

Catalogue of American Amphibians and Reptiles.

DIXON, J. R., AND R. R. FLEET. 1976. *Arizona, A. elegans*.**Arizona Kennicott
Glossy Snake***Arizona Kennicott* (in Baird), 1859:18. Type-species, *Arizona elegans* Kennicott, 1859, by monotypy.

- CONTENT. A single polytypic species, *Arizona elegans*, is recognized.

- DEFINITION. *Arizona* is a colubrid snake genus with a slightly elliptical pupil, moderately slender body, with the head slightly distinct from the neck and trunk. The snout is somewhat sharp, with a slightly recurved rostral and the lower jaw is countersunk. The head scales are normal with generally 1 loreal, 1 preocular, 2 postoculars, 2 + 3 or 2 + 4 temporals, and 2 supralabials entering orbit. The supralabials vary from 7 to 9 and infralabials from 11 to 15. The ventrals vary from 185 to 241. The subcaudals are divided, varying from 39 to 63. The anal plate is single. The dorsal scale rows are smooth with single apical pit. The number of scale rows varies from 25 to 35 at midbody, with variable reductions. The average tail length varies from subspecies to subspecies but in males is usually 12 to 17% of total length and females 12 to 15%. The tail of males is about 11% longer than that of females. The maximum known snout-vent length is 147.5 cm (sex unknown). The color pattern consists of a series of light tan to dark brown blotches on a light brown, buff, or cream ground color. The venter and underside of tail are creamy white.

The hemipenis is single, somewhat swollen distally; the tip bears reticulated flounces. Small spines cover the lower proximal half of shaft; those about the middle of the shaft are abruptly larger; spines again become smaller towards the distal end, grading to fine, delicate points. The transition from spines to flounces is abrupt.

- DESCRIPTIONS, ILLUSTRATIONS, DISTRIBUTION, FOSSIL RECORD, NOMENCLATURAL HISTORY, PERTINENT LITERATURE. See species account.

- ETYMOLOGY. *Arizona* is derived from the Latin words *Areo* (meaning to be dry) and *Zona* (a belt of earth) alluding to its geographical distribution. The gender is feminine.

**Arizona elegans Kennicott
Glossy Snake***Arizona elegans* Kennicott (in Baird) 1859:18. Type-locality, "Rio Grande," restricted to "lower Rio Grande" by Yarrow (1883) (see Remarks). Lectotype, U.S. National Museum 1722 from "Rio Grande," collected by A. Schott (date unknown), designated by Blanchard (1924:4) (examined by authors).*Pityophis elegans*: Cope 1875:39. New generic allocation.*Rhinechis elegans*: Cope 1886:284. New generic allocation.*Coluber arizonae* Boulenger 1894:66. New generic allocation and substitute name (see NOMENCLATURAL HISTORY).*Pituophis elegans*: Gunther 1894:125.

- CONTENT. Nine subspecies are recognized: *arenicola*, *candida*, *eburnata*, *elegans*, *expolita*, *noctivaga*, *occidentalis*, *pacata*, and *philipi*.

- DEFINITION. See generic definition.

- DESCRIPTIONS. A fairly accurate illustration accompanies the original description by Kennicott (in Baird, 1859). External characters were described in detail by Cope (1900), Van Denburgh (1922), Klauber (1946), Stebbins (1954), Smith (1956), and Wright and Wright (1957). Chromosomes ($2n = 36$) were described by Bury, Gress and Gorman (1970) and Baker, Mengden and Bull (1972). The most comprehensive work on the species is that of Klauber (1946). Wright and Wright (1957) treated the United States forms, and Dixon (1959a) and Fleet and Dixon (1971) treated the long-tailed group. Range maps were presented by Klauber (1946), Stebbins (1954, 1966),

Wright and Wright (1957), Conant (1975), Dixon (1959a) and Fleet and Dixon (1971).

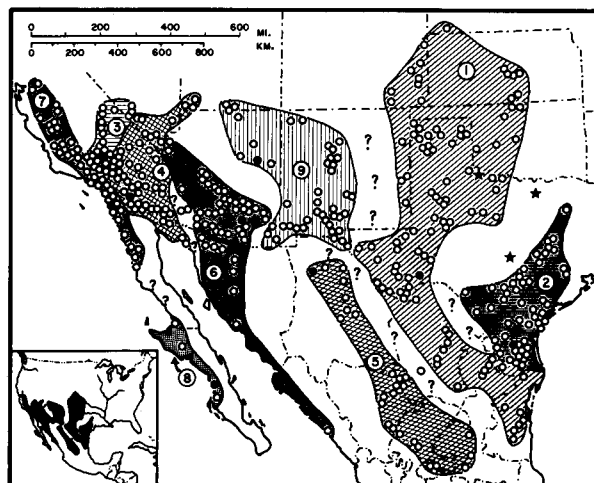
- ILLUSTRATIONS. Schmidt and Inger (1957), Conant (1975), and Stebbins (1966) illustrated the species in color. Black and white photographs are in Van Denburgh (1922), Klauber (1946), Smith (1956), Wright and Wright (1957), Williams, Chrapliwy, and Smith (1961), Miller and Stebbins (1964), Funk (1965), and Dixon (1967). Stebbins (1954) and Wright and Wright (1957) presented line drawings of scutellation.

- DISTRIBUTION. *Arizona elegans* ranges from southeastern Texas north to southwestern Nebraska, westward to coastal California and associated inland valleys, southward to central Baja California and central Sinaloa in western Mexico, to Aguascalientes and central San Luis Potosí in central Mexico, and southern Tamaulipas in eastern Mexico.

- FOSSIL RECORD. Holman (1963, 1964, 1966) reported *A. elegans* from Pleistocene deposits of Sangaman and Wisconsin ages in Denton, Llano and Hardeman Counties, Texas.

- PERTINENT LITERATURE. A number of papers treat reproduction: Burt and Hoyle (1934), Reynolds (1943), Cowles and Bogert (1944), Klauber (1946), Wright and Wright (1957), Fitch (1970). Ecological information is presented by Klauber (1946), Fouquette and Lindsay (1955), Dixon (1957), Wright and Wright (1957), McCoy (1964), and Miller and Stebbins (1964). Distributional studies include Klauber (1946), Hensley (1950), Tanner (1954), Murray (1955), Smith (1956), Wright and Wright (1957), Crawford (1958), Dixon (1959a), Roest (1959), Tanner and Robison (1960), Williams, Chrapliwy and Smith (1961), Banta and Leviton (1962), Dixon, Sabath and Worthington (1962), McCoy (1962), Greer (1964), Liner (1964), Tinkle and Knopf (1964), Banta (1965), Smith, Maslin, and Brown (1965), Stebbins (1966), Tanner and Banta (1966), Fleet and Dixon (1971), and Raun and Gehlbach (1972). Behavioral papers are those of Brattstrom (1952) and Neill and Allen (1955). Keasey (1969) gave a longevity record of 6 years, 4 months. Funk (1965) reported an albino specimen. Chiu and Lynn (1971) presented aspects of physiology.

- ETYMOLOGY. The name *elegans* (Latin) means "tasteful, choice, fine, or select" and refers to the color pattern. The name *arenicola* (Latin) means "sand loving" and refers to the principal soil type where the species occurs. The name *candida* (Latin) means "shining white, bright" and refers to the pale color pattern. The name *eburnata* (Latin) means "of ivory" and refers to a pale color pattern. The name *expolita* (Latin) means "smooth, polished" and refers to the color pattern. The



MAP. Solid symbols show type localities; hollow symbols indicate other known localities. Stars mark fossil records. Areas of uncertain subspecific assignment are questioned. Symbol between areas 1 and 5 represents recently collected intergrades.

name *noctivaga* (Latin) means "night wanderer" and refers to nocturnal habits. The name *occidentalis* (Latin) means "western" and refers to its western distribution. The name *pacata* (Latin) means "peaceful, quiet" and refers to a behavioral trait. The name *philipi* is a patronym and honors Philip M. Klauber.

• **NOMENCLATURE HISTORY.** Although Cope (1875) and Gunther (1894) considered *Arizona* congeneric with *Pituophis* (*Pityophis*), and Cope later (1886) referred *Arizona* to the European genus *Rhinechis*, it was Boulenger's (1894) treatment of *Arizona* as congeneric with *Coluber* that initiated difficulties not resolved until action by the International Commission more than 70 years later. Boulenger coined the name *Coluber arizonae*, evidently intending *arizonae* as a substitute name for *elegans*, preoccupied in *Coluber*. Klauber (1946), however, took Boulenger's name to be a new species name rather than a substitute name (which would have taken the same type as *elegans* Kennicott), and designated a lectotype while placing *arizonae* in the synonymy of *A. e. elegans*. Dixon (1959a) regarded *A. e. elegans* of Klauber as composed of two subspecies and revived *arizonae* as the earliest available name for one of them. Upon learning that *arizonae* was a substitute name for *elegans*, Dixon (1960) proposed the new name *arenicola* without, however, designating a type-specimen. The entire convoluted affair may be followed in detail through Williams and Smith (1962), Holthius (1963), Williams and Smith (1963), and International Commission . . . (1965). In the last reference, *Arizona* Kennicott, 1859 is placed on the Official List of Generic Names in Zoology, and *elegans* Kennicott, 1859, and *arenicola* Dixon, 1960 are placed on the Official List of Specific Names in Zoology.

• **REMARKS.** Klauber (1946:321) mentioned the uncertainty surrounding the exact type locality. He suggested that the collector (A. Schott) spent some time in the vicinity of Eagle Pass, Texas, and that the specimen may have come from that vicinity. Yarrow (1883) restricted the type locality to "lower Rio Grande," Texas, for some unspecified reason. We have examined the holotype and 95 additional specimens from throughout the range of the nominate subspecies. The salient features of the holotype best agree with samples of *A. elegans* from the vicinity of Sanderson, Terrell County, Texas. This locality is some 192 km northwest of Eagle Pass and approximately 32 km north of the Rio Grande. We propose that Yarrow's (1883) restriction of the type locality was in error, that Schott probably used Eagle Pass as a central shipping point for specimens. This information should be kept in mind if there is need in the future for reconsidering the restricted type-locality of this species.

1. *Arizona elegans elegans* Kennicott Texas Glossy Snake

Arizona elegans Kennicott (in Baird) 1859:18 (see species account).

Arizona elegans elegans: Blanchard, 1924:3.

Arizona elegans blanchardi Klauber, 1946:328. Type-locality, "Cheyenne County, Kansas, 13 miles southeast of Benkelman, Dundy County, Nebraska." Holotype, California Academy of Sciences (formerly Stanford University collection) 10393, collected by J. W. Anderson, 7 July 1942 (examined by authors).

• **DIAGNOSIS.** Differs from other subspecies by having a combination of a low number of body blotches (39-69 \bar{x} = 53.1), low number of ventrals (δ 197-219, \bar{x} = 206.0; ϕ 208-227, \bar{x} = 215.9), high number of scale rows at midbody (29-31) and a relatively long tail (\bar{x} = 15.6 δ , \bar{x} = 14.9 ϕ , % of total length).

• **REMARKS.** See Fleet and Dixon (1971) for the referral of *A. e. blanchardi* to synonymy.

2. *Arizona elegans arenicola* Dixon Southern Texas Glossy Snake

Arizona elegans elegans (part): Blanchard, 1924:3.

Arizona elegans arizonae: Dixon, 1959b:21. See NOMENCLATURE HISTORY.

Arizona elegans arenicola Dixon, 1960:226. Type-locality, Duval County, Texas. Lectotype, British Museum (Nat.

Hist.) 90.7.30.40, date and collector unknown, designated by Williams and Smith (1962:300) (not examined by authors). See NOMENCLATURE HISTORY.

• **DIAGNOSIS.** Differs from other races by having a combination of low number of body blotches (41-58, \bar{x} = 48.6), high number of ventrals (δ 207-225, \bar{x} = 215.2; ϕ 217-231, \bar{x} = 225.2), high number of midbody scale rows (29-35), and a relatively long tail (\bar{x} = 15.4 δ ; \bar{x} = 13.8 ϕ , % of total length).

3. *Arizona elegans candida* Klauber Western Mojave Glossy Snake

Arizona elegans candida Klauber, 1946:364. Type-locality, "Kramer Hills (6 miles south of Kramer Junction on US 395), San Bernardino County, California." Holotype, San Diego Soc. Nat. Hist. 34191, collected by James Deuel, 16 June 1941 (examined by authors).

• **DIAGNOSIS.** Differs from other races by having a combination of numerous, narrow blotches (53-73, \bar{x} = 62.9), high frequency of paired preoculars, light ground color, high number of ventrals (δ 203-220, \bar{x} = 214.2; ϕ 220-232, \bar{x} = 223.4), and a relatively short tail (\bar{x} = 13.9 δ , \bar{x} = 12.5 ϕ , % of total length).

4. *Arizona elegans eburnata* Klauber Desert Glossy Snake

Arizona elegans eburnata Klauber, 1946:350. Type-locality, "Bensons Dry Lake, in eastern San Diego County, California (3 miles west of the Imperial County Line on highway Cal. 78)." Holotype, San Diego Soc. Nat. Hist. 33094, collected by James Deuel, "preserved" 5 June 1940 (examined by authors).

• **DIAGNOSIS.** Differs from all other races by having a combination of light ground color, numerous small, narrow body blotches (53-83, \bar{x} = 68.5), high number of ventrals (δ 208-238, \bar{x} = 219.5; ϕ 220-241, \bar{x} = 231.2), and short tail (\bar{x} = 13.7 δ , \bar{x} = 12.6 ϕ , % of total length).

5. *Arizona elegans expolita* Klauber Chihuahua Glossy Snake

Arizona elegans expolita Klauber, 1946:340. Type-locality, "Casas Grandes, Chihuahua, Mexico." Holotype, U.S. National Museum 46374, collected by E. W. Nelson and E. A. Goldman, 27 May 1899 (examined by authors).

Arizona elegans australis Williams, Chrapliwy, and Smith 1961:1. Type-locality, "21 mi. SW. Loreto, San Luis Potosí, in Aguascalientes, Mexico." Holotype, Univ. Illinois Mus. Nat. Hist. 48721, collected by P. S. Chrapliwy and K. L. Williams, 20 July 1958 (not examined by authors).

• **DIAGNOSIS.** Differs from all other races by having a combination of a low number of body blotches (35-53, \bar{x} = 44.5); low number of ventrals (δ 188-202, \bar{x} = 193.8; ϕ 197-209, \bar{x} = 204.9); low number of midbody scale rows (25 to 27); tail of intermediate length (\bar{x} = 14.0 δ , \bar{x} = 13.4 ϕ , % of total length).

• **REMARKS.** Dixon et al. (1962) referred *A. e. australis* to synonymy.

6. *Arizona elegans noctivaga* Klauber Arizona Glossy Snake

Arizona elegans noctivaga Klauber, 1946:343. Type-locality, "8 miles northwest of Owlshead, Pinal County, Arizona (Owlshead is on U.S. 80, 45 miles southeast of Florence)." Holotype, San Diego Soc. Nat. Hist. 34188, collected by C. E. Shaw and L. M. Klauber, 31 May 1941 (examined by authors).

• **DIAGNOSIS.** Differs from other races by having a combination of wide dorsal body blotches that exceed the light interspaces between them; a low number of dorsal midbody scale rows (25-29, \bar{x} = 27); a relatively short tail (\bar{x} = 13.7 δ , \bar{x} = 12.7 ϕ , % of total length).

7. *Arizona elegans occidentalis* Blanchard California Glossy Snake

Arizona elegans occidentalis Blanchard, 1924:1. Type-locality, "La Jolla [San Diego County], California." Holotype, U.S. National Museum 54372, collected by J. C. Thompson, May 1916 (examined by authors).

• **DIAGNOSIS.** Differs from all other races by having a combination of a dark ground color with a high number of chocolate body blotches (51–75, \bar{x} = 62.7); 27 midbody scale rows; relatively short tail (\bar{x} = 13.6 ♂, \bar{x} = 12.5 ♀, % of total length).

8. *Arizona elegans pacata* Klauber Peninsula Glossy Snake

Arizona elegans pacata Klauber, 1946:379. Type-locality, "Santo Domingo (lat. 25°30' N.), Baja California [Sur], Mexico." Holotype, San Diego Soc. Nat. Hist. 17652, collected by F. F. Gander, 16 November 1941 (examined by authors).

• **DIAGNOSIS.** Differs from all other races by having a combination of low number of subcircular body blotches (36–41, \bar{x} = 38.7); 27 midbody scale rows; few subcaudals (♂ 43–50, \bar{x} = 46.5, only known ♀, 42); relatively short tail (\bar{x} = 12.1 ♂, unknown for ♀, % of total length).

9. *Arizona elegans philipi* Klauber Painted Desert Glossy Snake

Arizona elegans philipi Klauber, 1946:333. Type-locality, "10 mi. east of Winslow, Navajo County, Arizona." Holotype, San Diego Soc. Nat. Hist. 34456, collected by C. E. Shaw and C. Engler, 29 July 1941 (examined by authors).

• **DIAGNOSIS.** Differs from other races by having a combination of a low number of ventrals (♂ 183–202, \bar{x} = 195.3; ♀ 192–211, \bar{x} = 203.6); high number of caudals (♂ 50–60, \bar{x} = 55.1; ♀ 45–53, \bar{x} = 47.7); high number of body blotches (53–80, \bar{x} = 64.2); relatively long tail (\bar{x} = 16.4 ♂, \bar{x} = 14.8 ♀, % of total length).

LITERATURE CITED

- Baird, S. F. 1859. Reptiles of the Boundary, in: Vol. 2, pt. 2, United States and Mexican Boundary Survey, U.S. 34th Congress, 1st Session, Exec. Doc. 108 :1–35.
- Baker, R. J., G. A. Mengden and J. J. Bull. 1972. Karyotypic studies of thirty-eight species of North American snakes. *Copeia* 1972 (2) :257–265.
- Banta, B. H. 1965. A distributional check list of the recent reptiles inhabiting the State of Nevada. *Occas. Pap. Biol. Soc. Nevada* (5) :1–8.
- , and A. E. Leviton. 1962. Remarks upon *Arizona elegans pacata*. *Herpetologica* 18(4) :277–279.
- Blanchard, F. N. 1924. A new snake of the genus *Arizona*. *Occas. Pap. Mus. Zool. Univ. Michigan* (150) :1–5.
- Boulenger, G. A. 1894. Catalogue of the snakes in the British Museum (Natural History), vol. 2, pp. xi + 382.
- Brattstrom, B. H. 1952. Diurnal activities of a nocturnal animal. *Herpetologica* 8(3) :61–63.
- Burt, C. E. and L. W. Hoyle. 1934. Additional records of the reptiles of the central prairie region of the United States. *Trans. Kansas Acad. Sci.* 37 :193–216.
- Bury, R. B., F. Gress and G. C. Gorman. 1970. Karyotypic survey of some colubrid snakes from western North America. *Herpetologica* 26(4) :461–466.
- Chiu, K. W. and W. G. Lynn. 1971. The hypophysis-gonad relation in the Glossy Snake, *Arizona elegans*. *Herpetologica* 27(3) :303–307.
- Conant, R. 1975. A field guide to reptiles and amphibians of eastern and central North America. Second ed. Houghton Mifflin Co., Boston. xviii + 429 p.
- Cope, E. D. 1875. Check-list of North American Batrachia and Reptilia. U.S. Nat. Mus. Bull. 1 :1–104.
- 1886. Thirteenth contribution to the herpetology of tropical America. *Proc. Amer. Philos. Soc.* 23 :271–287.
- 1900. The crocodylians, lizards and snakes of North America. *Rep. U.S. Nat. Mus.* for 1898 :153–1294.
- Cowles, R. B. and C. M. Bogert. 1944. A preliminary study of the thermal requirements of desert reptiles. *Bull. Amer. Mus. Natur. Hist.* 83 :261–296.
- Crawford, B. W. 1958. Two new California locality records for *Arizona elegans occidentalis*. *Herpetologica* 14(3) :183.
- Dixon, J. R. 1957. Notes on the Glossy Snake, *Arizona elegans*, in Texas. *Southwest. Natur.* 2(2–3) :132–133.
- 1959a. Geographic variation and distribution of the long-tailed group of the Glossy Snake, *Arizona elegans* Kennicott. *Ibid.* 4(1) :20–29.
- 1959b. *Arizona elegans* in southeastern Texas. *Herpetologica* 15(2) :72.
- 1960. A new name for the snake, *Arizona elegans arizonae*. *Southwest. Natur.* 5(4) :226.
- 1967. Amphibians and reptiles of Los Angeles County, California. Los Angeles County Mus. Natur. Hist. Sci. Ser. (23) Zool. (10) :1–63.
- , M. Sabath, and R. Worthington. 1962. Comments on snakes from central and western Mexico. *Herpetologica* 18(2) :91–100.
- Fitch, H. S. 1970. Reproductive cycles in lizards and snakes. *Univ. Kansas Mus. Natur. Hist. Misc. Publ.* (52) :1–247.
- Fleet, R. R., and J. R. Dixon. 1971. Geographic variation within the long-tailed group of the Glossy Snake, *Arizona elegans* Kennicott. *Herpetologica* 27(3) :295–302.
- Fouquette, M. J. and H. L. Lindsay, Jr. 1955. An ecological survey of reptiles in parts of northwestern Texas. *Texas J. Sci.* 7(4) :402–421.
- Funk, R. S. 1965. Albino Glossy Snake, *Arizona elegans*, from northern Sonora. *Southwest. Natur.* 10(4) :316–317.
- Greer, A. E. 1964. The Glossy Snake, *Arizona elegans noctivaga* in Sonora and Sinaloa, Mexico. *Herpetologica* 20(3) :215.
- Günther, A. C. L. G. 1885–1902. *Biologia Centrali-Americana. Reptilia and Batrachia* 16. Dulan and Co., London. xv + 326 p.
- Hensley, M. M. 1950. Results of a herpetological reconnaissance in extreme southwestern Arizona and adjacent Sonora, with a description of a new subspecies of the Sonoran whipsnake, *Masticophis bilineatus*. *Trans. Kansas Acad. Sci.* 53 :270–288.
- Holman, J. Alan. 1963. Late Pleistocene amphibians and reptiles of the Clear Creek and Ben Franklin local faunas of Texas. *J. Grad. Res. Center S. Methodist Univ.* 31(3) :152–167.
- 1964. Pleistocene amphibians and reptiles from Texas. *Herpetologica* 20(2) :73–83.
- 1966. The Pleistocene herpetofauna of Miller's Cave, Texas. *Texas J. Sci.* 18(4) :372–377.
- Holthius, L. B. 1963. An alternative proposal concerning *Arizona elegans* Kennicott, Z. N. (S.) 1454. *Bull. Zool. Nomencl.* 20:264–265.
- International Commission on Zoological Nomenclature. 1965. Opinion 717. *Arizona elegans* Kennicott, 1859 (Reptilia): validated under the plenary powers. *Bull. Zool. Nomencl.* 22(1) :19–21.
- Keasey, M. S. 1969. Some records of reptiles at the Arizona-Sonora Desert Museum. *Int. Zool. Yearb.* 9 :16–17.
- Klauber, L. M. 1946. The Glossy Snake, *Arizona*, with descriptions of new subspecies. *Trans. San Diego Soc. Natur. Hist.* 10(17) :311–398.
- Liner, E. A. 1964. Notes on four small herpetological collections from Mexico. I. Introduction, turtles and snakes. *Southwest. Natur.* 8(4) :221–227.
- McCoy, C. J. 1962. Noteworthy amphibians and reptiles from Colorado. *Herpetologica* 18(1) :60–62.
- 1964. Notes on snakes from northern Mexico. *Southwest. Natur.* 9(1) :46–48.
- Miller, A. H., and R. C. Stebbins. 1964. The lives of desert animals in Joshua Tree National Monument. *Univ. California Press, Berkeley.* vi + 452 p.
- Murray, K. F. 1955. Herpetological collections from Baja California. *Herpetologica* 11(1) :33–48.
- Neill, W. T. and E. R. Allen. 1955. Metachrosis in snakes. *Quart. J. Florida Acad. Sci.* 18(3) :208–215.
- Raun, G. G. and F. R. Gehlbach. 1972. Amphibians and reptiles in Texas. *Bull. Dallas Mus. Natur. Hist.* 2 :1–61, 140 maps.
- Reynolds, F. A. 1943. Notes on the western Glossy Snake in captivity. *Copeia* 1943(1) :196.
- Roest, A. I. 1959. California locality records for *Arizona elegans* and *Eumeces gilberti*. *Herpetologica* 15(3) :143–144.

- Schmidt, K. P. and R. F. Inger. 1957. Living reptiles of the world. Doubleday and Co., New York. 287 p.
- Smith, H. M. 1956. Handbook of amphibians and reptiles of Kansas. Univ. Kansas Mus. Natur. Hist. Misc. Publ. (9) :1-356 (2nd ed.).
- , T. P. Maslin, and R. L. Brown. 1965. Summary of the distribution of the herpetofauna of Colorado. Univ. Colorado Stud. Ser. Biol. 15 :1-52.
- , and E. H. Taylor. 1945. An annotated checklist and key to the snakes of Mexico. U.S. Nat. Mus. Bull. (187) :IV + 239.
- Stebbins, R. C. 1954. Amphibians and reptiles of western North America. McGraw-Hill Co., New York. X + 528 p.
- 1966. A field guide to western reptiles and amphibians. Houghton Mifflin Co., Boston. xiv + 279 p.
- Tanner, W. W. 1954. Herpetological notes concerning some reptiles of Utah and Arizona. Herpetologica 10(2) :92-96.
- , and B. H. Banta. 1966. A systematic review of the Great Basin reptiles in the collections of Brigham Young University and the University of Utah. Great Basin Natur. 26(3-4) :87-135.
- , and W. G. Robison, Jr. 1960. New and unusual serpents from Chihuahua, Mexico. Herpetologica 16(1) :67-70.
- Tinkle, D. W. and G. N. Knopf. 1964. Biologically significant distribution records for amphibians and reptiles in northwest Texas. Herpetologica 20(1) :42-47.
- Van Denburgh, J. 1922. The reptiles of western North America. Occas. Pap. California Acad. Sci. (10) :1-1028.
- Williams, K. L., P. S. Chrapliwy, and H. M. Smith. 1961. Snakes from northern Mexico. Natur. Hist. Misc. Chicago Acad. Sci. (177) :1-8.
- , and H. M. Smith. 1962. *Arizona elegans* Kennicott, 1859 (Reptilia); proposed validation under the plenary powers. Z. N. (S.) 1454. Bull. Zool. Nomencl. 19 :298-300.
- , and —. 1963. Revision of the petition for validation of *Arizona elegans* Kennicott Z. N. (S.) 1454. *Ibid.* 20 :265-266.
- Wright, A. H. and A. A. Wright. 1957. Handbook of snakes of the United States and Canada. Vol. I. Comstock Publ. Assoc., Ithaca, New York. 564 p.
- Yarrow, H. C. 1883. Check list of North American reptilia and batrachia, with catalogue of specimens in U.S. National Museum. U.S. Nat. Mus. Bull. (24) :1-249.

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