53 map, (general account and description).

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Garfield Co. — Little Fossil Mt., nr. Rifle (1), 209; 8 mi. N Rifle (1), 4254; 3 mi. SE Glenwood Springs, Lookout Mt. Road (1), 4255; 2 mi. N Rifle Creek (1), 5202; 5 mi. W Rifle (1), 9712. **Gunnison Co.** — ½ mi. E Sapinero (4), 4601-4. **La Plata Co.** — 2 mi. E Durango (1), 210; vicinity of Bondad (22), 7289-7306, 7309-10, 7404-5; 8 mi. NW Hesperus (1), 11387; 5 mi. WNW Hesperus (1), 11388. **Mesa Co.** — vicinity of Colorado Nat'l. Mon. (69), 2726-47, 3178-9, 6988, 9336-44, 9711, 10461-94; 3 mi. W Glade Park (2), 9709-10; 10 mi. SE Gateway, Dolores River (1), 1041; 7 mi. SE Gateway, Dolores River (1), 1362; 15 mi. SE Gateway, Dolores River (8), 6622-9; 1 mi. SE Gateway (1), 6621; 2 mi. SW Whitewater (2), 1365-6; nr. DeBeque, 5.1 mi. from Plateau Creek (1), 5201; Carson Hole on Hwy. 141 (1), 5203; 10 mi. N Grand Junction (3), 7192-3, 7202; 9.8 mi. W Grand Valley (4), 10787-90. **Moffat Co.** — Dinosaur Nat'l. Mon. — vicinity of Castle Park (45), 3715, 3718-20, 3724-9, 5419-53, Irish Canyon, 7,000' (4), 2212-5, 4.5 mi. E Ladore Canyon, Mt. Zenobia, 6,500' (2), 2216-7, 6 mi. W Hell's Canyon, 5,400' (2), 2221-2, Red Rock Canyon (15), 3716, 5455-68, Bull Canyon (3) 3721-3, foot of Crow's Nest (5), 5454-8; 6 mi. N Axial (25), 4168-92; Graystone, 12 mi. NW Vermillion Creek (3), 2218-20. **Montezuma Co.** — Mesa Verde Nat'l. Park (46), 4716-55, 5593-8; Hartman Gulch, 1 mi. SW Cortez (2), 1326-8; 5 mi. W Cortez, McElmo Creek (13), 4703-15; 30 mi. W Cortez, mouth of Yellow Jacket Canyon (67), 11404-70; 10 mi. SW Towaoc (1), 9449; 20 mi. SW Towaoc (4), 9450-3; 23 mi. SW Towaoc, Mancos River Trading Post (29), 4769-97; Four Corners, SW San Juan River (21), 4798-4818; Mancos Canyon, SE Jackson's Butte (13), 4756-68; 15 mi. NW Cortez, Yellow Jacket Canyon (1), 10791; 3 mi. S and 3 mi. W Yellow Jacket (9), 11394-402; 10 mi. NW McPhee, across Dolores River from Lone Dome (1), 11403. **Montrose Co.** — San

Miguel Canyon, 3 mi. N Uravan (7), 1348-54; Uncompahgre Plateau, 7 mi. NW Nucla (1), 1387; S rim Black Canyon of the Gunnison Nat'l. Mon. (5), 11389-93. **Rio Blanco Co.** — Meeker (1), 66; 4 mi. W Meeker (1), 208; 6 mi. NE Meeker (1), 1936; 2 mi. S Rangely (13), 4193-4205; 6 mi. S Rangely (5), 4206-10; 11 mi. S Rangely (43), 4111-53. **San Miguel Co.** — Gypsum Creek, trib. of Dolores River (2), 448; vicinity of Gypsum Gap (82), 4621-4702; 10 mi. NW Gypsum Gap, Hamm's Canyon (14), 4607-20; 12 mi. NW Gypsum Gap (2), 4605-6; Disappointment Creek, 1 mi. above Dolores River (1), 1334; Tabogauche Creek (1), 449.

Sceloporus undulatus erythrocheilus Maslin

Common name: Red-lipped Rock Lizard.

Type: Holotype, U. S. Nat'l. Mus. 137833 ad. ♂; T. P. Maslin and H. A. Fehlmann, collectors, 17 Sept. 1947.

Type locality: 19 mi. E Model, Purgatoire River, Las Animas Co., Colorado.

Range: Eastern foothills of Colorado and southeast, south of the Arkansas River to the southeastern corner of the state, and also the San Luis Valley.

Published accounts and records:

Sceloporus undulatus erythrocheilus Maslin, 1956: 291-294, (original description. **Alamosa, Baca, Bent, Boulder, Conejos, Costilla, Elbert, El Paso, Fremont, Huerfano, Larimer, Las Animas, Otero, and Pueblo** cos.).

Sceloporus undulatus, ELROD, 1895: 137, (**El Paso Co.** — Garden of the Gods).

Sceloporus elongatus, CARY, 1911: 26, (list. **Larimer Co.** — Arkins. Eastern Colorado). BURNETT, 1926: 3, part, (range).

Sceloporus consobrinus, CARY, 1911: 26, part, (**Huerfano Co.** — La Veta). ELLIS and HENDERSON, 1913: 68-69, figs. 10-11, part, (description. **Boulder Co.** — Boulder. **Douglas Co.** — Perry Park. **Larimer Co.** — Box Elder Creek, foothills NW Fort Collins. **Jefferson Co.** — Buffalo Park. **Las Animas Co.** — Trinidad; Ponia, nr. Trinidad). 1915: 259-260, part, (**Boulder Co.** — Boulder foothills above 6,000'). BURNETT, 1926: 3, part, (**NE Las Animas Co.**).

Sceloporus thayerii, COCKERELL, 1927: 107, part, (range).

Sceloporus consobrinus consobrinus, STEJNEGER and BARBOUR, 1923: 54, part, (range). 1933: 60, part, (range).

Sceloporus undulatus elongatus, SMITH, 1938: 14, 15, 16, (discussion of subspecific characters. **Baca Co.** — Skull Canyon. **Weld Co.** — Milton Reservoir). 1946: 220-222, pl. 50, map 15, part, (general account and description. **Weld Co.** — Milton Reservoir). STEJNEGER and BARBOUR, 1943: 82, part, (range). MASLIN, 1947: 8-9, part, (description; habitat; range). SCHMIDT, 1953: 127, part, (range).

Sceloporus undulatus tristichus, SMITH, 1938: 16, part, (discussion of subspecific characters. **Rio Grande Co.** — nr. Monte Vista, San Luis Valley). MASLIN, 1947b: 9-10, part, (description; habitat; range). 1950a: 82, abstract, (range). 1950b: 90, (range). STEBBINS, 1954: 243-244, 318, pl. 53 map, part, (general account and description).

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Alamosa Co. — Great Sand Dunes Nat'l. Mon. (4), 3939, 7222-3, 7464. **Baca Co.** — below Two Buttes Reservoir (23), 11471-93; 20 mi. S Pritchett (4), 2959-62; 24 mi. S Pritchett (2),

5159-60; 27 mi. S Pritchett, Sand Canyon, 4,000' (35), 2951-8, 2963-89; Skull Creek, SW part of County (1), 7224. **Bent Co.** — 10 mi. SW Las Animas (1), 5032. Boulder Co. — vicinity of Boulder (17), 211, 434, 2879-80, 5658-9, 7131, 7461-3, 10062, 10516-9, 10528, 11497; 10 mi. NW Boulder, Lefthand Canyon (4), 5657, 6818, 7211, 7460; 15 mi. NW Boulder, Lefthand Canyon (3), 10511-13; 6 mi. NW Boulder, Lee Hill Road (1), 6817; 9 mi. N Boulder (8), 7203-10; 7 mi. W Boulder (23), 10496-510, 10520-7; mouth of Sunshine Canyon (3), 10517-9; Royal Arch, nr. Boulder (1), 1042; vicinity of Lyons (11), 3431-3, 6814-6, 10514-5, 11494-6; 8 mi. W Lyons (1), 632; nr. Ward (1), 5656. **Cheyenne Co.** — just E Kit Carson (5), 3154-8. **Conejos Co.** — 14 mi. E Conejos, Rio Grande River (40), 3899-3938. **Costilla Co.** — 3.5 mi. S Blanco (2), 3940-1; vicinity of San Luis (24), 3942-64, 10063; nr. Garcia (1), 6989. **Douglas Co.** — 2½ mi. NW Franktown (5), 11498-502; 4 mi. NE Sedalia (8), 3905-4002. **Elbert Co.** — 2 mi. S Elbert, Peaceful Valley Ranch (10), 7212-21. **El Paso Co.** — 6 mi. N Colorado Springs, Pulpit Rock, 6,000' (1), 2229. **Fremont Co.** — Canyon City (2), 3180-1; 5 mi. SW Canyon City (17), 5660-76; 10 mi. E Canyon City (7), 5677-83; S end Salt Canyon, gypsum hills on W side Beaver Creek (11), 5684-94. **Huerfano Co.** — North La Veta Creek (2), 1301-2; 15 mi. E Walsenburg, Cuchara Canyon (3), 2231-3; 2 to 4 mi. E Farisita (10), 5965-74; Turkey Creek, 8 mi. N Gardner (4), 5983-6; ¼ mi. E Gardner Butte (3), 5988-90; 12 mi. N La Veta (3), 5991-3; Huerfano Butte, 8 mi. N Walsenburg (1), 7078; 20 mi. N Walsenburg (7), 5976-82. **Jefferson Co.** — 1 mi. N Morrison, Red Rocks Park (24), 10529-34, 10536-52; 15 mi. S Boulder (1), 10535. **Larimer Co.** — 5 mi. N Fort Collins (1), 2223; Pinyon Grove, N of Fort Collins (1), 9713; 13½ mi. NW Fort Collins (2), 11503-4; 10 mi. NW Fort Collins (1), 11505; 6 mi. SW Fort Collins (1), 2224; 4 mi. W Loveland (5), 7197-7201; 2 mi. NW Loveland (1), 2552; 7 mi. N Loveland (1), 10061; 6 mi. NW Loveland (1), 10495; 8 mi. SE Virginia Dale (2), 5217-8; Box Elder Spring, Dakota Ridge (1), 5655; 14 mi. NW Masonville (3), 6742-4; 2 mi. NE Rockport (1), 11506; 6 mi. NE Rockport (1), 11507. **Las Animas Co.** — Trinidad (2), 7090-1; 9 mi. N Trinidad (2), 7099-80; 9 mi. E Trinidad, Frijoles Creek (7), 7092-8; 13 mi. E Trinidad, Barela Reservoir (2), 7099-7100; Camp Trinidad (5), 7081-5; 27 mi. NE Trinidad, Trinchera Creek (68), 10064-129, 10813-4; 6 mi. E Trinidad (1), 10578; Salt Creek at U. S. Hwy. 160 (9), 7086-9, 10564-8; Alkali Creek at U. S. Hwy. 160 (2), 11508-9; 6 mi. E Trinchera (9), 10569-77; 12 mi. E Model (7), 5044-50; 19 mi. E Model, Purgatoire River (45), 5051-95; 15 mi. S Kim, Mesa de Maya, Maes Ranch (22), 5096-5117; 3 mi. S Kim (1), 1288; Chacuaco Creek, W of Tobe (6), 1291-4, 1297-8; 1 mi. N Alcreek (6), 5211-6; 2 mi. W Branson (1), 1299; Ludlow (11), 5033-43; 2 mi. S Potato Butte, nr. Cottonwood Creek (43), 2990-3017, 7582-95, 9454. **Otero Co.** — Purgatoire River, SW Higbee (1), 1289; 6 mi. NE Higbee (9), 4991-9; 5 mi. NE Higbee (8), 5000-7; 1 mi. S Higbee (24), 5008-31; 4 mi. W Timpas (1), 6820. **Pueblo Co.** — Pueblo, Big Hill area (6), 10559-63, 10832; 4 mi. N Pueblo (3), 3965-7; 8 mi. N Pueblo (1), 1063; 7 mi. W Pueblo (1), 2230; foothills W Pueblo (8), 2637-44; 5 mi. N Pueblo (1), 4982; 1 mi. E Greenhorn Mt. on Hwy. 87 (8), 4983-90; foothills Greenhorn Range, NE Stone City (14), 2623-36; foothills W Rye (8), 2645-52. **Saguache Co.** — 5 mi. NE Saguache (26), 10553-57, 10792-812; 5 mi. S Saguache, La Garita Hills (1) 10558.

Sceloporus undulatus garmani Boulenger

Common name: Northern Prairie Lizard.

Type: Syntypes. British Museum, *Sceloporus consobrinus* specimens a-c, three specimens, originally five; S. Garman, collector, Oct. 1882. See Boulenger 1885(2): 230.

Type locality: Pine Ridge, Shannon Co., South Dakota.

Range: Northeastern plains of Colorado.

Published accounts and records:

- Sceloporus garmani* BOULENGER, 1882: 761-762, pl. 56, (original description).
Sceloporus consobrinus, CARY, 1911: 21, (list). STONE, 1911: 227-228, (list. **Logan Co.** — Sterling). ELLIS and HENDERSON, 1913: 68-69, part, (description. **Yuma Co.** — Wray).
Sceloporus consobrinus consobrinus, STEJNEGER and BARBOUR, 1923: 54, part, (range). 1933: 60, part, (range).
Sceloporus undulatus garmani, SMITH, 1938: 14, (discussion of subspecific characters. **Weld Co.** — Milton Reservoir). 1946: 228-231, pl. 52, map 15, (general account and description). MASLIN, 1947b: 9, (description; habitat; range). 1950a: 82, abstract, (range). SCHMIDT, 1953: 126-127, (range). STEBBINS, 1954: 243-244, 318, pl. 53 map, (general account and description).

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Cheyenne Co. — 1 mi. S Kit Carson, Big Sandy Creek (1), 1267; just E Kit Carson (5), 5154-8.
Kiowa Co. — 10 mi. E Eads (4), 4978-81; 4 mi. E Eads (7), 9719-25; 1 mi. N Eads (3), 9726-8.
Morgan Co. — 2 mi. N and 1½ mi. W Fort Morgan, 4400' (1), 11788. **Phillips Co.** — 11 mi. S Holyoke (2), 6738-9. **Washington Co.** — 20 mi. S and 4 mi. W Otis, Mathias Ranch (2), 6740-1. **Weld Co.** — vicinity of Milton Reservoir, E of Platteville (126), 2835-46, 2883-9, 3106-19, 3434-58, 5579-82, 5613-54, 6981, 10583-5, 10588-605; 10 mi. N Roggen (1), 2225; 5 mi. E Roggen (45), 5611-2, 6929-35, 7465-7, 7596, 9456-67, 10130-4, 10582, 10586-8, 10606-15, 10833; 8 mi. N Hudson, Mosher Ranch (3), 2226-8; 6 mi. S La Salle (17), 5562-78. **Yuma Co.** — 10 mi. N Wray (66), 3339-64, 6936-68, 9468-9, 10616-20; 5 mi. N Wray (5), 3365-9; 4 mi. N Wray (5), 9714-8; 1 mi. N Wray (1), 10135; 2 mi. W Wray (11), 6969-79; 3 mi. NE Wray (5), 10621-5.

Sceloporus undulatus tristichus Cope

Common name: Southern Plateau Lizard.

Type: Holotype by monotypy, U. S. Nat'l. Mus. 8613; H. C. Yarrow, collector. Number provided by Cope, 1900: 377.

Type locality: Taos, Taos Co., New Mexico.

Range: Known from southern Archuleta Co.

Published accounts and records:

- Sceloporus tristichus* COPE, 1875: 571-572, (original description).
Sceloporus consobrinus, CARY, 1911: 26, part, (record: **Archuleta Co.** — Arboles). ELLIS and HENDERSON, 1913: 68-69, part, (description. **Archuleta Co.** — Pagosa). YARROW, 1875: 574, (list. Pagosa, **Archuleta Co.**).
Sceloporus consobrinus consobrinus, STEJNEGER and BARBOUR, 1923: 54, part, (range). 1933: 60, part, (range).
Sceloporus undulatus elongatus, STEJNEGER and BARBOUR, 1943: 82, part, (range).
Sceloporus undalutus tristichus, SMITH, 1946: 231-234, pl. 53, map 15, (general account and description). STEBBINS, 1954: 243-244, 318, pl. 53 map, part, (general account and description).

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Archuleta Co. — ½ mi. SE Pagosa Springs (10), 5995-6004; 2 mi. N Chromo (26), 7311-26.

Genus UROSAURUS Hallowell

***Urosaurus ornatus wrighti* (Schmidt)**

Common name: Northern Tree Lizard.

Type: Holotype, American Museum of Natural History 18097 ♂; B. T. H. Hyde, collector, 9 Nov. 1920.

Type locality: Grand Gulch, 4,000'-5,000', San Juan Co., Utah.

Range: Western border counties of Colorado below 7,000'.

Published accounts and records:

Uta wrighti SCHMIDT, 1921: 3, (original description).

Uta ornata, YARROW, 1875: 568, (record: Twin Lakes, Colorado?). 1882: 56, (Colorado River). COPE, 1900: 317, (list. Colorado River. **Mesa Co.** — Plateau Creek, nr. Eagalite). CARY, 1911: 26, (habitat. **Archuleta Co.** — Arboles. **Mesa Co.** — Plateau Creek. **Montezuma Co.** — Spruce Tree Ruins, Mesa Verde, 7,000'; McElmo. **Montrose Co.** — Coventry; Sinbad Valley). ELLIS and HENDERSON, 1913: 64-65, figs. 5-6, (description. **Garfield Co.** — Rifle. **Mesa Co.** — Grand Junction. **Rio Blanco Co.** — 4 mi. W Meeker). COCKERELL, 1927: 107, (range).

Uta levis, VAN DENBURGH, 1922: 211, (differentiates races but does not recognize *wrighti*). TANNER, 1928: 26, (range. **Montezuma Co.** — Mesa Verde Nat'l. Park). BARRY, 1932c: 23, (description. Mesa Verde Nat'l. Park). FRANKE, 1932: 39, (key to Mesa Verde lizards). STEJNEGER and BARBOUR, 1933: 56, part, (range). 1939: 61, part, (range).

Urosaurus ornatus wrighti, MITTLEMAN, 1942: 146, fig. 8, (general account; description; habitat. **Montezuma Co.**). STEJNEGER and BARBOUR, 1943: 89, (range). SMITH, 1946: 274-276, pl. 70, map 18, (general account and description). MASLIN, 1947a: 138, (description; habitat, **Moffat Co.** — Hell's Canyon, Dinosaur Nat'l. Mon.; 6 mi. W Hell's Canyon). 1947b: 10 (description; habitat; range).

Uta ornata wrighti, SCHMIDT, 1953: 132, (range). STEBBINS, 1954: 250-251, 318, 320, pls. 38, 54 map, (general account and description).

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Delta Co. — 4 mi. NW Cedaredge, Cedar Breaks, 6,200' (4), 7225-8. **Dolores Co.** — 3 mi. W Dove Creek (1), 1332. **Garfield Co.** — Rifle (1), 205, paratype; Glenwood Springs (2), 4139-40. **Mesa Co.** — Colorado Nat'l. Mon. (24), 2748-59, 10628-36, 10693-5; Kahnah Creek at Gunnison River (2), 5204-5; nr. DeBeque, 6.6 mi. from Plateau Creek (1), 5206; 1 mi. SE Gateway (1), 6691; 9.8 mi. W Grand Valley (3), 10816-8. **Moffat Co.** — Dinosaur Nat'l. Mon. — vicinity of Castle Park (60), 2286-99, 3663-9, 5471-85, 5492-5515, 6 mi. W Hell's Canyon (4), 2283-6, foot of Crow's Nest (6), 5486-91, Red Rocks Ranch (8), 5516-23; 6 mi. N Axial (23), 4099-4121. **Montezuma Co.** — Mesa Verde Nat'l. Park (6), 4838-42, 5594; 5 mi. W Cortez, McElmo Creek (5), 4833-7; 21 mi. SW Towaoc (1), 9482; 30 mi. W Cortez, mouth of Yellow Jacket Canyon (29), 11510-38; 3 mi. S and 3 mi. W Yellow Jacket (5), 11539-43. **Montrose Co.** — 3 mi. N Uravan, San Miguel Canyon (1), 1338. **Rio Blanco Co.** — 4 mi. W Meeker (1), 206, paratype; 2 mi. S Rangely (6), 4122-7; 6 mi. S Rangely (3), 4128-30; 11 mi. S Rangely (8),

4131-8. **San Miguel Co.** — vicinity of Gypsum Gap (10), 4923-32; 10 mi. NW Gypsum Gap, Hamm's Canyon (4), 4819-22.

Genus *UTA* Baird and Girard

Uta stansburiana stansburiana Baird and Girard

Common name: Northern Side-blotched Lizard.

Type: Syntypes, U. S. Nat'l. Mus. 2753 (six specimens); Capt. H. Stansbury, collector. Number provided by Cope, 1890: 310.

Type locality: Salt Lake City, Utah, Restricted by Cope, 1890: 310.

Range: Western border counties of Colorado below 6,500'.

Published accounts and records:

Uta stansburiana BAIRD and GIRARD, 1852a: 345-346, pl. 5, figs. 4-6, (original description). 1852b: 69, (description). CARY, 1911: 26, (**Mesa Co.** — desert N Mack; Plateau Creek; DeBeque; Salt Canyon. **Montezuma Co.** — Spruce Tree Cliff Ruins, Mesa Verde; McElmo. **Montrose Co.** — Coventry; Paradox Valley. Grand Valley. Dolores River Canyon). ELLIS AND HENDERSON, 1913: 65, (description. quotes Cary, 1911, for localities). COCKERELL, 1927: 107, (range). FRANKE, 1932: 39, (key to Mesa Verde lizards). BURT, 1953a: 233-236, (subspecific status; ecology; habitat; range. **Montrose Co.** — 13 mi. SW Delta).

Uta stansburiana stansburiana, BARRY, 1932c: 22, (description. **Montezuma Co.** — Mesa Verde Nat'l. Park; S end Chapin Mesa, Mesa Verde). SMITH, 1946: 277-281, pl. 71, figs. 45, 53, map 19, (general account and description). MASLIN, 1947a: 138, (habitat; description. **Moffat Co.** — 6 mi. W Hell's Canyon, Dinosaur Nat'l. Mon., 5,400'). 1947b: 10-11, (description; habitat; range). STEBBINS, 1954: 251-253, 320, pls. 38, 54 map, (general account and description).

University of Colorado Museum Specimens

Garfield Co. — 5 mi. N Rifle (2), 1050, 9729. **Mesa Co.** — vicinity of Colorado Nat'l. Mon. (103), 2760-92, 3175, 9470-9, 9730, 10637-92, 10834-5; Fruita (2), 1003; 4 mi. W Grand Junction (1), 5207; nr. DeBeque, 6.6 mi. from Plateau Creek (1), 5208; 10 mi. N Grand Junction (1), 7229; 9.8 mi. W Grand Valley (4), 10819-22; 2 mi. SE Gateway (2), 1363-4; 7 mi. SE Gateway (2), 1359-60; 10 mi. SE Gateway (4), 1041; 15 mi. SE Gateway, Dolores River Canyon (6), 6694-9; 2 mi. SW Whitewater (2), 1367-8. **Moffat Co.** — Dinosaur Nat. Mon. — vicinity of Castle Park (12), 2302-7, 5524-9, Red Rocks Ranch (1), 5530. **Montezuma Co.** — 5 mi. W Cortez, McElmo Creek (4), 4844-7; 30 mi. W Cortez, mouth of Yellow Jacket Canyon (41), 11544-84; 10 mi. SW Towaoc (2), 9480-1; 23 mi. SW Towaoc, Mancos River Trading Post (18), 4861-78; NE Four Corners, bluffs on N. side San Juan River (3), 4858-60; Four Corners, SW San Juan River (23), 4879-4901; Mancos Canyon, SE Jackson's Butte (10), 4848-57. **Montrose Co.** — 3 mi. N Uravan, San Miguel Canyon (9), 1339-47; 24 mi. NW Naturita, San Miguel Canyon (1), 1384. **Rio Blanco Co.** — 2 mi. S Rangely (4), 4083-6; 6 mi. S Rangely (4), 4087-90; 11 mi. S Rangely (8), 4081-8. **San Miguel Co.** — 10 mi. NW Gypsum Gap, Hamm's Canyon (1), 4843.

Genus PHRYNOSOMA Wiegmann

Phrynosoma cornutum (Harlan)

Common name: Texas Horned Lizard.

Type: Unknown.

Type locality: Fort Towson, Choctaw Co., Oklahoma. Restricted by Smith and Taylor, 1950a: 358.

Range: Southeastern Colorado.

Published accounts and records:

Agama cornuta HARLAN, 1825: 299-304, pl. 20, (original description).

Phrynosoma cornutum, COPE, 1900: 435, (list. **Archuleta Co.** — Pagosa. **El Paso Co.** — Colorado Springs). ELLIS and HENDERSON, 1913: 74-75, fig. 13, (description. **Boulder Co.** — Boulder, escaped pet? **Denver Co.** — Denver, escaped pet? **Las Animas Co.** — Trinidad). STEJNEGER and BARBOUR, 1917: 58, (range). 1923: 61, (range). 1933: 67, (range). 1939: 73, (range). 1943: 92, (range). COCKERELL, 1927: 106, (list). RODECK, 1936: 70, (record: **Boulder Co.** — Boulder, possibly an escape). SMITH, 1946: 290-293, pl. 74, fig. 84, map 20, (general account and description). MASLIN, 1947b: 11, (description; habitat). SCHMIDT, 1953: 133-134, (range). STEBBINS, 1954: 255-257, 312, pls. 39, 50 map, (general account and description).

University of Colorado Museum Specimens

Baca Co. — SE Campo, just N Oklahoma Line (1), 1370; 20 mi. SSW Pritchett (7), 2942-8; rim of Carrizo Canyon, 6 mi. N state line (1), 2949; nr. Pritchett (1), 7435; nr. Oklarado, 35 mi. SSW Springfield (1), 10046. **Bent Co.** — nr. Bent's New Fort, 8 mi. W Lamar (1), 1369. **Boulder Co.** — Boulder, escaped pets? (2), 124, 742. **Las Animas Co.** — 2 mi. S Potato Butte, Cottonwood Creek, Dodge Ranch (2), 2950, 7577.

Phrynosoma douglassi brevirostre Girard

Common name: Eastern Short-horned Lizard.

Type: Lectotype, U. S. Nat'l. Mus. 208. Designated by Reeve, 1952: 913.

Type locality: Lodge Pole Creek, nr. Dix, Kimball Co., Nebraska. Restricted by Reeve, 1952: 913.

Range: Plains of eastern Colorado, west to 7,000'.

Published accounts and records:

Tapaya brevirostre GIRARD, 1858: 397, (original description under subgeneric name). BAIRD, 1859: 18, (range).

Phrynosoma douglassii douglassii, YARROW, 1875: 581, part, (**El Paso Co.** — Colorado Springs). 1882: 68-69, part, (**El Paso Co.** — Colorado Springs).

Phrynosoma douglassii, PUTNAM, 1877: 22, (**Boulder Co.** — Valmont. **Denver Co.** — Denver).

Phrynosoma douglassii hernandesi, COPE, 1900: 414, 415, part, (Colorado. **El Paso Co.** — Colorado Springs).

Phrynosoma ornallissimum, CARY, 1911: 21, (list. Great Plains).

Phrynosoma hernandesi ornatissimum, ELLIS and HENDERSON, 1913: 72-74, figs. 12, 14, part, (description. **Boulder Co.** — Owens Lake; Boulder. **Denver Co.** — Denver. **Larimer Co.** — 4 mi. E Wellington. **Las Animas Co.** — Trinidad. **Lincoln Co.** — Hugo. **Morgan Co.** — Cottonwood Springs, N Fort Morgan. **Weld Co.** — Greeley). 1915: 260, part, (**Boulder Co.** — Boulder; Marshall).

Phrynosoma hernandesi hernandesi, ELLIS and HENDERSON, 1915: 260, part, (description. **El Paso Co.** — Colorado Springs. **Las Animas Co.** — Trinidad. **Weld Co.** — Greeley).

Phrynosoma hernandesi, COCKERELL, 1927: 106, part, (nomenclatorial status; range).

Phrynosoma douglassii brevirostre, SMITH, 1946: 302-304, pl. 79, map 21, (general account and description). MASLIN, 1947b: 11, (description; habitat). REEVE, 1952: 913-916, fig. 10 map, part, (diagnosis; description; range. **Boulder Co.** — Boulder. **Denver Co.** — Denver.

El Paso Co. — Colorado Springs. **Morgan Co.** — **Weld Co.** — Greeley; Avalo). SCHMIDT, 1953: 134, (range). STEBBINS, 1954: 259-261, 312, pls. 40, 50 map, (general account and description).

University of Colorado Museum Specimens

Adams Co. — 8 mi. NE Byers, Parrot Ranch (1), 11351. **Boulder Co.** — vicinity of Boulder (9), 218, 220, 227-8, 1937, 2557, 11352-4; White Rocks, E of Boulder (1), 1070; 2 mi. E Eldorado Springs (1), 9697; Marshall (1), 10841. **Denver Co.** — Denver (9), 10048-56. **Fremont Co.** — Canyon City (1), 3184. **Huerfano Co.** — Cuchara Canyon, 15 mi. NE Walsenburg (1), 2312. **Larimer Co.** — 4 mi. E Wellington (1), 222; 10 mi. S Fort Collins (1), 11355. **Las Animas Co.** — Trinidad (5), 7072-6; Barela Reservoir, 13 mi. E Trinidad (1), 7077; 27 mi. E Trinidad, Purgatoire River (1), 9430; Aguilar (1), 1107. **Morgan Co.** — Cottonwood Springs, N Fort Morgan (1), 223; 8 mi. N Orchard (4), 11356-9; 13 mi. N and 6 mi. E Fort Morgan (1), 11785; 1½ mi. W and 8 mi. N Weldona, "Stony Point", 4760' (2), 11786-7. **Weld Co.** — Battle Canyon, 24 mi. N Stoneham (1), 2310; Two-mile Creek, 22 mi. N Stoneham (1), 2311.

Phrynosoma douglassii hernandesi Girard

Common name: Desert Short-horned Lizard.

Type: Lectotype, U. S. Nat'l. Mus. 197; J. D. Graham and J. H. Clark, collectors. U. S. Nat. Mus. 107 designated lectotype *in errore* by Stejneger, 1890: 113. Lectotype redesignated by Smith and Taylor, 1950b: 100. Status of type discussed by Reeve, 1952: 923-924.

Type locality: State of Sonora, Mexico. Rerestricted by Reeve, 1952: 923-924. See Smith and Taylor, 1950b: 100.

Range: Extreme western Colorado below 5,500', in broad, arid river basins.

Published accounts and records:

Tapaya hernandesi GIRARD, 1858: 395-396, (original description under subgeneric name).

Phrynosoma douglassii hernandesi, STEJNEGER and BARBOUR, 1923: 61, (range). 1933: 67, (range). 1939: 74, (range). REEVE, 1952: 922-926, fig. 10, map, (diagnosis; description; discussion of status. **Mesa Co.** — Mack). SCHMIDT, 1953: 135, (range). STEBBINS, 1954: 259-261, 312, pls. 40, 50 map, (general account and description).

Phrynosoma hernandesi, STEJNEGER and BARBOUR, 1917: 59, (range). COCKERELL, 1927: 106, (nomenclature; status; range).

Phrynosoma ornatissimum, CARY, 1911: 26, 40, part, (list. Mesa Co. — N Mack. Montezuma Co. — McElmo). STEJNEGER and BARBOUR, 1917: 60, (range).

Phrynosoma douglassii ornatissimum, STEJNEGER and BARBOUR, 1923: 62, (range). 1933: 68, (range). 1939: 74, (range). SMITH, 1946: 305-307, pl. 81, map 21, part, (general account and description). MASLIN, 1947b: 11, part (description and habitat).

Phrynosoma orbiculare hernandesi, STEJNEGER and BARBOUR, 1943: 94, part, (range).

University of Colorado Museum Specimens

Montrose Co. — Naturita (2), 446. San Miguel Co. — Gypsum Creek, trib. of Dolores River (2), 447; 2 mi. W Gypsum Gap (1), 4509; Gypsum Gap (1), 4510.

***Phrynosoma douglassii ornatissimum* Girard**

Common name: Mountain Short-horned Lizard.

Type: Lectotypes, U. S. Nat'l. Mus. 204 (two specimens); Woodhouse, collector. Designated by Stejneger, 1890: 113.

Type locality: Zuni Mountains, McKinley-Valencia cos., New Mexico. Restricted by Reeve, 1952: 928.

Range: Mountainous and hilly country of southern and western Colorado.

Published accounts and records:

Tapaya ornatissima GIRARD, 1858: 396, (original description under subgeneric name).

Phrynosoma douglassii, YARROW, 1875: 581, part, (Colorado. Alamosa Co. — Fort Garland. Archuleta Co. — Pagosa).

Phrynosoma douglassii hernandesi, COPE, 1900: 414, part, (Colorado. Archuleta Co. — Pagosa). BARRY, 1932d: 37, (notes on puffing, eye blood squirting, etc., at Mesa Verde National Park). FRANKE, 1932: 39, (key to Mesa Verde lizards). BURT, 1933a: 244-245, (subspecific status, distribution. Delta Co. — 3 mi. E Delta).

Phrynosoma ornatissimum, CARY, 1911: 23, 26, 40, part, (lists. Colorado River drainage. Garfield Co. — Baxter Pass, Book Cliffs, 8,500'. Mesa Co. — Dominguez Creek, 8,500', Uncompahgre Plateau).

Phrynosoma hernandesi ornatissimum, ELLIS and HENDERSON, 1913: 72-74, part, (description. Conejos Co. — Antonito. Huerfano Co. — La Veta Pass). 1915: 260, part, (Montrose Co. — Bedrock; Coventry; Naturita. San Miguel Co. — Gypsum Creek, trib. Dolores River).

Phrynosoma hernandesi hernandesi, ELLIS and HENDERSON, 1913: 72-74, part, (description. Montezuma Co. — Cortez. Rio Blanco Co. — 2 mi. SE Meeker). 1915: 260, part, (Costilla Co. — 2 mi. SE Medano Ranch. Huerfano Co. — 3 mi. from Muddy Creek, on Gardner-Silvercliff Road. Moffat Co. — between Douglas Spring and Snake River).

Phrynosoma hernandesi, COCKERELL, 1910: 131, (list. Rio Blanco Co. — Meeker; 2 mi. SE Meeker). 1927: 106, part, (nomenclatorial status; range).

Phrynosoma orbiculare ornatissimum, STEJNEGER and BARBOUR, 1943: 94, (range).

Phrynosoma douglassii ornatissimum, SMITH, 1946: 305-307, pl. 81, map 21, (general account and description). MASLIN, 1947b: 11, (description; habitat; range). 1950b: 90, (record: San Luis Valley). REEVE, 1952: 927-930, fig. 10 map, (diagnosis; description; distribution. Archuleta Co. — Pagosa. Costilla Co. — Garland). SCHMIDT, 1953: 135, (range). STEBBINS, 1954: 259-261, 312, pls. 40, 50 map, (general account and description).

Phrynosoma douglassi brevirostre, REEVE, 1952: 913-916, (part), (diagnosis; description; range. La Plata Co. Moffat Co. — Lay; Snake River).

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Alamosa Co. — 5 mi. NW Blanco Peak (2), 3894-5. **Archuleta Co.** — 2 mi. N Chromo (1), 7271. **Conejos Co.** — 3 mi. S Antonito (2), 9698-9. **Costilla Co.** — 1 mi. W Mesita (3), 3896-8. **Custer Co.** — Silver Cliffs (19), 7437-55. **Delta Co.** — top of Dry Mesa (5), 6714-8. **Mesa Co.** — 6 mi. S Fruita (1), 2793. **Moffat Co.** — sec. 30, Wiggin's Ranch, Cold Spring Mt., 8,000' (7), 2313-9; 20 mi. W Elk Springs, 7,500' (1), 2320; Dinosaur Nat'l. Mon. — Harper's Corner (7), 2865-71, trail N Hardscrabble Hill, W Jone's Hole (1), 3185, Yampa River bench overlooking Harding's Hole (1), 3662 ¼ mi. W Round Top Mt. (1), 5297, 3 mi. S Iron Springs Canyon on Blue Mt. (1), 5298. **Montezuma Co.** — Mesa Verde Nat'l. Park Hdq. (2), 5591, 7458; Yellow Jacket (1), 10057. **Rio Blanco Co.** — Meeker (1), 50; 2 mi. SE Meeker (1), 1069.

Family TEIDAE Gray

Genus CNEMIDOPHORUS Wagler

Cnemidophorus sexlineatus (Linnaeus)

Common name: Six-lined Racerunner.

Type: Holotype by monotypy, Royal University of Upsala, Donatio Adolphi Friderici, 1745, specimen No. C. See Lönnberg, 1896:17; Alexander Garden, collector, see Klauber, 1948: 6.

Type locality: Charleston, Charleston Co., South Carolina. Restricted by Smith and Taylor, 1950a: 360.

Range: Eastern plains of Colorado.

Published accounts and records:

Lacerta sexlineata LINNAEUS, 1776: 364, (brief original diagnosis).

Cnemidophorus gularis, CARY, 1911: 21, 40, (list. Great Plains. **Jefferson Co.** — foothills nr. Golden). ELLIS and HENDERSON, 1913: 78, (quotes Cary, 1911). COCKERELL, 1927: 106, (list. **Jefferson Co.** — nr. Golden).

Cnemidophorus sexlineatus, ELLIS and HENDERSON, 1913: 78, part, (description. **Denver Co.** — Denver. **Las Animas Co.** — Carrizo Creek; Ponia, nr. Trinidad. **Weld Co.** — Greeley. **Yuma Co.** — Wray). 1915: 260, part, (**Adams Co.** — Barr. **Fremont Co.** — Canyon City). COCKERELL, 1927: 106, part, (list; range). SMITH, 1946: 415-418, pl. 116, fig. 13, map 33, (general account and description). MASLIN, 1947b: 13, (description; habitat). STEBBINS, 1954: 290-291, 324, pl. 57, 44 map, (general account and description).

Cnemidophorus sexlineatus sexlineatus, BURT, 1931: 76-97, figs. 20, 25, (general account and description. **Larimer Co.** — Arkins. **Prowers Co.** — Lamar. **Washington Co.** — Akron). 1935: 325, (**Baca Co.** — 3 mi. NE Bartlett. **Prowers Co.** — Arkansas River at Holly).

University of Colorado Museum Specimens

Adams Co. — 8 mi. NE Byers (1), 11258. **Baca Co.** — Horse Creek, 1 mi. S Buckeye (1), 1276; Bear Creek, 6 mi. S Buckeye (1), 1277; Lone Rock Draw, 3 mi. S Springfield (3), 1278-80; vicinity of Campo (2), 1284, 1287; Sand Arroyo, 3 mi. S Walsh (41), 2366-2405, 3143. **Boulder Co.** —

White Rocks, nr. Boulder (11), 730, 2848-56, 7433; Boy's Hill, nr. Lyons (1), 7432; 1½ mi. NW Lyons (1), 11259. **Cheyenne Co.** — 14 mi. SW Kit Carson (1), 1272. **Denver Co.** — Denver (1), 10021. **Jefferson Co.** — 1 mi. E Table Mountain, Golden (3), 6711-3; **Kiowa Co.** — nr. Chivington (2), 1049, 9659; 10 mi. E Eads (10), 4943-52; 14 mi. E Eads (1), 4953; 4 mi. E Eads (4), 9655-8. **Larimer Co.** — 4 mi. W Loveland (1), 7144. **Las Animas Co.** — 9 mi. E Trinidad (1), 7070. **Logan Co.** — 5 mi. S Sterling (9), 4033-41. **Morgan Co.** — 14 mi. SE Wiggins, Bijou Creek (18), 7145-62; 2½ mi. E and 7½ mi. N Weldona (2), 11789-90. **Otero Co.** — 1 mi. S Higbee Store (1), 4954. **Phillips Co.** — 11 mi. S Holyoke (6), 6726-31. **Prowers Co.** — Arkansas River, Lamar (2), 1273-4. **Pueblo Co.** — foothills of Greenhorn Range, W Pueblo (2), 2653-4; nr. Pueblo (5), 10361-5; junction of Arkansas and Huerfano River (3), 7163-5. **Sedgwick Co.** — 2.5 mi. SW Ovid (5), 4042-6; 2 mi. NW Dorsey (2), 6824-5. **Washington Co.** — 20 mi. S and 4 mi. W Otis, Mathias Ranch (1), 6732. **Weld Co.** — nr. Roggen (18), 5607, 6840, 7430-1, 9660, 10015-20, 10354-60; 10 mi. NE Roggen (7), 2357-63; 4 mi. E Gill (2), 2464-5; 6 mi. S La Salle (5), 5551-5; vicinity of Milton Reservoir, E of Platteville (5), 3120-1, 3427-9. **Yuma Co.** — 10 mi. N Wray (105), 3253-87, 6841-80, 9377-9406; 5 mi. N Wray (4), 3288-91. 2 mi. E Wray (2), 3292-3; N side Bonny Reservoir (1), 11260.

Cnemidophorus tessellatus (Say)

Common name: Checkered Whiptail Lizard.

Type: Lost.

Type locality: Smith and Burger (1949: 277-278) restricted the type locality of *C. tessellatus* to Beaver Creek, Fremont Co., basing their action on Thwaites' (1905(3): 44) editorial comment concerning the identity of "Castle Rock Creek". Thwaites writes, "The distance travelled since leaving Royal Gorge indicates Beaver Creek, in eastern Fremont County, as probably the one here called Castle Rock Creek." But James' (1823(2): 239) account clearly indicates that they were much farther east. He writes, "We had proceeded about eight or ten miles from our camp, [their main camp at the confluence of Turkey Creek and the Arkansas River, not the secondary exploring party's camp at Royal Gorge,] when we observed a very considerable change in the character both of the river and its valley, the former becoming wider, less rapid, filled with numerous islands; the latter bounded by sloping sandhills, instead of perpendicular precipices." This broadening area is just west of the present site of Pueblo. Shortly past this area, before noon, they crossed a small stream which they called "Castle Rock Creek", where they halted and had dinner. The recent publication of Bell's Journal, subsequent to its remarkable discovery, has made it possible to locate even more definitely the position of "Castle Rock Creek". Bell (1957: 160), in his accurate and easily understandable account, names the headwaters of Monument Creek as "Castle Rock Creek" after the nearby mass of rock referred to by Long and his party as "Castle Rock" but which is now called Elephant Rock near Palmer Lake. This

"Castle Rock Creek" is in turn a tributary of what Major Long indicated on his map of the region as "Boiling Spring Creek", now called Fountain Creek. Bell (*op. cit.*, 177) in his account of the itinerary of July 19, the day they left their camp at Turkey Creek, refers again to "Castle Rock Creek" which they crossed. Furthermore, he gives compass bearings of "James Peak" (Pikes Peak) and the Spanish Peaks after they ascended out of the valley, presumably at the place where the river widens and the canyon opens, thus permitting the party to see the peaks once more. Extrapolations of these bearings intersect at Pueblo. It seems extremely likely, then, from the accounts of James and Bell that this creek is actually what is now known as Fountain Creek. Bell (*op. cit.*, 177-178) further states that they arrived here at 11:00 AM and did not resume their march until 3:00 PM. This long rest, necessitated by the wait for their hunters, would have provided an ideal time for James and others of the party to collect *Cnemidophorus*, whose "movements were so extremely rapid that it was with much difficulty we were able to capture a few of them." *C. tessellatus* can still be collected within a few hundred yards of Fountain Creek. In view of this new evidence I herewith restrict the type locality of *Cnemidophorus tessellatus* (Say) to the junction of Fountain Creek and the Arkansas River, Pueblo Co., Colorado.

Range: From Fremont Co. southeast through southeastern Colorado below 6,500'.

Published accounts and records:

Ameiva tessellata SAV, 1823: 50-51, (original description). BURT, 1931: 152, (discussion of correction of spelling of name "tessellata").

Cnemidophorus tessellatus, COCKERELL, 1927: 106, part, (list. Canyon of the Arkansas). SMITH and BURGER, 1949: 277-284, (reduction to synonymy of *C. grahmi*; relocation of type locality). MASLIN, 1950b: 90-91, (color pattern; range. **Baca Co.** — 27 mi. S Pritchett. **Las Animas Co.** — 19 mi. E Model, Purgatoire River; Cottonwood Creek, 4,600', nr. Carrizo Mt. **Otero Co.** — 6 mi. NE Higbee; 1 mi. S Higbee. **Pueblo Co.** — nr. Pueblo; foothills Greenhorn Range, W Pueblo; foothills nr. Rye). SCHMIDT, 1953: 143, (range). STEBINS, 1954: 294-296, 324, 326, pls. 45, 57 map, (general account and description).

Cnemidophorus tessellatus tessellatus, COPE, 1875: 46, (list). STEJNEGER and BARBOUR, 1917, 67-68, part, (range). 1923: 73, part, (range). 1933: 77-78, part, (range). 1939: 85, part, (range). 1943: 106, part, (range).

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Baca Co. — 27 mi. S Pritchett, 4,000' (1), 2938; Skull Creek, SW part of county (1), 7166. **Fremont Co.** — Canyon City (1), 3183. **Las Animas Co.** — 2 mi. S Potato Butte, Cottonwood Creek, Dodge Ranch (13), 2934-7, 7549-55, 7556, 11261; Purgatoire River, 19 mi. E Model (12), 4957-68; 30 mi. ENE Trinidad, Trinchera Canyon (1), 10022. **Otero Co.** — 6 mi. NE Higbee (1), 4955; 1 mi. S Higbee (1), 4956. **Pueblo Co.** — foothills of Greenhorn Range, W

Pueblo (8), 2655-62; vicinity of Pueblo (22), 2663, 10366-79, 10380-5, 10404; 6 mi. E Pueblo (1), 10386; foothills E of Rye (5), 2664-8.

Cnemidophorus tigris septentrionalis Burger

Common name: Northern Whiptail Lizard.

Type: Holotype, Chicago Nat. His. Mus. 38217, subad. ♀.

Type locality: Una, Garfield Co., Colorado.

Range: Western edge of Colorado below 6,000'.

Published accounts and records:

Cnemidophorus tigris septentrionalis BURGER, 1950b: 8, (original description). SCHMIDT, 1953: 144, (range). STEBBINS, 1954: 291-294, 326, pls. 45, 57 map, (general account and description). SCHMIDT, 1953: 144, (range) STEBBINS, 1954: 291-294, 326, pls. 45, 57 map, (general account and description). MARX, 1958: 456, (lists type).

Cnemidophorus tigris, CARY, 1911: 26, (habitat. **Mesa Co.** — Plateau Creek, 5 mi. E Tunnel; Dolores River Canyon to mouth of West Creek. **Montezuma Co.** — McElmo. **Montrose Co.** — West Paradox Valley; Sinbad Valley).

Cnemidophorus tessellatus, ELLIS and HENDERSON, 1913: 78, (description. **Mesa Co.** — Grand Junction). COCKERELL, 1927: 106, part, (list).

Cnemidophorus tessellatus tessellatus, STEJNEGER and BARBOUR, 1917: 67-68, part, (range). 1923: 73, part, (range). 1933: 77-78, part, (range). 1939: 85, part, (range). 1943: 106, part, (range). BURT, 1931: 146-199, figs. 27, 30, (general account and description). BARRY, 1933b: 99, (description. **Montezuma Co.** — Four Corners). SMITH, 1946: 421-424, pl. 18, figs. 14, 124, 125, map 35, part, (general account and description). MASLIN, 1947b: 13-14, (description and habitat).

Cnemidophorus tigris tigris, LOMBARD, 1949: 234, (copulation; range. Dinosaur Nat'l. Mon., canyon parks and benches).

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Mesa Co. — vicinity of Fruita (10), 1002, 2794-2801; vicinity of Colorado Nat'l. Mon. (39), 2802-8, 9361-71, 9663-6, 10387-403; Dolores River, 7 mi. below Gateway (1), 1361; 1 mi. SE Gateway (14), 6569-77; nr. DeBeque (1), 5189; 10 mi. N Grand Junction (5), 7167-71; 9.8 mi. W Grand Valley (2), 10783-4. **Moffat Co.** — Dinosaur Nat'l. Mon. — vicinity of Castle Park, 10 mi. up Yampa River (81), 2406-20, 3637-58, 5253-76, 5278-96, 6980; Red Rock Canyon (2), 3659, 5277; foot of Crow's Nest (1), 5252. **Montezuma Co.** — btwn. Towaoc and Four Corners (1), 1310; Mancos River Trading Post, 23 mi. SW Towaoc (24), 4406-29; Four Corners, SW of San Juan River (18), 4430-47; Mancos River Canyon, SE of Jackson's Butte (6), 4400-5; McElmo Creek, 5 mi. W Cortez (6), 4384-9; 30 mi. W Cortez, mouth of Yellow Jacket Canyon (67), 11262-328. **San Miguel Co.** — Hamm's Canyon, 10 mi. NW Gypsum Gap (3), 4353-5; vicinity of Gypsum Gap (38), 4356-93.

Cnemidophorus velox Springer

Common name: Plateau Whiptail Lizard.

Type: Lectotype, Harvard University, Mus. Comp. Zool. 37208 (formerly Butler University 848); Stewart H. Springer, collector, Aug. 1927. Desig-

nated by Burt, 1931: 124, 127. Springer (*in lit.*) informs me that he presented at least a part of his 1926–1927 Arizona herpetological collections to Butler University for classroom use. Only one of the four syntypes of *C. velox* was included in this gift. This specimen, Butler Univ. 848, was subsequently designated by Burt (1931: 124, 127) as the lectotype of this species. Dr. Jean Piatt (*in lit.*) informs me that in 1934 arrangements were made with Dr. Thomas Barbour to transfer this specimen to the Museum of Comparative Zoology at Harvard University, where it is now registered, bearing the number 37208, (see Barbour and Loveridge 1946: 92). Two of the remaining syntypes appear to be in the University of Michigan Museum of Zoology. These bear the number UMMZ 76881 and have recently been reidentified by Dr. Richard G. Zweifel as *C. stictogrammus* Burger. The fourth syntype cannot be located.

Type locality: Oraibi, Navajo Co., Arizona. Restricted by Lowe, 1955: 4.

Range: Western edge of Colorado below 7,000' from Garfield Co. and south.

Published accounts and records:

- Cnemidophorus gularis velox* SPRINGER, 1928: 102–104, (original description).
Cnemidophorus sexlineatus, COPE, 1900: 597, (list. **Montezuma Co.** — Plateau Creek). ELLIS and HENDERSON, 1913: 78, part, (description. **Mesa Co.** — Grand Junction). 1915: 260, part, (**Montrose Co.** — Joe Davis Gulch, Dolores River; Dolores Canyon; N and S Paradox Valley). COCKERELL, 1927: 106, part, (list and range).
Cnemidophorus gularis, CARY, 1911: 27, (habitat. **Delta Co.** — Hotchkiss. **Garfield Co.** — Grand Valley. **Mesa Co.** — Salt Canyon. **Montezuma Co.** — McElmo. Dolores River Canyon). TANNER, 1928: 27, (general distribution. **Montezuma Co.** — Mancos River; Mesa Verde Nat'l. Park).
Cnemidophorus sexlineatus perplexus BURT, 1931: 122–140, fig. 22, maps 23, 25 part, (general account and description. **Montezuma Co.** — Ashbaugh's Ranch; 2 mi. E Cortez). 1933a: 246, (habitat. In **Montrose Co.**, 10 and 13 mi. SW Delta).
Cnemidophorus sexlineatus perplexus, BARRY, 1932d: 38, (**Montezuma Co.** — Mesa Verde Nat'l. Park). FRANKE, 1932: 39, (key to Mesa Verde lizards).
Cnemidophorus gularis octolineatus, SMITH, 1946: 490–412, pl. 114, figs. 126, 127, map 32, part, (general account and description). MASLIN, 1947b: 13, (description; habitat).
Cnemidophorus sacki innotatus BURGER, 1950b: 4, (original description; type, University Michigan Mus. Zool. 7332c, ad.; vicinity Kanab, Kane Co., Utah). SCHMIDT, 1953: 146, (range). STEBBINS, 1954: 289–290, 324, pls. 45, 57 map, (general account and description).
Cnemidophorus perplexus, MASLIN, 1950b: 92, (description).
Cnemidophorus velox, LOWE, 1955a: 1–7, (description; habitat; ecology; nomenclature).

University of Colorado Museum Specimens

Delta Co. — 4 mi. NW Cedaredge, Cedar Breaks, 6,200' (6), 7138–42. **Mesa Co.** — Dolores River, extreme southern Mesa Co. (1), 1358; Colorado Nat'l. Mon. (2), 9359, 9654; 9.8 mi. W Grand Valley (2), 10785–6. **Montezuma Co.** — 3 mi. S and 3 mi. W Yellow Jacket (2), 11329–30; Mesa Verde Nat'l. Park (8), 4345–52; McElmo Creek, 5 mi. W Cortez (14), 4331–44; 5 mi. SW Towaoc (1), 1313; 10 mi. SW Towaoc (1), 9360; 16 mi. SW Mancos (1), 10405. **Montrose Co.** —

San Miguel Canyon, 3 mi. N Uravan (3), 1335-7; Dolores River, at bridge on Route 141, nr. Uravan (1), 1357; 14 mi. NW Naturita (1), 1385; 10 mi. N Naturita (1), 3182. **San Miguel Co.** — Joe Davis Gulch (1), 451; 10 mi. NW Gypsum Gap (1), 4320; vicinity of Gypsum Gap (10), 4321-30.

Family SCINCIDAE Gray

Genus EUMECES Wiegmann

Eumeces multivirgatus gaigeae* Taylor

Common name: Two-lined Skink.

Type: Holotype, University of Kansas Mus. Nat. Hist. 7300; E. H. Taylor, collector, 13 June 1929.

Type locality: Taos, Taos Co., New Mexico.

Range: Southern Colorado, central and eastern portions.

Published accounts and records:

Eumeces gaigei TAYLOR, 1935a: 219-223, 1 fig., (original description).

Eumeces multivirgatus, TAYLOR, 1935b: 341-353, pls. 27, 28, figs. 54, 55, map 56, part, (general account and description; complete synonymy. **Huerfano Co.** — S Walsenburg). MASLIN, 1950b: 90, (range extension; habitat. **Alamosa Co.** — Great San Dunes Nat'l. Mon., 8,000'. **Costilla Co.** — San Luis, 8,000').

Eumeces multivirgatus gaigeae, MASLIN, 1957: 50, abstract, (**Archuleta Co.**). 1957b: 87-90, fig. 1, (time of ovulation; color pattern analysis; **Archuleta Co.** — $\frac{1}{2}$ mi. SE Pagosa Springs, 8,000'). MECHAM, 1957: 121-122, fig. 2, (discussion of subspecific status. **Huerfano Co.** — S Walsenburg).

University of Colorado Museum Specimens

Alamosa Co. — Great Sand Dune Nat'l. Mon. (1), 3892. **Archuleta Co.** — $\frac{1}{2}$ mi. SE Pagosa Springs (7), 6006-12. **Costilla Co.** — rim rock N San Luis (1), 3893. **Huerfano Co.** — Turkey Creek, 8 mi. N Gardner (1), 5987.

Eumeces multivirgatus multivirgatus (Hallowell)

Common name: Many-lined Skink.

Type: Holotype by monotypy, Academy Nat. Sci. Philadelphia 9371; Dr. Hammond, collector. Number provided by Taylor, 1935b: 343.

Type locality: Cow Creek, Larimer Co., Colorado. Corrected and restricted by Taylor 1935b: 343-344.

Range: Eastern plains of Colorado.

*Taylor (1935a: 219) presumably named this species in honor of the herpetologist Mrs. Helen T. Gaige, director of the Museum of Zoology, University of Michigan. Therefore, in pursuance of the recommendations of paragraphs 87 and 90 of the Copenhagen Decisions (Hemming, ed., 1957) the masculine genitive ending "i" of the original spelling is herein changed to the feminine genitive "ae".

Published accounts and records:

- Plestiodon multivirgatum* HALLOWELL, 1857: 215, (original description).
Eumeces leptogrammus, ELLIS and HENDERSON, 1913: 80, (description. **Weld Co.** — Big Bend).
Eumeces multivirgatus, ELLIS and HENDERSON, 1913: 81, (description. **Weld Co.** — nr. Greeley).
 STEJNEGER and BARBOUR, 1923: 76, (range). 1933: 81–82, (range). 1939: 89–90, (range).
 1943: 111, part, (range). BURT, 1932: 104, (reidentification of Burnett's (1932) record of
E. fasciatus from 14 mi. N Fort Collins, Larimer Co.). TAYLOR, 1935b: 341–353, pls. 27,
 28, figs. 54, 55, map 56, part, (general account and description; complete synonymy. **Denver**
Co. — Denver. **Larimer Co.** — Cow Creek, type locality. **Weld Co.** — Milton Reservoir;
 Roggen; Greeley; nr. Greeley; Grover; Big Bend). SMITH, 1946: 367–371, pl. 101, fig. 97,
 map 27, (general account and description). MASLIN, 1947b: 12, (description; habitat).
 SCHMIDT, 1953: 149–150, (range). STEBBINS, 1954: 276–277, 323–324, pls. 42, 56 map, (gen-
 eral account and description. **Denver Co.** — Denver).
Plestiodon multivirgatus, COCKERELL, 1927: 106, (list. **Weld Co.** — nr. Greeley).
Plestiodon leptogrammus, COCKERELL, 1927: 106, (**Weld Co.** — Big Bend).
Eumeces fasciatus, BURNETT, 1932: 37, (**Larimer Co.** — 14 mi. N Fort Collins).
Eumeces multivirgatus multivirgatus, MECHAM, 1957: 116–122, pl. 1, figs. 1, 2, (discussion of
 subspecific status; description. **Adams, Denver, El Paso,** and **Weld** cos.).

University of Colorado Museum Specimens

Adams Co. — 35 mi. E Brighton and 5 mi. S Prospect Valley (4), 5702–5; 7 mi. NE Byers (2),
 11346–7. **Larimer Co.** — 4 mi. E Wellington (1), 224. **Morgan Co.** — 14 mi. SE Wiggins,
 Bijou Creek (2), 7172–3. **Washington Co.** — 20 mi. S and 4 mi. W Otis, Mathias Ranch (1),
 6734. **Weld Co.** — vicinity of Roggen (7), 729, 1066, 2332, 10003–5, 10417; 5 mi. E Roggen (27),
 10006–14, 10418–35; vicinity of Milton Reservoir, E of Platteville (36), 2847, 3122–5, 3418–25,
 5595–5606, 5697–5701, 6701–7; Greasewood Lake, SE Osgood (1), 225; 10 mi. S Roggen (4),
 2333–6; 10 mi. SE Platteville (1), 3426; 6 mi. S La Salle (5), 5556–60; nr. Keenesburg (1), 5696.

Eumeces obsoletus (Baird and Girard)

Common name: Great Plains Skink.

Type: Holotype by monotypy, U. S. Nat'l. Mus. 3133, ad.; John H. Clark,
 collector. Number provided by Taylor, 1935b: 307.

Type locality: Valley of Devils River, Val Verde Co., Texas.

Range: Plains of eastern quarter of Colorado.

Published accounts and records:

- Plestiodon obsoletum* BAIRD and GIRARD, 1852b: 129, (original description).
Plestiodon guttulatus, BAIRD, 1859: 18, (list; range). COCKERELL, 1927: 105, (list).
Eumeces obsoletus, ELLIS and HENDERSON, 1913: 79–80, figs. 15, 16, (description **Larimer Co.**
 — 4 mi. E Wellington. **Weld Co.** — nr. Greeley; Greasewood Lake, SE Osgood). STEJNEGER
 and BARBOUR, 1923: 76, (range). 1933: 82, (range). 1939: 90, (range). 1943: 111–112, (range).
 BURT, 1929: 8–9, (synonymizes *E. guttulatus*, shows it is juvenile of *E. obsoletus*). TAYLOR,
 1935b: 305–320, pl. 24, fig. 47, map 48, (description; complete synonymy. Cites Ellis and
 Henderson, 1913, for localities). SMITH, 1946: 362–365, p. 99, fig. 100, map 29, (general
 account and description). MASLIN, 1947b: 12, (description; habitat). SCHMIDT, 1953: 149,

- (range). STEBBINS, 1954: 275-276, 324, pls. 43, 56 map, (general account and description). FITCH, 1955: 59-83, 11 figs. (ecology; life history; etc.).
Eumeces guttulatus, ELLIS and HENDERSON, 1913: 80, (description. **Las Animas Co.** — Carrizo Creek).
Plestiodon obsoletus, STEJNEGER and BARBOUR, 1917: 70, (range). COCKERELL, 1927: 105, (list).

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Baca Co. — Sand Arroyo, 3 mi. S Walsh (11), 2324-31, 3140-2; Sand Canyon, 27 mi. S. Pritchett (1), 2941; 24 mi. S Pritchett (1), 3144. **Kiowa Co.** — 4 mi. E Eads (3), 9686-8. **Otero Co.** — Catlin Ditch, Mansanato (1), 288. **Prowers Co.** — nr. Lamar (1), 1228. **Yuma Co.** — 1 mi. N Wray (1), 7563.

Suborder SERPENTES Linnaeus

Family COLUBRIDAE Cope

Genus NATRIX Laurenti

Natrix sipedon sipedon (Linnaeus)

Common name: Northern Water Snake.

Type: Unknown; Peter Kalm, collector. See Klauber, 1948: 4.

Type locality: Vicinity of New York City, N. Y. Restricted by Schmidt, 1953: 161.

Range: Permanent streams and rivers of northeastern Colorado.

Published accounts and records:

- Coluber sipedon* LINNAEUS, 1758: 219, (original description).
Tropidonotus sipedon, COCKERELL, 1910: 131, (**Boulder Co.** — Boulder). ELLIS and HENDERSON, 1913: 97-98, fig. 27, (description; recognizes three races. **Baca Co. Las Animas Co. Boulder Co.** — Boulder. **Denver Co.** — Denver. **Weld Co.** — Greeley. **Yuma Co.** — Wray).
Tropidonotus sipedon fasciatus, ELLIS and HENDERSON, 1915: 262, (**Weld Co.** — Greeley).
Natrix sipedon, COCKERELL, 1927: 109, (list).
Natrix sipedon sipedon, STEJNEGER and BARBOUR, 1933: 116, (range). 1939: 128, (range). 1943: 161, (range). CLAY, 1938: 178, (range). JONES-BURDICK, 1939: 8, (description; range). 1949: 16, pl. 6, 1st and 2nd printing, (description and range). SCHMIDT and DAVIS, 1941: 219, pl. 24, fig. 72 map, (description; range). WRIGHT and WRIGHT, 1952: 582, (list). 1957: 511-514, fig. 150, map 42, (general account and description). SCHMIDT, 1953: 161, (range). STEBBINS, 1954: 409-411, 497, pls. 74, 97 map, (general account and description).

University of Colorado Museum Specimens

Boulder Co. — Boulder Creek, nr. Boulder (4), 870, 871(2), 872; nr. Boulder (3), 6996, 7651-2; Boulder Creek nr. Valmont (10), 2862, 7649-50, 9505, 10707-12; 3 mi. E Boulder (14), 10145-58. **Prowers Co.** — nr. Lamar (1), 1223. **Weld Co.** — Greeley (1), 5714. **Yuma Co.** — Wray (3), 10159, 11682-3.

Genus THAMNOPHIS Fitzinger

Thamnophis cyrtopsis cyrtopsis (Kennicott)

Common name: Black necked Garter Snake.

Type: Lectotype, U. S. Nat'l. Mus. 8067 (formerly U. S. N. M. 930); Lt. Couch, collector. Designated by Milstead, 1953: 371.

Type locality: Rinconado, Coahuila, Mexico.

Range: Southern Colorado.

Published accounts and records:

Eutaenia cyrtopsis KENNICOTT, 1860a: 333-334, (original description).

Eutaenia macrostemma megalops, YARROW, 1882: 117, (Rio Grande, Colo.)

Eutaenia megalops, COPE, 1900: 1026, (list).

Thamnophis megalops, ELLIS and HENDERSON, 1913: 86, (description; range. Quotes Yarrow and Cope for localities). 1915: 261, (La Plata Co. — Pine River). COCKERELL, 1927: 108, (list). JONES-BURDICK, 1939: 9, (description; range).

Thamnophis eques eques, JONES-BURDICK, 1949: 17, 1st and 2nd printing, (description; range).

Thamnophis macrostemma, JONES-BURDICK, 1949: 17, 1st and 2nd printing, (description; range).

Thamnophis eques cyrtopsis, MASLIN, 1950b: 93, (Las Animas Co. — Carrizo Creek nr. Troy; Cottonwood Creek, 4,600').

Thamnophis elegans cyrtopsis, WRIGHT and WRIGHT, 1952: 582, (list).

Thamnophis cyrtopsis cyrtopsis, MILSTEAD, 1953: 372, (range; description; variation). SCHMIDT, 1953: 168, (range). STEBBINS, 1954: 424-426, 503 pls. 79, 101 map, (general account and description).

University of Colorado Museum Specimens

Las Animas Co. — Carrizo Creek, nr. Troy, 1 mi. W Alcreek (1), 1372; 2 mi. S Potato Butte, Cottonwood Creek (1), 3030; Trinchera Creek, 2 mi. S U. S. Hwy. 160 (2), 10824, 11622.

Thamnophis elegans vagrans (Baird and Girard)

Common name: Wandering Garter Snake.

Type: Lectotype, U. S. Nat'l. Mus. 908; Wm. Gambel, collector. Designated through publication by Fitch, 1940: 17-18.

Type locality: Southwestern Utah. Restricted by Fitch, 1940: 17-18; but type locality is more probably Sante Fe, Santa Fe Co., New Mexico. See Maslin, *et al.* (1958: 335-339).

Range: Colorado in general below 10,500'; but excluded from the eastern plains.

Published accounts and records

Eutainia vagrans BAIRD and GIRARD, 1853: 35, (original description).

Eutaenia vagrans vagrans, YARROW, 1875: 551-553, (San Luis Valley. **Archuleta Co.** — Pagosa. **Conejos Co.** — Conejos. **Lake Co.** — Twin Lakes). 1882: 119-120 (additional records: [Hinsdale Co. ?] — French Creek. **Larimer Co.** — Cache la Poudre River).

- Eutaenia marciana*, YARROW, 1875: 555, (Pueblo Co. — Pueblo). 1882: 118, (Costilla Co. Co. — Fort Garland. Pueblo Co. — Pueblo).
- Tropidonotus vagrans*, BOULENGER, 1893: 203, (description. Pueblo Co. — New Wales Canyon, 6,000'–7,000').
- Eulaenia elegans vagrans*, COPE, 1900: 1041, (description. Localities as of Yarrow plus North Platte River).
- Thamnophis ordinoides elegans*, RUTHVEN, 1908: 139, 140, fig. 59 map, part, (description. Archuleta Co. — Pagosa. Boulder Co. — Boulder Canyon, 9,500'. Conejos Co. — Conejos. Costilla Co. — Fort Garland. Eagle Co. — Gypsum. Lake Co. — Twin Lakes. La Plata Co. — Durango. Mesa Co. — Grand Junction. San Luis Valley. Rio Grande. Hogden [?]).
- Thamnophis elegans*, COCKERELL, 1910: 131, (Moffat Co. — 3 mi. S Axial. Rio Blanco Co. — 3 mi. E Meeker, on White River; Curtis Creek, 7 mi. NE Meeker; Buford). ELLIS and HENDERSON, 1913: 88–89, (description; range. Boulder Co. — Copeland Park; Allen's Park; Boulder; 1 mi. NE Ward; W of Nederland; Lake Eldora, nr. Eldora; 1 mi. NE Ward, nr. Jim Creek. Conejos Co. — Cumbres Pass Lake; Cumbres Pass. Gilpin Co. — Park Lake, Tolland; Mammoth Creek, Tolland; Tolland; East Lake nr. Tolland. Grand Co. — 25 mi. NW Kremmling; Muddy Creek, Kremmling. Gunnison Co. — 4 mi. NE Ohio City; 10 mi. NE Ohio City. Jefferson Co. — Buffalo. Larimer Co. — Estes Park; Big Thompson River; upper Cache la Poudre River. Mesa Co. — Grand Junction. Moffat Co. — Axial. Montezuma Co. — Dolores. Park Co. — Estabrook. Rio Blanco Co. — Meeker; Curtis Resv., 7 mi. NE Meeker; Snake Slough, 3 mi. above Meeker; Buford). 1915: 261, (El Paso Co. — Chambres Ranch, nr. Glenn Eyrie. Montrose Co. — Bedrock; Naturita. San Miguel Co. — Dolores River).
- Thamnophis elegans vagrans*, CARY, 1911: 27, 40, 45, (Jackson Co. — Higo, North Park; Pearl, North Park, 8,000'. Moffat Co. — Slater, 7,000'. Rio Blanco Co. — Meeker. Routt Co. Summit Co. — Snake River). JONES-BURDICK, 1949: 17, pl. 7, 1st and 2nd printing, (description; range). WRIGHT and WRIGHT, 1952: 582, (list). 1957: 795–799, fig. 229, map 57, (general account and description). SCHMIDT, 1953: 170, (range). STEBBINS, 1954: 416–417, pls. 75, 102 map, (general account and description).
- Thamnophis ordinoides vagrans*, COCKERELL, 1927: 108, (list). BURT and BURT, 1929: 458, (field notes. Routt Co. — nr. Bear River; 5 mi. NW Steamboat Springs; 10 mi. S Steamboat Springs at foot of Rabbit Ears Pass). BARRY, 1932b: 103, (list. Baca Co.). 1933c: 8, (notes on from Mesa Verde Nat'l. Park). RODECK, 1936: 70, (Boulder Co. — Science Lodge, 9,000'–10,000'; Hill's Mills, 10,500'). JONES-BURDICK, 1939: 9, (description; range). FITCH, 1940: 16–26, fig. 5 map, pls. 4, 7, (general account; description; variation. Boulder Co. — Arapahoe Falls, nr. Pine Cliff. Douglas Co. — Sedalia, Devil's Head. El Paso Co. — Utes Pass Trail above Long's Ranch, 7,300'; Cabin Creek, 9,700', E. slope Pikes Peak; Minnehaha, 8,500' and 8,300'; Pikeview Station, 2 mi. N Colorado Springs, 6,100'; Hell's Gate, Halfway House, 9,000'; Pikes Peak; Palmer Lake. Fremont Co. — 5 mi. NE Canyon City. Grand Co. — 6 mi. N Grand Lake. Gunnison Co. — 2½ mi. S Gothic. Huerfano Co. — Walsenburg; nr. Rouse Junction S Walsenburg; Cuchara Canyon; Spanish Peaks, 8,000'. Jefferson Co. — Watertown, 25 mi. SW Denver. Larimer Co. — Fort Collins; Estes Park. Montezuma Co. — Mesa Verde Nat'l. Park — Soda Canyon nr. Far View House, School Section Canyon; N. Fork West Mancos River, 10,000'. Montrose Co. — Pardaax. Rio Grande Co. — San Luis Valley nr. Monte Vista. Routt Co. Saguache Co. — 3 mi. N Elko). TANNER, 1940: 144, (Boulder Co. — Science Lodge, 28 mi. W Boulder). SCHMIDT

and DAVIS, 1941: 244, pl. 27, fig. 79 map, (description; range). BLAIR, 1951: 240, (ecology; food. Gunnison Co. — nr. Gothic, Axolotl Lake, 10,000').

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Adams Co. — 8 mi. NE Byers, Noonan's Lake (1), 11607. **Archuleta Co.** — $\frac{1}{2}$ mi. SE Pagosa Springs (1), 6005. **Boulder Co.** — vicinity of Boulder (5), 245, 2563, 10721, 10734, 10738; 20 mi. NW Boulder, Lefthand Canyon (5), 10724-6, 10728-9; 15 mi. NW Boulder, Lefthand Canyon (1), 10727; 9 mi. NW Boulder, Overland Mt. Lakes (5), 10730-3, 10739; Lake Eldora (7), 233, 867, 3060-3, 9513; Copeland Park (12), 237; 1 mi. E Ward (1), 239; Allen's Lake (1), 242; W Nederland, 8,500' (1), 243; Glacier Lake (6), 827(5), 828; nr. Science Lodge (5), 833(3), 834, 11608; 6 mi. SW Magnolia (2), 2957; 3 mi. W Gold Hill (3), 7513, 7655, 9512; 5 mi. NE Nederland (1), 9769; 4 mi. N Allen's Park, Meeker Lodge (6), 10722-3, 10836-9; 9 mi. NE Ward, Minnie Lake (4), 10735-7, 10740. **Chaffee Co.** — Buena Vista, Cottonwood Lake (1), 850; Mt. Princeton Hot Springs (5), 7349-7353. **Conejos Co.** — 14 mi. E Conejos, Rio Grande River (1), 3974; Spectacles Lake, Conejos Canyon (8), 5758-60, 10178-82; 5 mi. up Alamosa River Canyon (2), 11609-10; 10 mi. E Antonito (3), 10183-5. **Costilla Co.** — 3.5 mi. S Blanco (1), 3975. **Custer Co.** — 5 mi. W Westcliffe, Deweese Reservoir (8), 9776-83; 2 mi. NW Westcliffe, cemetery (3), 9784-5. **Delta Co.** — Delta (1), 886. **Douglas Co.** — Franktown, Cherry Creek (6), 9770-5. **El Paso Co.** — 15 mi. NE Colorado Springs (1), 7657. **Fremont Co.** — 10 mi. E Canyon City, W side Beaver Creek (1), 5764. **Garfield Co.** — Rifle (1), 1000; Rifle Falls (1), 9768. **Gilpin Co.** — Tolland, Park Lake (3), 240; Tolland (2), 241, 244; 2.4 mi. SW Rollinsville, Moon Gulch (1), 2859; Lump Gulch (4), 3091-4; Rollinsville (1), 7656. **Grand Co.** — 25 mi. NW Kremmling (2), 238, 246; 10 mi. SW Kremmling (1), 11611. **Gunnison Co.** — 4 mi. NE Ohio City (2), 234; 10 mi. NE Ohio City (1), 236; nr. Gunnison (1), 4904; 10 mi. E Gunnison (1), 234; 10 mi. W Crested Butte, Gunnison River (1), 10176. **Huerfano Co.** — 4.5 mi. N La Veta Pass, Pass Creek (1), 5746. **Jackson Co.** — 8 mi. W Coalmont, 1 mi. N Sawmill Creek, 8,500' (1), 2525; 8 mi. W Coalmont, Chedsey Creek, 8,500' (1), 2526; N end Big Creek Lake (3), 9509-11; $3\frac{1}{2}$ mi. NE Rabbit Ears Peak (1), 11612. **La Plata Co.** — 3 mi. E Fort Lewis (4), 1181-4; 2 mi. S Marvel (2), 1185-6; 5 mi. WNW Hesperus (1), 11613. **Larimer Co.** — 2 mi. SW Estes Park (1), 1376; 9.5 mi. S Estes Park, Meeker Campground (1), 5757; 3 mi. NW Estes Park, Griffith Sawmill (2), 10745-6; 6 mi. N Chambers Lake (4), 11614-7; **Las Animas Co.** — 2 mi. S Potato Butte, Cottonwood Creek (22), 3021-9, 7658, 11623-34; 12 mi. S Kim, Mesa de Maya (6), 5129-34; 15 mi. S Kim, Mesa de Maya (4), 5135-8; 19 mi. E Model, Purgatoire River (1), 5147; 4 mi. SE Branson (1), 9528; 28 mi. NE Trinidad, Trinchera Creek (6), 10186-91; San Francisco Creek at U. S. Hwy. 160 (4), 10741-4; 7 mi. E Uteville (2), 11633-4. **Mesa Co.** — Skyway (11), 841; Kahnah Creek at Gunnison River (1), 5210; Grand Junction (1), 860. **Moffat Co.** — Dinosaur Nat'l. Mon. — Castle Park (35), 3720-38, 3744-47, 5538-50, nr. Harper's Corner (1), 4044, Bull Park (1), 3739, Pat's Hole (4), 3740-3; 3 mi. E Maybell, Yampa River, 5,800' (1), 2524; 4 mi. N Craig (1), 9765. **Montezuma Co.** — vicinity of Cortez (18), 1160-4, 1187, 4906, 9517-27; abt. 10 mi. S Yellow Jacket (1), 10177; 11 mi. NW Cortez (1), 10825; 10 mi. NW McPhee, across Dolores River from Lone Dome (2), 11618-9; 6 mi. NW McPhee, Dolores River at Beaver Creek (2), 11620-1. **Montrose Co.** — Naturita (1), 443. **Otero Co.** — 66 mi. NE Higbee (2), 5126-7; 6 mi. E Higbee (1), 5128. **Pitkin Co.** — Aspen, Hallom Pond (3), 9514-6. **Pueblo Co.** — $\frac{1}{2}$ mi. E Pueblo, Arkansas River (1), 2528; 5 mi. N Beulah (1), 1375. **Rio Blanco Co.** — 7 mi. NE Meeker (3), 47, 61(2); vicinity of Buford (3), 48, 836, 10720; Meeker (1), 880; 3 mi. E Meeker, White River (1), 62; 6 mi. S Axial (1), 60. **Routt Co.** — Seedhouse, 10 mi. E Clark (15), 9741-55; Steamboat Springs (10), 9756-64, 10175; 14 mi. N Columbine (2), 9766-7. **San Miguel Co.** — Dolores River (1), 442.

***Thamnophis radix haydeni* (Kennicott)**

Common name: Western Plains Garter Snake.

Type: Neotype, U. S. Nat'l. Mus. 128137, (formerly Chicago Acad. Sic. 14498); H. K. Gloyd and T. I. Wright, collectors. Designated by A. G. Smith, 1949: 286. (Holotype by monotypy U. S. Nat'l. Mus. 707, Dr. Evans, collector (?); Fort Pierre, Stanley Co., South Dakota. Number provided and type locality corrected by A. G. Smith, 1949: 285. Holotype disintegrating, of no taxonomic value; see A. G. Smith).

Type locality: (Of neotype) Whitlock Crossing, Dewey Co., South Dakota.

Range: Eastern plains and foothills generally below 7,000'.

Eutaenia haydeni KENNICOTT, 1860b: 298, pl. 14, (original diagnosis).

Eutaenia marciana, YARROW, 1875: 555, (Pueblo Co. — Pueblo). 1882: 118, (list).

Eutaenia radix, COPE, 1900: 1028, (list. Pueblo Co. — Pueblo). BROWN, 1901: 21–22, (range).

Thamnophis radix, RUTHVEN, 1908: 61, 77, figs. 25 map, 26–28, (description; general account. Larimer Co. — Fort Collins. Pueblo Co. — Pueblo. Weld Co. — Greeley). ELLIS and HENDERSON, 1913: 84–86, figs. 17–18, 20, (description. Baca Co. Boulder Co. — Boulder; Niwot. Denver Co. — Denver; Aurora Lake; Highline Ditch. Las Animas Co. Sedgwick Co. — Julesburg. Weld Co. Yuma Co. — Yuma). 1915: 261, (habits). STEJNEGER and BARBOUR, 1917: 102, part, (range). 1923: 115–116, part, (range). 1933: 124, part, (range). 1939: 136, part, (range). 1943: 170–171, part, (range). COCKERELL, 1927: 108, (list). JONES-BURDICK, 1939: 9, (description; range). 1949: 17–18, 1st and 2nd printing, (description; range). SCHMIDT and DAVIS, 1941: 250, pl. 26, figs. 79 map, 80, (description; range).

Thamnophis radix radix, BURT and BURT, 1929: 458, (field notes. Denver Co. — 3 mi. E Denver). BARRY, 1932b: 103, (list. Baca Co.). BURT, 1935: 335, (3 mi. NE Bartlett, Baca Co.).

Thamnophis radix haydeni, SMITH, A. G., 1949: 285–289, map, fig. 1, (redescription; diagnosis. Arapahoe Co. — Deertrail; Englewood. Boulder Co. — Boulder; Valmont. Denver Co. — Denver. El Paso Co. — Colorado Springs. Fremont Co. — Canyon City. Larimer Co. — Fort Collins. Prowers Co. — Lamar. Pueblo Co. — Pueblo. Yuma Co. — Laird). WRIGHT and WRIGHT, 1952: 582, (list). 1957: 820–823, fig. 237, map 58, (general account and description; fig. 237 of specimen from Colorado Springs, El Paso Co.). SCHMIDT, 1953: 172, (range). STEBBINS, 1954: 428–432, 506, pls. 78, 102 map, (general account and description; pl. 78 of specimen from Boulder, Boulder Co.).

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Adams Co. — 20 mi. NE Byers (3), 11635–7; 15 mi. NE Byers (20), 11638–9, 11756–73; 8 mi. NE Byers (1), 11640; 7 mi. NE Byers, Bitzer Ranch (3), 11641–3, **Baca Co.** — 27 mi. S Pritchett, junction of Sand and Gallinas Canyon (13), 3040–8, 3166–9; below Two Buttes Reservoir (2), 11644, 11778. **Boulder Co.** — vicinity of Boulder (64), 227, 230–1, 276, 279, 432, 437, 440, 680–1, 720, 837, 839, 848–9, 858, 1096, 1128–31, 1158, 2137–40, 2904, 2906, 5735–44, 5752, 5761–2, 7069, 7514–5, 9529–35, 10192–5, 10763–4, 10768–9, 11645–9; 1.5 mi. SE Lyons (2), 3465–6; White Rocks, nr. Boulder (3), 730(2), 10197; 5 mi. E Boulder (2), 10196, 11650; 8 mi. E Boulder (3), 10770–2; 8 mi. N Boulder (1), 10767; 6 mi. N Boulder (2), 10773–4; vicinity of Valmont (2), 10198, 11651; vicinity of Marshall (3), 4256, 10775–6; Niwot (1), 226; nr. Longmont (1), 11652; 6 mi. SSE Longmont (1), 11653; 2 mi. E Lyons (1), 10764. **Denver Co.** — Denver (4), 2898–9, 10199–200. **El Paso**

Co. — 15 mi. SSE Colorado Springs (1), 2673. **Jefferson Co.** — Lakeside (2), 4004-5. **Kiowa Co.** — 14 mi. E Eads (3), 5139-41; 7 mi. W Chivington (1), 11654. **Las Animas Co.** — 2 mi. S Potato Butte, Cottonwood Creek (6), 3031-2, 7659-60, 11656-7; Carrizo Creek, nr. Troy (1), 1217; 12 mi. S Kim, Mesa de Maya (2), 5148-9; 15 mi. S Kim, Mesa de Maya (1), 5150; 30 mi. ENE Trinidad, Trinchera Creek (1), 10201; Salt Creek at U. S. Hwy. 160 (1), 11655. **Morgan Co.** — 13 mi. N and 6 mi. E Fort Morgan, 4550'(2), 11798-9. **Otero Co.** — Manzanotta, Catlin Ditch (1), 287; 6 mi. NE Higbee (5), 5142-6. **Prowers Co.** — nr. Lamar (1), 1227. **Pueblo Co.** — nr. Pueblo (7), 2816, 2674-9. **Sedgwick Co.** — Julesburg (1), 229. **Weld Co.** — btwn. Hardin and Roggen (1), 527; nr. Evans (1), 868; 3 mi. E Greeley Airport (1), 5588. **Yuma Co.** — vicinity of Wray (14), 3372-4, 5747-51, 5765, 11658-62; N Side Bonny Reservoir (5), 11663-67; nr. Hale, below Bonny Dam (1), 11688.

Thamnophis sauritus proximus (Say)

Common name: Western Ribbon Snake.

Type: Lost.

Type locality: Stone quarry on W. Side Missouri River, 3 mi. above mouth of Boyers River, Pottawattamie Co., Iowa.

Range: Extreme southeastern Colorado.

Published accounts and records:

Coluber proximus SAY, 1823: 187, (original description).

Eutaenia proxima, YARROW, 1882: 115, (headwaters of Colorado?).

Thamnophis sauritus proximus, BARRY, 1932b: 103, (**Baca Co.** — Singer Boys' Ranch, Furnace [Furnish] Canyon). 1933b: 100, (list). STEJNEGER and BARBOUR, 1939: 136-137, (range). 1943: 171, (range). JONES-BURDICK, 1939: 10, (description; range). 1949: 18, 2nd printing, (description; range). WRIGHT and WRIGHT, 1952: 582, (list). 1957: 828-832, figs. 239, 240, map 59, (general account and description). STEBBINS, 1954: 532-434, 506, pls. 77, 100 map, (general account and description).

Thamnophis sirtalis proximus, JONES-BURDICK, 1949: 18, 1st printing, (description; range).

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Baca Co. — Furnish Creek Canyon, Singer Boys' Ranch (5), 11669-11673.

Thamnophis sirtalis parietalis (Say)

Common name: Red-sided Garter Snake.

Type: Lost.

Type locality: Stone quarry on W. side Missouri River, 3 mi. above mouth of Boyers River, Pottawattamie Co., Iowa.

Range: Colorado below 8,000'.

Published accounts and records:

Coluber parietalis SAY, 1823: 186-187, (original description).

Eutaenia sirtalis dorsalis, YARROW, 1875: 554, (Rio Grande, [**Alamosa Co.**], Colo.).

Eutaenia sirtalis obscura, YARROW, 1882: 126, (range. Btwn. Arkansas and Cimarron River).

Eutaenia sirtalis parietalis, BROWN, 1901: 25-26, (description; variation; range).

Thamnophis sirtalis parietalis, RUTHVEN, 1908: 167, fig. 73 map, (description. **Denver Co.** — **Denver. Larimer Co.** — Fort Collins. **Weld Co.** — Greeley). COCKRELL, 1910: 131, (list. **Rio Blanco Co.** — Meeker; Buford). STEJNEGER and BARBOUR, 1917: 103-104, part, (range). 1923: 117, (range). 1933: 126, (range). 1939: 138, (range). 1943: 172-173, (range). JONES-BURDICK, 1939: 9, (description; range). 1949: 18, 2nd printing, (description; range). SCHMIDT and DAVIS, 1941: 252, (description; range). WRIGHT and WRIGHT, 1952: 582, (list). 1957: 854-858, fig. 246, map 60, (general account and description). SCHMIDT, 1953: 175, (range). STEBBINS, 1954: 434-436, 508, pls. 78, 101 map, (general account and description). *Thamnophis parietalis*, ELLIS and HENDERSON, 1913: 86-89, (description. **Boulder Co.** — **Boulder. Denver Co.** — **Denver. Larimer Co.** — Fort Collins. **Sedgwick Co.** — **Julesburg. Weld Co.** — Greeley). 1915: 261, (**Boulder Co.** — **Boulder**). COCKERELL, 1927: 108, (list). *Thamnophis ordinatus parietalis*, JONES-BURDICK, 1949: 18, 1st printing, (description; range).

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Baca Co. — 2.5 mi. S Stonington, N Fork Cimarron River (1), 3165. **Boulder Co.** — vicinity of Boulder (12), 232, 433(2), 539, 829, 831, 837, 861, 5763, 7517-8, 10757; 8 mi. E and 2½ mi. N Boulder (1), 10202; 6 mi. E Boulder (1), 10755; 5 mi. E Boulder (1), 10756; Marshall (5), 2185-6, 10760-2, 11674; nr. Longmont (1), 10759; vicinity of Valmont (6), 835, 1165-6, 7516, 7661, 9538; 1.5 mi. SE Lyons (1), 3464; 2.5 mi. NE Niwot (1), 5745. **Jefferson Co.** — Lakeside (2), 4007-8; Wheat Ridge (1), 11675. **Weld Co.** — 10 mi. E Longmont (1), 4015.

Genus TROPIDOCOLONION Cope

Tropidocolonion lineatum lineatum (Hallowell)

Common name: Northern Lined Snake.

Type: Holotype by monotypy, Acad. Nat. Sci. Philadelphia 5922 ♀; presented by Dr. Hammond. Number provided by Ramsay, 1953: 9.

Type locality: Fort Leavenworth, Leavenworth Co., Kansas. Restricted by Ramsay, 1953: 9.

Range: Eastern foothills and southeastern Colorado.

Published accounts and records:

Microps lineatum HALLOWELL, 1856: 241, (original description).

Tropidocolonion lineatum, SWENSON and RODECK, 1948: 53, abstract, (**Denver Co.** — **Denver**).

JONES-BURDICK, 1949: 18, 1st and 2nd printing, (description; range). MASLIN, 1950: 93-94, (description. **Denver Co.** — **Denver. Otero Co.** — 6 mi. NE Higbee). STEBBINS, 1954: 436, 508, pls. 81, 103 map, (description; range).

Tropidodonion lineatum, WRIGHT and WRIGHT, 1952: 582, (list).

Tropidocolonion lineatum lineatum, RAMSAY, 1953: 8, 12, (partition of species into subspecies; ranges). MASLIN and KOSTER, 1954: 172, (list; assignment of western forms to *lineatum*). WRIGHT and WRIGHT, 1957: 879-884, fig. 252, map 62, (general account and description).

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Boulder Co. — Boulder (2), 7519, 11676. **Denver Co.** — Denver, Sheridan Road S of Colfax Ave. (10), 1920-3, 2900-2, 3103-5. **Otero Co.** — 6 mi. NE Higbee (4), 5151-4.

Genus *HETERODON* Latreille***Heterodon nasicus nasicus* Baird and Girard***Common name:* Plains Hognose Snake.*Type:* Lost; Gen. Churchill, collector.*Type locality:* Amarillo, Potter Co., Texas. Restricted by Edgren, 1953: 179.*Range:* Eastern plains of Colorado below 6,000'.*Published accounts and records:*

Heterodon nasicus BAIRD and GIRARD, 1852a: 352-353, (original description). 1852b: 70, (intended original description). 1853: 61, (catalog). 1859: 19, (list). BROWN, 1901: 91, (range). CARY, 1911: 21, (list). ELLIS and HENDERSON, 1913: 95-96, figs. 28-31, (general account and description). DENVER Co. — Denver. LARIMER Co. — Fort Collins. LAS ANIMAS Co. — Trinidad. LOGAN Co. — 10 mi. N Sterling. MORGAN Co. — Goodrich, nr. Cow Creek. OTERO Co. — La Junta. PROWERS Co. — Lamar. SEDGWICK Co. — Lodgepole Creek, nr. Ovid; nr. Julesburg. WELD Co. — Hudson; 5 mi. E Grover; Greeley; 3 mi. E Osgood. FOSTON(?). STEJNEGER and BARBOUR, 1917: 77, part. 1923: 84, part, (range). 1933: 92, part, (range). COCKERELL, 1927: 109, (list). JONES-BURDICK, 1939: 5, (description; range).

Heterodon simus nasicus, YARROW, 1875: 555-556, (DENVER Co. — Denver. PUEBLO Co. — Pueblo). 1882: 141, (BENT Co. — Fort Lyon).

Heterodon nasicus nasicus, COPE, 1900: 777, (list). STEJNEGER and BARBOUR, 1939: 101, (range). SCHMIDT and DAVIS, 1941: 115, pl. 11, figs. 25-26 (description and range). STEJNEGER and BARBOUR, 1943: 125, (range). MARR, 1944: 484, (Prowers and Yuma cos.). JONES-BURDICK, 1949: 8-9, pl. 1, fig. 6, 1st and 2nd printing, (description; range). WRIGHT and WRIGHT, 1952: 582, (list). 1957: 297-301, fig. 91, map 28, (general account and description). SCHMIDT, 1953: 179-180, (range). STEBBINS, 1954: 364-366, 491, pls. 63, 94 map, (general account and description).

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Cheyenne Co. — 11 mi. SW Kit Carson (1), 1218. DENVER Co. — Denver (1), 6719. KIOWA Co. — 1 mi. E Eads (1), 9735. LOGAN Co. — 5 mi. S Sterling (1), 4063. MORGAN Co. — 1 mi. S and ½ mi. E Fort Morgan (1), 11792. OTERO Co. — La Junta (1), 247. PHILLIPS Co. — 11 mi. S Holyoke (1), 6745. PROWERS Co. — 20 mi. S Holly on Hwy. 88 (1), 1219. PUEBLO Co. — 12 mi. W Pueblo (1), 5994. SEDGWICK Co. — N Ovid, Lodgepole Creek (1), 250; 1 mi. W Julesburg (1), 251. WASHINGTON Co. — 20 mi. S and 4 mi. E Otis, Mathias Ranch (1), 6746; 20 mi. S Otis (1), 6993. WELD Co. — Milton Reservoir, E Platteville (5), 3460-1, 5747, 7497, 10701; Hudson (1), 248; 5 mi. E Grover (1), 249; Osgood (1), 252; 4 mi. NW Buckingham (2), 4064-5; Pawnee Buttes (1), 7133; 5 mi. E Roggen (3), 9499, 10140-1; abt. 10 mi. E Longmont (1), 9498. YUMA Co. — 9.5 mi. N Wray (1), 3370.

Genus *DIADOPHIS* Baird and Girard***Diadophis punctatus arnyi* Kennicott***Common name:* Prairie Ringneck Snake.*Type:* Holotype by monotypy, U. S. Nat'l. Mus. 1968; Samuel Army, collector. Number provided by Blanchard 1942: 69.

Type locality: Hyatt, Anderson Co., Kansas.

Range: Southeastern corner of Colorado.

Published accounts and records:

Diadophis arnyi KENNICOTT, 1859: 99, (original description).

Diadophis regalis arnyi, COPE, 1900: 746, (list. **Chaffee Co.** — mouth of Cache Creek).

Diadophis regalis, ELLIS and HENDERSON, 1913: 101–102, (description. **Las Animas Co.** — Trinidad). COCKERELL, 1927: 109, (list).

Diadophis regalis regalis, JONES-BURDICK, 1939: 5, (description; range).

Diadophis punctatus arnyi, BLANCHARD, 1942: 69–87, fig. 16, map 4, (general account and description. Quotes Ellis and Henderson for localities). JONES-BURDICK, 1949: 8, fig. 13, 1st and 2nd printing, (description; range). MASLIN, 1950b: 92, (**Las Animas Co.** — Kim). WRIGHT and WRIGHT, 1952: 582, (list). 1957: 179–182, fig. 57, map 29, (general account and description). SCHMIDT, 1953: 184, (range). STEBBINS, 1954: 360–361, 489, pl. 93 map, (general account and description).

University of Colorado Museum Specimens

Las Animas Co. — Kim (1), 5121.

Genus COLUBER Linnaeus

Coluber constrictor flaviventris Say

Common name: Eastern Yellow-bellied Racer.

Type: Lost.

Type locality: Stone quarry on west side of Missouri River, 3 miles above Boyer's River, Pottawattamie Co., Iowa.

Range: Plains and foothills of eastern Colorado.

Published accounts and records:

Coluber flaviventris SAY, 1823: 185–186, (original description).

Bascanium constrictor velustum, YARROW, 1875: 542, (**Pueblo Co.** — Pueblo).

Bascanium constrictor, YARROW, 1882: 108, part, (**Pueblo Co.** — Pueblo). CARY, 1911: 21, (range).

Zamenis constrictor, COPE, 1900: 796, (**Denver Co.** — Denver. **Pueblo Co.** — Pueblo. Rocky Mountains). ELLIS and HENDERSON, 1913: 103–104, (description. **Baca Co. Boulder Co.** — Boulder. **Denver Co.** — Denver. **Larimer Co.** — Fort Collins. **Las Animas Co. Prowers Co.** — Lamar. **Weld Co. Yuma Co.** — Yuma).

Zamenis constrictor flaviventris, BROWN, 1901: 58–59, part, (range). ELLIS and HENDERSON, 1915: 262, (**Boulder Co.** — Boulder).

Coluber constrictor flaviventris, STEJNEGER and BARBOUR, 1917: 79, part, (range). 1923: 87, (range). 1933: 94, (range). 1939: 103, (range). 1943: 128, (range). COCKERELL, 1927: 110, (list). ORTENBURGER, 1928: 175–192, pls. 27–30, maps figs. 33, 40, (extensive discussion and description). BURT, 1935: 329, (distribution. **Baca Co.** — 3 mi. NE Bartlett; 2 mi. E Stonington. **Prowers Co.** — 1 mi. E Holly). JONES-BURDICK, 1939: 6, (description; range). 1949: 10, pl. 2, fig. 10, 1st and 2nd printing, (description; range). SCHMIDT and DAVIS, 1941: 125, pl. 4, 13, (range; description). WRIGHT and WRIGHT, 1952: 582, (list). 1957: 138–142, fig. 44, map

16, (general account and description). SCHMIDT, 1953: 187, (range). STEBBINS, 1954: 372-374 487, 489, pls. 66, 92 map, (general account and description).

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Baca Co. — Two Buttes Reservoir (1), 11775. **Boulder Co.** — vicinity of Boulder (30), 285, 541, 821, 1059, 1159, 1381, 2815, 2863-4, 5795-6, 6990-2, 7065, 7470-5, 7510-1, 9487-8, 9731, 10696-8, 11594; 6 mi. N Boulder (2), 1924-5; 5 mi. N Boulder (1), 9490; nr. Valmont (4), 862-3, 7476-7; 2 mi. SE Lyons (3), 2478-80; 1.5 mi. SE Lyons (1), 4359; Longmont (1), 5712; 3 mi. E Longmont (1), 10699; nr. Altona, Table Mesa, Lefthand Canyon (1), 9489. **Jefferson Co.** — 4 mi. SE Golden (1), 10139. **Kiowa Co.** — 14 mi. E Eads (1), 5118. **Larimer Co.** — LaPorte, 5,000' (3), 2472-4; 4 mi. SE Fort Collins, Dixon Reservoir (1), 2475; nr. Carter Lake, 6 mi. W Berthoud (1), 11595. **Logan Co.** — 11 mi. S Sterling (1), 4062. **Pueblo Co.** — nr. Pueblo (1), 2671. **Sedgwick Co.** — 2 mi. NW Dorsey (2), 6837-8; ½ mi. S Ovid (1), 9486. **Weld Co.** — 3 mi. E Greeley Airport (2), 5583-4; 6 mi. S LaSalle (1), 5585; 10 mi. E Loveland (1), 2476; 17 mi. N Stoneham, Rush Creek (1), 2477. **Yuma Co.** — Bonny Reservoir (1), 11677.

Coluber constrictor mormon Baird and Girard

Common name: Western Yellow-bellied Racer.

Type: Holotype by monotypy, U. S. Nat'l. Mus. 2012; Capt. Stansbury's party, collector. Number provided by Ortenburger 1928: 213.

Type locality: Valley of the Great Salt Lake, Utah.

Range: Western Colorado at lower elevations. As far as I am aware no specimens have been recorded for Colorado in the literature. Jones-Burdick (1939: 6) at first tentatively included the species in the fauna and then later (1949: 10), apparently on the basis of verbal reports from Mesa and Delta cos., listed it in his revised editions of the "Guide to the Snakes of Colorado." More recently Mr. Robert L. Hoover of the Colorado Game and Fish Commission informs me that an adult specimen was collected 3 mi. E Fruita and two juveniles from 2 mi. W Grand Junction, Mesa Co. The latter two are preserved in the Commission's collections. I have not seen these specimens nor any others from the Western Slope of Colorado; but on the basis of these records I include the species in the state fauna.

Published accounts and records:

Coluber mormon BAIRD and GIRARD, 1852a: 351-352, (original description). 1852b: 70, (intended original description).

Zamenis constrictor flaviventris, BROWN, 1901: 58-59, part, (range).

Coluber constrictor mormon, JONES-BURDICK, 1939: 6, (description; range). 1949: 10, 1st and 2nd printing, (description; range). STEBBINS, 1954: 372-374, 487, 489, pls. 66, 92 map, (general account and description).

University of Colorado Museum Specimens

None.

Genus MASTICOPHIS Baird and Girard

Masticophis flagellum flavigularis (Hallowell)

Common name: Western Coachwhip.

Type: Lectotype, Philadelphia Academy of Natural Sciences 5388; Woodhouse, collector. Designated through publication by Ortenburger, 1928: 92.

Type locality: Cross Timbers, Oklahoma.

Range: Northeastern Colorado.

Published accounts and records:

Psammophis flavigularis HALLOWELL, 1852: 178-179, (original description).

Zamenis flagellum, ELLIS and HENDERSON, 1913: 104-105, figs. 32-33, part, (description).

Boulder Co. — Boulder; Altona. **Yuma Co.** — Yuma).

Coluber flagellum flagellum, STEJNEGER and BARBOUR, 1923: 87, part, (range). 1933: 94-95, part, (range).

Coluber flagellum, COCKERELL, 1927: 110, part, (list).

Masticophis flagellum testaceus, SCHMIDT, 1953: 189, part, (range). WRIGHT and WRIGHT, 1957: 446-450, fig. 133, map 37, part, (general account and description).

University of Colorado Museum Specimens

Yuma Co. — nr. Wray (1), 6035.

Masticophis flagellum piceus (Cope)

Common name: Red Racer.

Type: Holotype, U. S. Nat'l. Mus. 7891; Dr. E. Palmer, collector.

Type locality: Camp Grant, Graham Co., Arizona.

Range: Extreme southwestern Colorado. The inclusion of this species in the fauna of the state is based on reports of specimens seen in the vicinity of Mesa Verde National Park. I also saw, but failed to collect, a pale reddish-brown specimen 30 mi. W. Cortez, Montezuma Co., at the mouth of Yellow Jacket Canyon in June, 1958. It is possible that the form that undoubtedly occurs in this area should be assigned to *M. f. flavigularis*. But biogeographic evidence, based on the distribution of other species of reptiles, indicates that it should be tentatively recognized as *M. f. piceus* until corroboration from actual specimens is possible.

Published accounts and records:

Bascanium piceum COPE, 1892: 625, (original description of a specimen already named (Cope 1875: 40), but not described).

Bascanium flagelliforme piceum, COPE, 1875: 40, (*nomen nudum*).

Masticophis flagellum frenatum, JONES-BURDICK, 1939: 6, (description; range). 1949: 11, 1st and 2nd printing, (description; range).

Masticophis flagellum piceus, STEBBINS, 1954: 374-378, 495, pls. 66, 96 map, (general account and description).

Masticophis flagellum testaceus, WRIGHT and WRIGHT, 1957: 446-450, fig. 133, map 37, part, (general account and description).

University of Colorado Museum Specimens

None

Masticophis flagellum testaceus (Say)

Common name: Pink Coachwhip.

Type: Lost.

Type locality: Junction of Turkey Creek with Arkansas River, 12 mi. W Pueblo, Pueblo Co., Colorado. Restricted by Smith and Taylor, 1950a: 358; further restricted by Maslin, 1953: 193.

Range: Southeastern Colorado.

Published accounts and records:

Coluber testaceus SAY, 1823: 48, (original description). HOLBROOK, 1842: 63, pl. 13, (description).

Bascanium flagelliforme testaceum, YARROW, 1875: 542, (list. Pueblo Co. — Pueblo). 1882: 112, part, (range).

Zamenis flagellum flagellum, COPE, 1900: 803, (list).

Zamenis flagellum, ELLIS and HENDERSON, 1913: 104-105, figs. 32-33, part, (description. Baca and Las Animas cos.).

Coluber flagellum flagellum, STEJNEGER and BARBOUR, 1917: 79, part, (range). 1923: 87, part, (range).

Coluber flagellum, COCKERELL, 1927: 110, part, (list).

Masticophis flagellum flavigularis, ORTENBURGER, 1928: 92-103, pls. 16-19, fig. 17 map, part, (revision. Pueblo Co. — Pueblo). GLOYD, 1937: 118, (Pueblo Co. — Pueblo). JONES-BURDICK, 1939: 6, (description; range). WRIGHT and WRIGHT, 1952: 582, (list).

Coluber flagellum flavigularis, STEJNEGER and BARBOUR, 1933: 95, part, (range). 1939: 104, part, (range). SCHMIDT and DAVIS, 1941: 127, fig. 29, (description; range).

Coluber flagellum testaceus, STEJNEGER and BARBOUR, 1943: 130-131, part, (range).

Masticophis flagellum testaceus, JONES-BURDICK, 1949: 11-12, 1st and 2nd printing, (description; range). SMITH and TAYLOR, 1950a: 358, (restriction of type locality to Pueblo, Pueblo Co.). SCHMIDT, 1953: 189, part, (range). MASLIN, 1953: 193-200, (restriction of name *testaceus* to form occurring in the Arkansas River drainage of Colorado; redescription; restriction of type locality). STEBBINS, 1954: 374-378, 495, pls. 66, 96 map, (general account and description). WRIGHT and WRIGHT, 1957: 446-450, fig. 133, map 37, part, (general account and description).

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Baca Co. — 27 mi. S Pritchett, Sand Canyon (1), 3018; 3 mi. S Walsh (1), 3162; 3 mi. N Kirkwell (1), 7647; below Two Buttes Reservoir (1), 11680. **El Paso Co.** — 15 mi. SSE Colorado Springs (1), 2672; nr. Calhan (1), 5753; 5 mi. S Colorado Springs (1), 5938. **Fremont Co.** — 10 mi. E Canyon City (1), 5755; 9 mi. NE Florence (1), 5756; abt. 15 mi. S Victor, Phantom Canyon (1), 9504. **Kiowa Co.** — 10 mi. N Eads (1), 5122; 14 mi. E Eads (1), 5123. **Las Animas Co.** — Hoopup, 13 mi. N Kim (1), 5125; 7 mi. SE Uteville, East Carrizo Creek (1), 5754; 23 mi. E

Trinidad on U. S. Hwy. 160 (1), 9505; Trinchera Creek on U. S. Hwy. 160 (1), 10705. **Otero Co.** — 6 mi. E Higbee (1), 5124. **Prowers Co.** — 10 mi. S Holly (1), 1221; nr. Lamar (1), 1222.

Masticophis taeniatus taeniatus (Hallowell)

Common name: Desert Striped Whip Snake.

Type: Holotype by monotypy, U. S. Nat'l. Mus. 2110; W. S. Woodhouse, collector. Number provided by Ortenburger 1928: 25.

Type locality: Shiprock, San Juan Co., New Mexico. Restricted by Smith and Taylor, 1950a: 359.

Range: Extreme western Colorado below 7,000'.

Published accounts and records:

Leptophis taenita HALLOWELL, 1852: 181, (original description).

Bascanium taeniatum taeniatum, YARROW, 1882: 112, (**Garfield Co.** — Canyon Creek).

Zamenis taeniatus, COPE, 1900: 817, (list). ELLIS and HENDERSON, 1913: 105-106, (description).

Bascanium taeniatum, CARY, 1911: 27, (list; habitat. **Garfield Co.** — Morris, W Rifle. **Mesa Co.** — Plateau Creek).

Coluber taeniatus, COCKERELL, 1927: 110, (list; range).

Masticophis taeniatus taeniatus, ORTENBURGER, 1928: 25-35, pl. 3, fig. 1 map, (revision; range).

BARRY, 1933b: 99-100, (**Garfield Co.** — Plateau Creek; Rifle; Canyon Creek. **Montezuma Co.** — McElmo Canyon. **Montrose Co.** — Paradox Valley). 1933c: 9-10, (brief account of

habits. Mesa Verde Nat'l. Park). JONES-BURDICK, 1939: 7, (description; range). 1949: 11, 1st and 2nd printing, (description; range. **Moffat, Garfield, Mesa, Montrose, Montezuma**

cos.). MASLIN, 1947a: 138, (eggs; habitat; range extension. **Moffat Co.** — nr. Yampa River, 6 mi. W Hell's Canyon, 5,400'). SCHMIDT, 1953: 190, (range). STEBBINS, 1954: 379-380, 495,

497, pls. 67, 96 map, (general account and description). WRIGHT and WRIGHT, 1957: 453-456, fig. 135, map 36, (general account and description).

University of Colorado Museum Specimens

Mesa Co. — 6 mi. S Fruita (1), 9736; Colorado Nat'l Mon. (1), 10706. **Moffat Co.** — Dinosaur Nat'l. Mon. — Castle Park (3), 3748-9, 5537, 6 mi. W Hell's Canyon (2), 2482-3; 3 mi. E Harding's Hole (1), 5536.

Genus OPHEODRYS Fitzinger

Opheodrys vernalis blanchardi Grobman

Common name: Western Smooth Green Snake.

Type: Holotype, University of Michigan Mus. Zool. 62439 ad. ♂; H. T. Gaige, collector, 25 July 1925.

Type locality: Spanish Peaks, 8,000', [probably Huerfano Co.], Colorado.

Range: Mountains and foothills of Colorado below 10,000'.

Published accounts and records:

Opheodrys vernalis blanchardi GROBMAN, 1941: 11-12, (original description. **Archuleta Co.**

Boulder Co. El Paso Co. Huerfano Co. — Spanish Peaks, 8,000', type locality. **La Plata Co.** — Vallecito. **Las Animas Co.**) SCHMIDT and DAVIS, 1941: 12, (description; range).

- STEJNEGER and BARBOUR, 127, (range). JONES-BURDICK, 1949: 9, figs. 9, 11, 1st and 2nd printing, (description; range). WRIGHT and WRIGHT, 1952: 582 (list). 1957: 560-564, fig. 166, map 43, (general account and description). SCHMIDT, 1953: 192, (range). STEBBINS, 1954: 370-372, 497, pls. 65, 96 map, (general account and description. **Boulder Co.** — Boulder).
- Liopeltis vernalis*, BROWN, 1901: 66, part, (range). CARY, 1911: 40, (list. **La Plata Co.** — Rio Pinos, nr. Vallecito). ELLIS and HENDERSON, 1913: 99-100, (description. **Boulder Co.** — Boulder. **El Paso Co.** — Palmer Lake). 1915: 262, (South Platte River Valley. **Park Co. Routt Co.** — Steamboat Springs). STEJNEGER and BARBOUR, 1923: 85, part, (range). 1933: 92, part, (range). COCKERELL, 1927: 104, (list). BARRY, 1933b: 99, (**Boulder Co.** — Boulder. **El Paso Co.** — Palmer Lake. **La Platta Co.** — Vallecito. **Montezuma Co.** — Mesa Verde Nat'l. Park, Far View House). 1933c: 9, (food habits; Mesa Verde). BURT, 1935: 328, (**Las Animas Co.** — Raton Pass). JONES-BURDICK, 1939: 5, (description; range).
- Ophedryx vernalis*, STEJNEGER and BARBOUR, 1939: 102, part, (range).

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Boulder Co. — Boulder (1), 127; Green Mt., nr. Boulder (1), 5800. **Douglas Co.** — btwn. Decker and Cheeseman Reservoir, South Platte River (1), 11681. **El Paso Co.** — nr. Manitou Springs, Manitou Mt. (1), 6997. **Hinsdale Co.** — Los Pinas River, 8,000' (1), 2166. **Jefferson Co.** — 4 mi. S Morrison (1), 4011. **Montrose Co.** — Black Canyon of the Gunnison Nat'l. Mon., S. Rim (1), 5798.

Genus ELAPHE Fitzinger

Elaphe guttata emoryi (Baird and Girard)

Common name: Great Plains Rat Snake.

Type: Holotype by monotypy, lost, formerly U. S. Nat'l. Mus. 2257; J. H. Clark, collector. Number provided by Baird, 1859b: 19.

Type locality: Howard Springs, 20 mi. SW Ozona, Crockett Co., Texas. Designated by Dowling, 1951: 43.

Range: Southeastern Colorado.

Published accounts and records:

Scotophis emoryi BAIRD and GIRARD, 1853: 157-158, (original description).

Elaphe laeta, SCHMIDT and DAVIS, 1941: 146, fig. 39, (range; description).

Elaphe laeta laeta, JONES-BURDICK, 1949: 12, 1st and 2nd printing, (description; range).

Elaphe emoryi emoryi, DOWLING, 1951: 39-44, 2 figs., (demonstrates that the name *laeta* is a synonym of *obsoleta*, resurrects *emoryi*). WRIGHT and WRIGHT, 1957: 218-222, fig. 68, map 23, (general account and description).

Elaphe guttata emoryi, DOWLING, 1952: 2-3, part, (reduces *intermontanus* Woodbury and Woodbury to synonymy of *emoryi*). SCHMIDT, 1953: 196, part, (range). STEBBINS, 1954: 387-389, 489, 491, pls. 69, 93 map, part, (general account and description).

University of Colorado Museum Specimens

Las Animas Co. — 2 mi. S Potato Butte, Cottonwood Creek, Dodge Ranch (2), 7643, 9734. **Prowers Co.** — nr. Lamar (1), 1226. **Pueblo Co.** — nr. Pueblo (2), 2669-70.

***Elaphe guttata intermontanus* Woodbury and Woodbury**

Common name: Intermountain Rat Snake.

Type: Holotype, University of Utah, Mus. Zool. 271 ad. ♂; D. M. Parriott, collector, 6 May 1933.

Type locality: Moab, Grand Co., Utah.

Range: Central portion of western Colorado at lower elevations in major river valleys.

Published accounts and records:

Elaphe laeta intermontanus WOODBURY and WOODBURY, 1942: 140-142, (original description. Garfield Co. — Lacey. Mesa Co. — Grand Junction; Mesa). JONES-BURDICK, 1949: 12, 1st and 2nd printing, (description; range). WRIGHT and WRIGHT, 1952: 582, (list). MARX, 1958: 481, (lists paratypes).

Elaphe emoryi intermontana, DOWLING, 1951: 43, (footnote suggesting new name combination). WRIGHT and WRIGHT, 1957: 222-224, fig. 69, map 23, (general account and description).

Elaphe guttata emoryi, DOWLING, 1952: 2-3, (reduces *intermontanus* Woodbury and Woodbury to synonymy of *emoryi* Baird and Girard). SCHMIDT, 1953: 196, part, (range). STEBBINS, 1954: 387-389, 489, 491, pls. 69, 93 map, part, (general account and description).

University of Colorado Museum Specimens

Mesa Co. — 13 mi. SE Gateway (1), 6700. Montrose Co. — nr. Nucla (1), 10700.

Genus ARIZONA Kennicott

***Arizona elegans blanchardi* Klauber**

Common name: Kansas Glossy Snake.

Type: Holotype, Stanford University, Nat. Hist. Mus. 10393 ad ♂; J. W. Anderson, collector, 7 July 1942.

Type locality: 13 mi. SE Benkelman, Dundy Co., Nebraska.

Range: Extreme eastern Colorado. Known from Yuma and Prowers cos.

Published accounts and records:

Arizona elegans blanchardi KLAUBER, 1946: 328-333, (original description. Yuma Co. — Schramm). WRIGHT and WRIGHT, 1952: 582, (list). 1957: 92-93, fig. 28, map 11, (discussion and description). SCHMIDT, 1953: 200, (range). STEBBINS, 1954: 390-391, 485, 486, pls. 70, 92 map, (general account and description).

Arizona elegans elegans, JONES-BURDICK, 1949: 12-13, 1st and 2nd printing, (description; range).

University of Colorado Museum Specimens

Prowers Co. — nr. Lamar (1), 1225; 4 mi. S Lamar (1), 11585.

Genus PITUOPHIS Holbrook

***Pituophis catenifer affinis* Hallowell**

Common name: Sonora Gopher Snake.

Type: Unknown. See Stull, 1940: 123, and Klauber 1947: 41.

Type locality: Zuni River, New Mexico. Restricted by Hallowell, 1854: 146 and Smith and Taylor 1950a: 359.

Range: Extreme southern Colorado known from Archuleta Co. Klauber (1947: 39) places the specimens of Archuleta Co. in the subspecies *deserticola*. Ecologically this area is like the more mesic mountainous region of west-central New Mexico, occupied by *affinis*, than the arid river basins of eastern Utah and western Colorado, where *deserticola* is found. I have not seen specimens from Archuleta Co.; but I follow Stull (1940: 130) in assigning the specimens of this area to *affinis*.

Published accounts and records:

Pityophis affinis HALLOWELL, 1852: 181, (original description).

Pityophis sayi bellona, YARROW, 1875: 515, 541, (list. **Archuleta Co.** — Hot Springs, Pagosa). 1882: 107, (**Archuleta Co.** — Pagosa). COPE, 1900: 876, (list).

Pityophis sayi sayi, YARROW, 1882: 105, (**Archuleta Co.** — Pagosa).

Pityophis catenifer sayi, ELLIS and HENDERSON, 1913: 93–94, figs. 24–26, 35–36, part, (description; range).

Pituophis sayi affinis, STULL, 1932: 4, (list; range). 1940: 123–140, (description; variation; range). STEJNEGER and BARBOUR, 1933: 104, (range). 1939: 114, (range). 1943: 114, (range). JONES-BURDICK, 1939: 7, part, (description; range). SCHMIDT and DAVIS, 1941: 163, fig. 46 map, (description; range).

Pituophis catenifer deserticola, KLAUBER, 1947: 39, part, (relationships. **Archuleta Co.** — Pagosa).

Pituophis catenifer affinis, JONES-BURDICK, 1949: 14, 1st and 2nd printing, (description; range). WRIGHT and WRIGHT, 1952: 582, (list). 1957: 593–596, fig. 172, map 46, (description; range).

University of Colorado Museum Specimens

None

***Pituophis catenifer deserticola* Stejneger**

Common name: Great Basin Gopher Snake.

Type: Lectotype, U. S. Nat'l. Mus. 18070; Merriam, collector, 11 May 1891. Designated by Grinnell and Camp, 1917: 194, and Klauber, 1947: 29.

Type locality: Beaverdam Mountains, Washington Co., Utah. Restricted by designation of type.

Range: Western Colorado below 7,000'.

Published accounts and records:

Pituophis catenifer deserticola STEJNEGER, 1893: 206–208, (original description). STULL, 1932: 5, (list). 1940: 166–184, (description; variation. **Mesa Co.** — Grand Junction. **Montrose Co.** — Naturita). STEJNEGER and BARBOUR, 1939: 113, (range). 1943: 142, (range). SCHMIDT and DAVIS, 1941: 165, pl. 18, fig. 46 map, (description; range). KLAUBER, 1947: 39, part, (relationships. **Mesa Co.** — Grand Junction; **Fruita. Montezuma Co.** — Mesa Verde

Nat'l. Park. **Montrose Co.** — Naturita. JONES-BURDICK, 1949: 14, pl. 3, 1st and 2nd printing, (description and range). WRIGHT and WRIGHT, 1952: 582, (list). 1957: 600-604, fig. 174, map 46, (general account and description). STEBBINS, 1954: 391-394, 497, 500, pls. 70, 98 map, (general account and description).

Pituophis sayi, CARY, 1911: 27, (**Montrose Co.** — 8 mi. W Naturita, Dry Creek).

Pituophis catenifer bellona, ELLIS and HENDERSON, 1913: 94, (description. **Mesa Co.** — Fruita). 1915: 262, (**Moffat Co.** — Douglas Spring. **Montrose Co.** — Naturita; Naturita to Gypsum Creek).

Pituophis bellona, COCKRELL, 1927: 109, (list).

Pituophis sayi affinis, BARRY, 1933c: 8-9, (account of species in Mesa Verde Nat'l. Park; feeding; hissing; etc.). JONES-BURDICK, 1939: 7, part, (description; range).

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Garfield Co. — 13 mi. W Rifle (1), 7503. **Mesa Co.** — 10 mi. S Fruita (1), 7135. **Moffat Co.** — Dinosaur Nat'l. Mon. — Castle Park (7), 3750-2, 5533-5, 5731; Blue Mt., 10 mi. S Castle Park (1), 5730; 10 mi. WNW Sunbeam, Little Snake River (1), 2484. **Montezuma Co.** — Cortez (1), 2562; 11 mi. S Cortez, 4902; Mesa Verde Nat'l. Park, Suntower (1), 4903. **Montrose Co.** — Naturita (2), 457.

***Pituophis catenifer sayi* (Schlegel)**

Common name: Bullsnake.

Type: Unknown. See Stull, 1940: 91.

Type locality: Carthage, Jasper Co., Missouri. Restricted by Smith and Taylor, 1950a: 358.

Range: Eastern Colorado below 9,000' and the San Luis Valley.

Published accounts and records:

Coluber sayi SCHLEGEL, 1837: 157, (original description).

Pityophis elegans, YARROW, 1882: 108, (btwn. Arkansas and Cimarron, New Mexico).

Pituophis sayi, CARY, 1911: 21, (list). STEJNEGER and BARBOUR, 1923: 96, (range). COCKERELL, 1927: 109, (list. **Boulder Co.** — Boulder. **Denver Co.** — Denver). BURT and BURT, 1929: 457, (field notes. In **Jefferson Co.** — 12 mi. W Denver).

Pityophis catenifer sayi, BROWN, 1901: 55, (range). ELLIS and HENDERSON, 1913: 93-94, figs. 24-26, 35-36, part, (description. **Baca Co.** **Boulder Co.** — Boulder. **Denver Co.** — Denver. **Larimer Co.** — Fort Collins; foothills 5 mi. S Box Elder. **Las Animas Co.** **Morgan Co.** — Wild Cat Creek, NE Fort Morgan. **Sedgwick Co.** — Julesburg. **Weld Co.** — Osgood. **Yuma Co.** — Wray). 1915: 262, (Upper Arkansas River Valley. **Boulder Co.** — Marshall. **Chaffee Co.** — Hortense Hot Springs, nr. Buena Vista, abt. 9,000'. **Weld Co.** — Greeley).

Pituophis sayi sayi, STULL, 1932: 3-4, (list). 1940: 91-122, (description; variation. **Boulder Co.** — Lee Hill; Boulder; Marshall. **Chaffee Co.** — Buena Vista. **Fremont Co.** — Canyon City. **Huerfano Co.** — Walsenburg. **Morgan Co.** — Orchard. **Washington Co.** — Akron. **Weld Co.** — Greeley). BURT, 1935: 331, (**Prowers Co.** — Arkansas River at Holly). JONES-BURDICK, 1939: 7, (description; range). SCHMIDT and DAVIS, 1941: 163, pl. 18, fig. 45, 46 map, (description; range). STEJNEGER and BARBOUR, 1943: 144, (range).

Pituophis catenifer sayi, KLAUBER, 1946: 5-6, (reduces *sayi* to synonymy of *catenifer*). 1947: 71, (key; range). SWENSON and RODECK, 1948: 53, abstract, (altitude record: W Boulder, 6,770', **Boulder Co.**). JONES-BURDICK, 1949: 13-14, 1st and 2nd printing, (description;

range). WRIGHT and WRIGHT, 1952: 582, (list). 1957: 604-609, fig. 175, map 46, (general account and description). SCHMIDT, 1953: 203, (range). STEBBINS, 1954: 391-394, 497, 500, pls. 70, 98 map, (general account and description).

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Adams Co. — Barr Lake (2), 10169-70; 8 mi. NE Byers, Bijou Creek (3), 11596-8. **Arapahoe Co.** — 2 mi. E Englewood (1), 4012. **Baca Co.** — W Kirkwell, E. Carrizo Creek (1), 1374; 22 mi. S Pritchett (1), 3019; 2.5 mi. S Stonington, N. Fork Cimarron River (2), 3163-4; 14 mi. S Utleyville (1), 11599. **Boulder Co.** — vicinity of Boulder (26), 77, 145, 514, 713, 866, 1381, 5719, 5734, 5766-73, 7067, 7506-8, 9508, 10162-4, 10717-8; White Rocks nr. Boulder (1), 1382; 7 mi. W Boulder (1), 5713; 11 mi. NE Boulder (1), 7505; 9 mi. E Boulder, Boulder Creek (1), 10165; 7 mi. N Boulder (1), 10715; nr. Marshall (2), 441, 2907; Magnolia, 7,100' (3), 1399, 5774-5; NE Longmont (1), 5720; 15 mi. NW Longmont (1), 5778; 4 mi. E Longmont (1), 10716; Coal Creek on St. Hwy. 93 (1), 5721; Lefthand Canyon (2), 5722, 5779; Sunshine Canyon, 5 mi. NW Boulder (2), 5725, 10718. **Conejos Co.** — 14 mi. E Conejos, Rio Grande River (4), 3490-3. **Costilla Co.** — 3 mi. N San Luis (2), 3968-9. **Douglas Co.** — 3 mi. S and 8 mi. E Littleton (1), 5818; 8 mi. NW Franktown (1), 9739. **Elbert Co.** — 5 mi. N Riverbend (1), 7509. **Jefferson Co.** — 4 mi. SE Golden, Green Mt. (3), 10166-8. **Kiowa Co.** — 4.5 mi. E Eads (1), 9740. **Larimer Co.** — Loveland (1), 5733; 4 mi. W Loveland (2), 5716-7; 10 mi. W Berthoud (1), 5724; Timnath (1), 7504; Horsetooth Mt., W Fort Collins (1), 9507. **Las Animas Co.** — abt. 10 mi. W Kim (1), 1220; Camp Trinidad, nr. Trinidad (1), 7105; 30 mi. ENE Trinidad, Trinchera Creek (1), 10171; 1 mi. E Salt Creek, on U. S. Hwy. 160 (1), 10823. **Lincoln Co.** — 4 mi. SE Limon (1), 11776. **Morgan Co.** — 2 mi. WNW Fort Morgan, Muir Springs, 4330' (1), 11800. **Otero Co.** — 6 mi. S La Junta (1), 7653. **Sedgwick Co.** — Julesburg Reservoir (2), 5723, 10161. **Washington Co.** — 20 mi. S and 4 mi. W Otis, Mathias Ranch (1), 6747. **Weld Co.** — vicinity of Milton Reservoir, E Platteville (6), 3462-3, 5586-7, 5776, 10714; Roggen (2), 864, 5715; 10 mi. NE Roggen (1), 2488; 24 mi. N Stoneham, Battle Canyon (1), 2860. **Yuma Co.** — vicinity of Wray (4), 3371, 5777, 5780, 9737; 3 mi. N Bonny Dam (2), 11600-1; Bonny Reservoir (2), 11603-4.

Genus LAMPROPELTIS Fitzinger

Lampropeltis doliata celaenops Stejneger

Common name: New Mexico Milk Snake.

Type: Holotype, U. S. Nat'l. Mus. 22375; H. B. Lane, collector.

Type locality: Mesilla Valley, Dona Ana Co., New Mexico.

Range: Extreme southwestern Colorado. I have seen one specimen of this species in the collection of the Mesa Verde National Park museum and feel that if more material were available, particularly from farther east, the affinity of the specimens from this area to *celaenops* would be more apparent.

Published accounts and records:

Lampropeltis pyrrhomelaena celaenops STEJNEGER, 1903: 153, (original description).

Lampropeltis triangulum gentilis, BLANCHARD, 1921: 165-171, figs. 49 map, 72, part, (revision; description; range). BARRY, 1933c: 8, (Montezuma Co. — nr. Mesa Verde Nat. Park). JONES-BURDICK, 1939: 7, part, (description; range). SCHMIDT and DAVIS, 1941: 188, fig. 57, 58 map, part, (description; range). STEJNEGER and BARBOUR, 1943: 150-151, part, (range).

Lampropeltis doliata gentilis, JONES-BURDICK, 1949: 14, pl. 5, 1st and 2nd printing, part, (description; range). SCHMIDT, 1953: 209, part, (range).

Lampropeltis doliata celaenops, TANNER and LOOMIS, 1957: 29-31, pls. 1, 3, (revision; resurrection of name; description; range. **Montezuma Co.** — Cortez; Mesa Verde Nat'l. Park; listed as intergrades btwn. *celaenops* and *taylori*).

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None.

Lampropeltis doliata gentilis (Baird and Girard)

Common name: Western Milk Snake.

Type: Holotype by monotypy, U. S. Nat'l. Mus. 1853 ad. ♂; Capt. Marcy, collector, 14 June 1852. Number provided by Cope, 1900: 895; see also Tanner and Loomis, 1957: 21.

Type locality: North Fork Red River, nr. Sweetwater Creek, Wheeler Co., Texas.

Range: Colorado east of the Rocky Mountains below 8,000'.

Published accounts and records:

Ophibolus gentilis BAIRD and GIRARD, 1853: 90, (original description).

Ophibolus doliatus gentilis, COPE, 1875: 36, (range). COCKERELL, 1910: 131, (list. **Boulder Co.** — Boulder). ELLIS and HENDERSON, 1913: 91-92, fig. 23, (description. **Baca Co. Boulder Co.** — Boulder. **Jefferson Co.** — Clear Creek, nr. Golden. **Larimer Co. Morgan Co.** — Orchard. **Pueblo Co.** — Beulah. **Weld Co.** — **Yuma Co.** — Yuma).

Ophibolus triangulus gentilis, GARMAN, 1883: 66-67, part, (description; range).

Ophibolus doliatus gentilis, ELLIS and HENDERSON, 1915: 261, (**Boulder Co.** — Flagstaff Mountain, Boulder, 6,000').

Lampropeltis triangulum gentilis, BLANCHARD, 1921: 165-171, fig. 49 map, 72, part, (revision; description. Quotes Ellis and Henderson, 1913, for localities and adds **Larimer Co.** — 7 mi. W Loveland. **Weld Co.** — Eaton. **Yuma Co.** — Dry Willow Creek). BURNETT, 1926: 3, part, (**Conejos Co.** — nr. Manassa. **Lincoln Co.** — Hugo). COCKERELL, 1927: 109, (list). JONES-BURDICK, 1939: 7, part, (description; range). SCHMIDT and DAVIS, 1941: 188, 191, fig. 57, 58 map, part, (description; range). STEJNEGER and BARBOUR, 1943: 150-151, part, (range). SWENSON and RODECK, 1948: 53, abstract, (size record from Boulder, **Boulder Co.**). WRIGHT and WRIGHT, 1952: 582, (list). STEBBINS, 1954: 403-404, 491, 494, pls. 73, 95 map, part, (general account and description).

Lampropeltis doliata gentilis, JONES-BURDICK, 1949: 14, pl. 5, 1st and 2nd printing, part, (description; range). SCHMIDT, 1953: 209, part, (range). TANNER and LOOMIS, 1957: 21-25, (revision; general account; variation. **Boulder Co.** — Boulder; Noland; N Lyons; 2 mi. SE Lyons; Sugar Loaf. **Huerfano Co.** — Walsenburg. **Jefferson Co.** — Lookout Mountain, W of Denver. **Larimer Co.** — 1 mi. W Fort Collins; 6 mi. SW Fort Collins; nr. Horsetooth Mt. **Pueblo Co.** — Beulah). WRIGHT and WRIGHT, 1957: 360-362, fig. 109, map 31, part, (general account and description).

University of Colorado Museum Specimens

Boulder Co. — vicinity of Boulder (18), 128, 130, 534, 854-5, 1157, 2897, 5707, 5710, 5802, 6994, 7498-7502, 10703, 11679; Four Mile Canyon, N Boulder (1), 853; Noland, N Boulder (1),

852; Sugarloaf Mt., N Boulder (1), 1398; Royal Arch Trail, S Boulder (1), 9500; 2 mi. SE Lyons (1), 2494; Eldorado Springs (1), 5708; 5 mi. W Lyons, Faculty Ranch (1), 10703. **Huerfano Co.** — Walsenburg (1), 1010. **Jefferson Co.** — Lakewood, W Denver (1), 10142; Lookout Mt., W Denver (1), 851; 1 mi. N Morrison, Red Rocks Park (1), 10143; 4 mi. SE Golden, Green Mt. (1), 10144; 10 mi. N Golden, Dow Chemical Plant (1), 10704. **Kiowa Co.** — Arlington (1), 5711. **Larimer Co.** — 1 mi. W Fort Collins (1), 2491; Horsetooth Mt., W Fort Collins (1), 2492; 6 mi. SE Fort Collins, Spring Canyon (1), 2493. **Morgan Co.** — 13 mi. NW Fort Morgan (1), 7134; 7 mi. S Fort Morgan (3), 11794-6; 7½ mi. N and 2½ mi. E Weldona, 4700' (1), 11793.

Lampropeltis doliata taylori Tanner and Loomis

Common name: Utah Milk Snake.

Type: Holotype, Brigham Young University 10533 ad. ♀; William M. Tanner, collector, 24 May 1951.

Type locality: Approximately 2 mi. N Alpine, Utah Co., Utah.

Range: Western Colorado north of Montezuma Co. and below 7,000'.

Published accounts and records:

Lampropeltis doliata taylori TANNER and LOOMIS, 1957: 31-36, pls. 1-4, (original description).

Delta Co. — Delta. **Mesa Co.** — nr. Grand Junction; 3 mi. S Fruita).

Ophibolus triangulus gentilis, GARMAN, 1883: 66-67, part, (description; range).

Lampropeltis triangulum gentilis, BLANCHARD, 1921: 165-171, figs. 49 map, 72, part, (revision).

BURNETT, 1926: 3, part, (**Delta Co.** — Paonia. **Montrose Co.** — nr. Montrose). JONES-BURDICK, 1939: 7, part, (description; range). SCHMIDT and DAVIS, 1941: 188, 191, figs. 57, 58 map, part, (description; range). STEJNEGER and BARBOUR, 1943: 150-151, part, (range). STEBBINS, 1954: 403-405, 491, 494, pls. 73, 95 map, part, (general account and description).

Lampropeltis doliata gentilis, JONES-BURDICK, 1949: 14, pl. 5, 1st and 2nd printing, part, (description; range). SCHMIDT, 1953: 209, part, (range). WRIGHT and WRIGHT, 1957: 338, map 31, part, (general account and description).

University of Colorado Museum Specimens

Jackson Co. — Irish Canyon, 10,000' (1), 7646. **Mesa Co.** — Grand Junction (1), 5706.

Genus RHINOCHEILUS Baird and Girard

Rhinocheilus lecontei tessellatus Garman

Common name: Texas Long-nosed Snake.

Type: Holotype by monotypy, Harvard University Mus. Comp. Zool. 4577 juv. ♀. Number provided by Barbour and Loveridge, 1929: 333.

Type locality: Monclova, Coahuila, Mexico.

Range: Southeastern corner of Colorado.

Published accounts and records:

Rhinocheilus lecontei tessellatus GARMAN, 1883: 74, (original description). JONES-BURDICK, 1949: 15, fig. 7, 1st and 2nd printing, (description; range). MASLIN, 1950b: 92-93, (description. **Baca Co.** — S side Cimarron River. **Prowers Co.** — Lamar). WRIGHT and WRIGHT,

1952: 582, (list). 1957: 642-644, fig. 187, map 48, (general account and description). SCHMIDT, 1953: 212, (range). STEBBINS, 1954: 406-407, 500, pls. 73, 98 map, (general account and description).

Rhinocheilus lecontei, SWENSON and RODECK, 1948: 53, abstract, (**Prowers Co.** — Lamar).

University of Colorado Museum Specimens

Baca Co. — extreme SE corner of county, S side Cimarron River (1), 4013. **Prowers Co.** — nr. Lamar (1), 1224.

Genus SONORA Baird and Girard

Sonora episcopa episcopa (Kennicott).

Common name: Great Plains Ground Snake.

Type: Lectotype, U. S. Nat'l. Mus. 2042; A. Schott, collector. Secondarily designated by restriction of type locality by Stickel, 1938: 184.

Type locality: Eagle Pass, Maverick Co., Texas. Restricted by Stickel, 1938: 184, and Smith and Taylor, 1950a: 362.

Range: Extreme southeastern corner of Colorado.

Published accounts and records:

Lamprosoma episcopum KENNICOTT, 1859: 22, pl. 8, fig. 2, (original description).

Chionactis episcopus isozonus, ELLIS and HENDERSON, 1913: 101, (description. **Las Animas Co.** — Carrizo Canyon).

Sonora occipitalis, STEJNEGER and BARBOUR, 1917: 92, part, (range). 1923: 103, part, (range). 1933: 112, part, (range). JONES-BURDICK, 1939: 7-8, (description; range).

Sonora semiannulata, COCKERELL, 1927: 109, (list).

Sonora episcopa, STICKEL, 1938: 184, (range). STEJNEGER and BARBOUR, 1939: 122, part, (range). 1943: 154, part, (range). SCHMIDT and DAVIS, 1941: 199-200, pl. 21, fig. 64, (description; range). JONES-BURDICK, 1949: 15, fig. 12, 1st and 2nd printing, (description, range). WRIGHT and WRIGHT, 1952: 582, (list). STEBBINS, 1954: 439-441, 501, pls. 82, 99 map, (general account and description).

Sonora episcopa episcopa, SCHMIDT, 1953: 213, (range). WRIGHT and WRIGHT, 1957: 672-676, fig. 196, map 51, (general account and description).

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Las Animas Co. — 2 mi. S Potato Butte, nr. Cottonwood Creek, Dodge Ranch (1), 7654.

Genus HYP SIGLENA Cope

Hypsiglena torquata loreala Tanner

Common name: Mesa Verde Night Snake.

Type: Holotype, Brigham Young University 2829 ♀; Vasco M. Tanner, collector, 17 June 1939.

Type locality: West edge of Castle Dale, Emery Co., Utah.

Range: Extreme southeastern Colorado in Montezuma Co.

Published accounts and records:

Hypsiglena ochrorhynchus lorealis TANNER, 1944: 63-65, pl. 2, figs. 1, 8, (original description. **Montezuma Co.** — Mesa Verde Nat'l. Park).

Hypsiglena ochrorhynchus, BARRY, 1932b: 103, (first Colorado record. Mesa Verde Nat'l. Park). 1933b: 99, (Sun Temple, Mesa Verde Nat'l. Park). 1933c: 8, 10, (Mesa Verde). JONES-BURDICK, 1939: 8, part, (description; range). 1949: 19, fig. 8, 1st and 2nd printing, part, (description · range).

Hypsiglena torquata loreala, WRIGHT and WRIGHT, 1952: 582, (list). 1957: 321-322, map 30, (general account and description). SCHMIDT, 1953: 218, (range). STEBBINS, 1954: 457-459, 491, pls. 86, 94 map, (general account and description).

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Montezuma Co. — Mesa Verde Nat'l. Park, Chapin Mesa (2), 5801, 11678.

Hypsiglena torquata texana Stejneger

Common name: Texas Night Snake.

Type: Holotype, U. S. Nat'l. Mus. 1782; Arthur Schott, collector.

Type locality: Mier, Tamaulipas, Mexico. Restricted by Smith and Taylor, 1950a: 345.

Range: Southeastern Colorado.

Published accounts and records:

Hypsiglena texana STEJNEGER, 1893: 205, (original description).

Hypsiglena ochrorhynchus, JONES-BURDICK, 1939: 8, part, (description; range). 1949: 19, fig. 8, 1st and 2nd printing, part, (description; range).

University of Colorado Museum Specimens

Pueblo Co. — 15 mi. W Pueblo (1), 2817.

Genus TANTILLA Baird and Girard

Tantilla nigriceps nigriceps Kennicott

Common name: Plains Black-headed Snake.

Type: Lectotype, U. S. Nat'l. Mus. 4491; Dr. Crawford, collector. Secondarily designated by restriction of type locality by Blanchard, 1938: 372.

Type locality: Fort Bliss, El Paso Co., Texas. Restricted by Blanchard, 1938: 372, and Smith and Taylor, 1950a: 362.

Range: Plains and foothills of eastern Colorado below 7,000'.

Published accounts and records:

Tantilla nigriceps KENNICOTT, 1860a: 328, (original description). ELLIS and HENDERSON, 1913: 106, fig. 34, (description. **Otero Co.** — La Junta. **Yuma Co.** — Yuma, nr. Dry Willow Creek). 1915: 263, (**Boulder Co.** — Boulder. **Otero Co.** — La Junta). COCKERELL, 1927: 108, (list). RODECK, 1936: 70, (**Boulder Co.** — Boulder, Red Rocks). BLANCHARD, 1938: 372, (diagnosis; range; restriction of type locality). STEJNEGER and BARBOUR, 1939: 142,

part, (range). JONES BURDICK, 1939: 10, (description; range). SCHMIDT and DAVIS, 1941: 271, (description; range). WRIGHT and WRIGHT, 1952: 582, (list).

Tantilla nigriceps nigriceps, STEJNEGER and BARBOUR, 1943: 176-177, (range). JONES-BURDICK, 1949: 19-20, 1st and 2nd printing, (description; range). SCHMIDT, 1953: 222, (range). STEBBINS, 1954: 451, 503, pl. 100 map, fig. 48, (description; range). WRIGHT and WRIGHT, 1957: 746-748, fig. 217, map 55, (general account and description).

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Baca Co. — 3 mi. S Walsh, Sand Arroyo, 3,900' (3), 2531-3; 13 mi. S Stonington (1), 3172; Two Buttes Reservoir (1), 11777. Boulder Co. — vicinity of Boulder (6), 498, 856, 7512, 10173-4, 11605; 6 mi. N Boulder (1), 11606. Larimer Co. — 6 mi. NW Loveland (1), 10172. Las Animas Co. — 13 mi. E Trinidad, Barela (1), 7106. Otero Co. — La Junta (1), 256. Prowers Co. — Lamar (1), 3171. Pueblo Co. — Pueblo (1), 857.

Family CROTALIDAE Gray

Genus SISTRURUS Garman

Sistrurus catenatus tergeminus (Say)

Common name: Western Massasauga.

Type: Lost.

Type locality: Winfield, Cowley Co., Kansas. Restricted by Smith and Taylor, 1950a: 358.

Range: Southeastern Colorado.

Published accounts and records:

Crotalus tergeminus SAY, 1823: 499, (original description).

Crotalophorus tergeminus, HOLBROOK, 1842: 30, pl. 5, (description; range).

Sistrurus catenatus edwardsii, ELLIS and HENDERSON, 1913: 111, (description; range. Baca Co.).

COCKERELL, 1927: 108, (range). STEJNEGER and BARBOUR, 1943: 183, (range). GLOYD, 1955: 90-91, fig. 1 map, (resurrection of *edwardsii*; distribution). KLAUBER, 1956: 50, figs. 2: 10 map, 2: 58, (recognizes *edwardsii* in addendum). WRIGHT and WRIGHT, 1957: 1050, map 70, (range, see map).

Sistrurus catenatus tergeminus, KLAUBER, 1936b: 229, fig. 73 map, (key; range). JONES-BURDICK, 1939: 10, (range; description). 1949: 21, 1st and 2nd printing, (description; range). GLOYD, 1940, 36-44, pl. 2, fig. 1, map 1, (general account and description). SCHMIDT and DAVIS, 1941: 287-288, (description; range). MASLIN, 1950b: 94, (description; range extension: **Kiowa Co.** — Arlington). WRIGHT and WRIGHT, 1952: 582, (list). 1957: 1048-1050, fig. 301, (general account and description). SCHMIDT, 1953: 226, (range). STEBBINS, 1954: 463-464, 811, pls. 88, 103 map, (general account and description).

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Kiowa Co. — 10 mi. NE Arlington, Lamberson Ranch (1), 2534; nr. Arlington (5), 2680-4.

Genus CROTALUS Linnaeus

Crotalus viridis concolor Woodbury

Common name: Midget Faded Rattlesnake.

Type: Holotype by monotypy, University of Utah, Mus. Zool. 306 ♂;

R. V. Chamberlain, collector, Sept. 1929. Number provided by Klauber 1957: 46.

Type locality: King's Ranch, at base of Henry Mountains, Garfield Co., Utah.

Range: Central portion of extreme western Colorado.

Published accounts and records:

Crotalus concolor WOODBURY, 1929: (2-3), figs. 1-2, (original description).

Crotalus confluentus, BROWN, 1901: 104-105, part, (range). STEJNEGER and BARBOUR, 1923: 123, (range). ELLIS and HENDERSON, 1915: 263, (**Montrose Co.** — nr. Paradox Valley; Paradox Valley. **Montrose** and **San Miguel** cos. — Gypsum Creek; San Miguel and Dolores River region S and W Naturita).

Crotalus confluentus decolor KLAUBER, 1930: 111-114 (original description; holotype, Chicago Nat. Hist. Mus. 923, Grand Junction, **Mesa Co.**, Colorado; E. S. Riggs, collector, summer, 1900). MARX, 1958: 478, (lists types and paratypes. Grand Junction, **Mesa Co.**).

Crotalus viridis concolor, KLAUBER, 1936b: 191, 242, fig. 68 map, (key; range. W. **Mesa**, S.W. **Delta** and N. **Montrose** cos.). STEJNEGER and BARBOUR, 1939: 152, (range). 1943: 190, (range). JONES-BURDICK, 1939: 11, (description; range). 1949: 23, 1st and 2nd printing, (description; range). WRIGHT and WRIGHT, 1952: 582, (list). KLAUBER, 1956: 46, 513, 554, figs. 2: 6 map, 2: 51, (places *decolor* Klauber in synonymy of *concolor* Woodbury; range; synonymy; habitat. **Delta Co.** — Escalante Canyon, 8,000'; Roubideau Canyon. **Mesa Co.** **Moffat Co.** — Fortification Rocks, few miles N Craig. **Montrose Co.** — Tabeguache Canyon, nr. Delta. **Routt Co.**).

Crotalus viridis decolor, GLOYD, 1940: 216-217, pl. 25, fig. 2, map 17, (general account and description. **Mesa Co.** — Palisades). SCHMIDT and DAVIS, 1941: 102, (description; map labeled *concolor*; range). SCHMIDT, 1953: 233, (range). STEBBINS, 1954: 479-483, 511, pls. 88, 103 map, (general account and description). WRIGHT and WRIGHT, 1957: 1012-1014, fig. 289, map 67, (general account and description).

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Mesa Co. — Colorado Nat'l. Mon., rimrock drive at Highland Overlook (1), 7618; 5 mi. SW Whitewater (1), 10136; 28 mi. ENE Gateway (1), 11586. **Montrose Co.** — Paradox (1), 455; nr. Paradox Valley (1), 452; Gypsum Creek, trib. Dolores River (1), 456.

Crotalus viridis viridis (Rafinesque)

Common name: Prairie Rattlesnake.

Type: Unknown.

Type locality: Gross, Boyd Co., Nebraska. Restricted by Smith and Taylor, 1950a: 358.

Range: Eastern plains and foothills of Colorado, and the northwestern and southwestern corners of the state.

Published accounts and records:

Crotalinus viridis RAFINESQUE, 1818: 41, (original description).

Crotalus confluentus SAY, 1823 (2): 48, (original description; type unknown; type locality,

- vicinity of Rocky Mountains, restricted by Klauber (1957: 45) to vicinity of Bell Springs [nr. Canyon City, Fremont Co.], Colorado). YARROW, 1882: 77, (Larimer Co. — Cache la Poudre River). BROWN, 1901: 104–105, part, (range). CARY, 1911: 21, 23, 27, (list; range). ELLIS and HENDERSON, 1913: 109–110, figs. 38–40, (description. Boulder Co. — Boulder; NE Lyons; Mts. N Lyons. Denver Co. — Denver. Larimer Co. — Pole Hill, nr. Loveland; Owl Canyon W [N] Fort Collins; Estes Park. Las Animas Co. — Watervale. Otero Co. — La Junta. Weld Co. — Greeley; Cow Creek nr. Cornish; Osgood; NE Ault. Yuma Co. — Wray. S of N. state line from U. P. R. R. to Pawnee Butte). STEJNEGER and BARBOUR, 1917: 109, (range). 1923: 123, (range). COCKERELL, 1927: 108, (range).
- Crotalus confluentus confluentus*, YARROW, 1882: 77, (Larimer Co. — Cache la Poudre River). COPE, 1900: 1172, (list). BURT and BURT, 1929: 459, (field notes. Elbert Co. — 3 mi. SE Buick; 9 mi. W Limon). KLAUBER, 1930: 113, (list. Moffat Co. — Maybell. Montrose Co. — Naturita). 1935: 82, (statistics). 1936: 2, (statistics. Platteville Series, E Platteville, Weld Co.). BARRY, 1933c: 8, 11, (notes. Mesa Verde Nat'l. Park). STEJNEGER and BARBOUR, 1933: 132–134, (range).
- Crotalus viridis viridis*, KLAUBER, 1936b: 241, figs. 68 map, 111 of albino, (key; range). 1937: 1–56, (statistics on growth, Platteville Series). 1938: 1–53, (statistics on head dimensions, Platteville Series). 1940: 1–62, (statistics on rattle, Platteville Series). 1939: 1–61 (statistics on fang, Platteville Series). 1941: 5–31, (statistical methods in herpetology, Platteville Series). 1943: 5–60, (statistics of tail-length, Platteville Series). 1943: 115–118, (statistical analyses, Platteville Series). 1945: 1–101, (correlations in homogenous populations, Platteville Series). 1956: 45, etc. figs. 2: 6 map, 2: 47, (general account. Roosevelt Nat'l. Forest, 7,000'. Chaffee Co. — nr. Salida. Conejos Co. — Mogote Peak, Antonito, 9,220'–9,320'. Crowley Co. — 30 mi. NE Olney Springs. El Paso Co. — 8,000' nr. Colorado Springs; 8,620', Trail Junction Picnic Area, NW Colorado Springs. Huerfano Co. — La Veta Pass, 7,100'. Larimer Co. — foothills N Fort Collins. Morgan Co. — Sand Arroyo Creek. Rio Blanco Co. — Buford, Fawn Creek, 8,500'–8,800'. Saguache Co. — btwn. Mineral Hot Springs and Saguache. Teller Co. — Woodland Park. Weld Co. — Fort Lupton; E Platteville. Weld and Morgan cos. — btwn. Wiggins and Roggen). STEJNEGER and BARBOUR, 1939: 151–152, (range). 1943: 189–190, (range). JONES-BURDICK, 1939: 11, (description; range). 1949: 22–23, pl. 8, fig. 1, 1st and 2nd printing, (description; range). MACCLARY, 1939. 12–14, 5 figs., (den; hunting. Otero Co. — 30 mi. NE Olney Springs). GLOYD, 1940: 212–213, pl. 22, map 17, (general account and description). SCHMIDT and DAVIS, 1941: 308–310, p. 34, figs. 101, 102 map, (description; range). WRIGHT and WRIGHT, 1952: 582, (list; range). 1957: 1001–1007, figs. 268, 269, 286, map 67, (general account and description). SCHMIDT, 1953: 231, (range). STEBBINS, 1954: 479–483, 511, pls. 88, 103 map, fig. 52, (general account description. El Paso Co. — nr. Colorado Springs).
- Prairie Rattlesnake, VAN RIPER, 1953: 100–102, 5 figs., (discussion of striking behavior. Vicinity of Denver).

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- Adams Co.** — 15 mi. NE Byers (1), 11590; 12 mi. NE Byers (1), 11754; 7 mi. NE Byers, Bitzer Ranch (2), 11588–9. **Alamosa Co.** — 12 mi. W Fort Garland (1), 11587. **Baca Co.** — 2.5 mi. S Stonington, N. Fork Cimmaron River (1), 3161. **Boulder Co.** — vicinity of Boulder (4), 842, 5792, 7619, 9495; N Allen's Lake, N Boulder (2), 846, 5789; Four Mile Canyon Road, 1.7 mi. above junction with St. Hwy. 119 (1), 7620; 10 mi. N Boulder, Buckingham Park (1), 10137. **Elbert Co.** — 6 mi. N Riverbend (1), 5807. **El Paso Co.** — nr. Colorado Springs (2), 5785, 9496. **Jefferson Co.** — 4 mi. SE Golden, Green Mt. (1), 11591. **Kiowa Co.** — 4 mi. E Eads (1), 10138;

nr. Arlington (1), 2686. **Larimer Co.** — 2 mi N Fort Collins, College Park (1), 2538; 5.5 mi. SW Fort Collins, Spring Canyon (1), 2539; Redstone Canyon, SW Fort Collins (1), 2540; Horsetooth Lake, W Fort Collins (1), 7066; Lindenmeyer Site (1), 5793. **Las Animas Co.** — Chacuaco Creek, W. Tobe, on U. S. Hwy. 160 (1), 1216; 6 mi. W Tobe (1), 5120; 9 mi. N Trinidad (1), 7104; 2 mi. S Potato Butte, Cottonwood Creek, 4,600' (2), 2939-40. **Logan Co.** — nr. Sterling (1), 844. **Moffat Co.** — 22 mi. S Craig (1), 9732. **Montezuma Co.** — Mesa Verde Nat'l. Park (1), 7494; Yellow Jacket Canyon, W Cortez (1), 7495; 21 mi. SW Towaoc, 4,900' (1), 9358; 20 mi. SW Towaoc (1), 9372; 10 mi. SW Towaoc (4), 9373-6. **Morgan Co.** — Snyder (1), 845; SE Fort Morgan (1), 5783; 8 mi. N and 1½ mi. W. Weldona, "Stony Point", 4760' (1), 11791. **Otero Co.** — La Junta (1), 257; Higbee (1), 5119. **Pueblo Co.** — nr. Pueblo (1), 2685. **Washington Co.** — 18 mi. S Otis (5), 7489-93; 3 mi. E Linden (1), 9733. **Weld Co.** — 5 mi. SE Platteville (102), 3468-3550, 5788, 5791, 7625-41; Roggen (1), 843; 4 mi. E Gill (3), 1938, 2882, 5784; 24 mi. N Stoneham, Battle Canyon (1), 2535; 20 mi. N Stoneham (1), 2861; 18 mi. N Stoneham (2), 2536-7; N Platteville (1), 2881; 2.5 mi. NE Keosa (1), 7488; 6 mi. NE Fort Lupton (4), 7621-4; 10 mi. E Hereford (2), 11592-3.

DOUBTFUL SPECIES

Terrapene carolina triunguis (Agassiz)

Terrapene triunguis, ELLIS and HENDERSON, 1913: 117, (Yuma Co. — Wray).

Terrapene carolina triunguis, COCKERELL, 1927: 104, (lists same specimen as cited by Ellis and Henderson). RODECK, 1948: 54, abstract, (reports on two previous records from Colorado). 1949: 32, (throws doubt on Boulder record; specimen had hole drilled in shell).

Inasmuch as this species is fairly common in the general area of its range and has not been recorded west of central Kansas and Oklahoma, it is believed that all Colorado records are based on escaped pets.

Bipes sp.

Chirotos lumbricoides, JAMES, 1823: 2: 170 London ed., (description of an amphisbaenid lizard from nr. Julesburg, Sedgwick Co.).

Bipes sp., TAYLOR, 1938: 202, (comments on James' account of *Chirotos*; doubts its existence).

In spite of Taylor's (1938: 202) comments to the contrary, the existence of an amphisbaenid in the Platte River Valley is a real possibility. I have heard accounts of two-legged lizards from two completely unrelated sources, both of which I have no reason to disbelieve. To include an exotic species in the fauna of the state on the basis of a single record more than 130 years old is something I hesitate to do.

Dipsosaurus dorsalis dorsalis (Baird and Girard)

Dipsosaurus dorsalis, YARROW, 1882: 54, (Colorado). This record probably refers to the Colorado Desert or Colorado River. COPE, 1900: 245, (lists same specimen cited by Yarrow, 1882). ELLIS and HENDERSON, 1913: 63, (quote Beardsley to whom it was reported that the species occurred at Lamar, Rocky Ford, and Canyon City).

Yarrow's and Cope's records are based on the same specimen listed by Baird (1859b, spcm. No. 4178) as having been collected in the Colorado Desert, not in Colorado. The reports of Beardsley are probably based on the Collared Lizard, *Crotaphytus collaris collaris*. The nearest localities to Colorado from which *Dipsosaurus* has been collected occur in western Arizona and extreme southwestern Utah, where it is found in extremely hot desert areas. There seems little likelihood that it will be found in Colorado.

Phrynosoma modestum Girard

Anota modesta, ELLIS and HENDERSON, 1913: 75-76, (description and account of the single specimen, now lost, upon which the evidence for including this species in the fauna is based. Wet Mountain Valley, **Custer Co.**).

Phrynosoma modestum, COCKERELL, 1927: 107, (listed as doubtful in **Custer Co.**). MASLIN, 1947: 12, (description; habitat). SMITH, 1946: 311-313, pl. 84, map 22 (general account and description; doubtful inclusion in Colorado fauna).

Ellis and Henderson (1913) report that a single specimen from the Wet Mountain country of Custer Co., collected by T. D. A. Cockerell, was sent to Washington, where it was identified as *P. modestum* by some unknown person. The specimen was subsequently lost. Inasmuch as the species has never been found in Colorado again in spite of intensive search, and because of the fact that the site from which the specimen was collected is considerably out of the known range of the species, it is here included as a doubtful member of the Colorado fauna.

Uta graciosa Baird

Uta graciosa, YARROW 1882: 54, (list. Colorado; H. B. Mollhausen, collector).

As in the case of *Dipsosaurus* the site "Colorado" probably refers to the lower Colorado River where this species occurs. Colorado itself is too far from the known range of this species to be considered seriously as an area in which it might occur.

Crotalus atrox Baird and Girard

Crotalus atrox, ELLIS and HENDERSON, 1913: 108-109, (description. **Las Animas Co.** — Trinidad). COCKERELL, 1927: 108, (list). STEJNEGER and BARBOUR, 1943: 184-185, (range). JONES-BURDICK, 1949: 21, 1st and 2nd printing, (description; range). WRIGHT and WRIGHT, 1952: 582, (list). 1957: 941-948, figs. 266, 269, 271, map 66, (general account and description; range).

Crotalus atrox atrox, STEJNEGER and BARBOUR, 1933: 132-133, (range). 1939: 147, (range).

Crotalus cinereous, JONES-BURDICK, 1939: 10, (description; range).

This species has been collected only once in this state. The specimen, which is now lost, was collected by William Wilson on August 17, 1912, in Trinidad Las Animas Co.; it measured $5\frac{1}{2}$ feet in length. There seems little doubt that this was indeed a Western Diamondback, and it may transpire that the species will prove to be a member of the Colorado fauna in spite of the fact that the southern part of the state is somewhat north of the present known range of the species. The fact that it has not been collected again in the state leads me tentatively to remove it from the faunal list.

***Crotalus cerastes* Hallowell**

Crotalus cerastes, YARROW, 1882: 73, ("Colorado River, Col.;" A. Schott, collector). COPE, 1900: 1199, (list. "Colorado R., Colo.;" A. Schott, collector). ELLIS and HENDERSON, 1913: 108, (discusses validity of record). JONES-BURDICK, 1939: 11, (description; doubts validity of record).

Yarrow (1882) in his check list invariably abbreviated Colorado to "Colo." and California to "Cal." It seems extremely likely to me that Yarrow's record "Colorado River, Col." represents a typographical error perpetuated by Cope, (1900). This seems even more likely considering that *C. cerastes* occurs in that area, that Schott collected there and not in Colorado, and that Colorado is a great distance from the present known range of the species. For these reasons *C. cerastes* should be removed from the faunal list of the state.

***Storeria dekayi texana* Trapido**

Storeria dekayi, ELLIS and HENDERSON, 1913: 98-99, (description; habitat. Las Animas Co.). COCKERELL, 1927: 109, (list). JONES-BURDICK, 1939: 8, (description).

The specimen upon which Ellis and Henderson based their record was collected by Beardslly and housed in the State Teachers College Museum at Greeley. This collection was recently destroyed inadvertently, so that a re-determination of the specimen is impossible. The species is known from central Kansas, some 250 miles to the east, where it reaches its western limit at about the eastern edge of the Great Plains. Areas occur in Las Animas Co. which could support a population of this snake which favors a mesic habitat, but to date no additional specimens have been acquired. Beardslly was an excellent and reliable collector; to him we owe our first records of *Diadophis*, *Sonora*, and *Sistrurus*, all from the same general area. As it is possible, therefore, that *Storeria* may yet turn up as a stable member of our fauna, it is only tentatively that this snake is removed from the faunal list.

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