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A TAXONOMIC STUDY OF THE RATSNAKES,  
GENUS *ELAPHE* FITZINGER  
IV. A CHECK LIST OF THE AMERICAN FORMS

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THIS check list presents the nomenclatural results of a comprehensive study of the American members of the genus *Elaphe*. Some of these have already appeared in separate papers: the revival of the specific trivial name *emoryi* Baird and Girard for the Plains ratsnake (Dowling, 1951), the detailed study of the geographic variation in *E. flavirufa* which resulted in the recognition of two additional forms (Dowling, 1952), and the revival of the specific trivial name *intermedius* Boettger for a Mexican ratsnake with the consequent relegation of the name *Coluber chlorosoma* Günther to synonymy (Mertens and Dowling, 1952). Work is now approaching completion on the species *E. triaspis*, *E. rosaliae*, and *E. subocularis*, and early publication of these studies is contemplated. The detailed variational studies of the species *E. guttata*, *E. vulpina*, and *E. obsoleta* will not be completed for some time, however, and it appears advisable to publish now the broad aspects of relationship which have been established and the tentative conclusions concerning the recognizable forms.

Genus *Elaphe* Fitzinger

- Elaphe* Fitzinger, in Wagler, 1833: text and Plate 27 (type species *E. parreysii* Fitzinger [= *Coluber quatuorlineatus* Lacepede] by reason of monotypy).  
*Pantherophis* Fitzinger, 1843: 25 (type species *Coluber guttatus* Linnaeus).  
*Scotothis* Baird and Girard, 1853: 73 (type species *Coluber alleghaniensis* Holbrook [= *C. obsoletus* Say]).  
*Pseudoelaphe* Mertens and Rosenberg, 1943: 61-62 (type species *Coluber flavirufus* Cope).

*Elaphe guttata guttata* (Linnaeus)

*Coluber guttatus* Linnaeus, 1766: 385-86.

*Coluber guttatus guttatus* (Linnaeus), Cope, 1888: 387.

*Elaphe guttatus* (Linnaeus), Dunn, 1915: 6.

*Elaphe guttata* (Linné), Stejneger and Barbour, 1917: 82.

LOCATION OF TYPE SPECIMEN, AND TYPE LOCALITY.—Lönningberg (1896: 36), speaking of the Linnaean type specimens in the Zoological Museum of the Royal University of Upsala, Sweden, said: "A very good specimen of *Coluber guttatus* Linnaeus, probably the type specimen."

The type was one of many specimens sent to Linnaeus by Alexander Garden, and the type locality was given as "Carolina." The snakes of the East coast vary geographically, however, and it appears best to restrict the type locality still further. Garden is known to have lived in Charleston and to have done most of his collecting in that vicinity. Since the scale counts of the type are those that would be expected from that area, I hereby restrict the type locality to the vicinity of Charleston, Charleston County, South Carolina.

RANGE.—From southern New Jersey southward along the coast to the tip of the Florida Peninsula. It extends westward to the Blue Ridge Mountains (and up the James River into the Valley-Ridge Province) in Virginia, and farther south crosses the mountains into Tennessee, whence it extends westward into Arkansas and Louisiana. There are only two records for Kentucky.

*Elaphe guttata rosacea* (Cope)

*Coluber rosaceus* Cope, 1888: 388, Pl. 36, Fig. 3.

*Elaphe rosacea* (Cope), Barbour, 1920: 68-69.

LOCATION OF TYPE SPECIMEN, AND TYPE LOCALITY.—USNM 14418, collected on Key West, Monroe County, Florida, by Henry Hemphill.

RANGE.—As recognized at present, the range includes the Florida Keys from Key Largo southward and westward to the Marquesas Keys, Monroe County, Florida.

*Elaphe guttata emoryi* (Baird and Girard)

*Scotothis emoryi* Baird and Girard, 1853: 157-58.

*Elaphe laeta* (Baird and Girard), Stejneger and Barbour, 1917: 82 [*non Scotothis laetus* Baird and Girard, 1853: 77].

*Elaphe laeta intermontanus* Woodbury and Woodbury, 1942: 133-42.

*Elaphe emoryi* (Baird and Girard), Dowling, 1951: 39-44.

LOCATION OF TYPE SPECIMEN, AND TYPE LOCALITY.—The type was formerly in the U. S. National Museum, but apparently has been lost. It was collected at Howard Springs, about 20 miles southwest of Ozona, Crockett County, Texas, by John H. Clark.

RANGE.—From coastal San Luis Potosí and central Chihuahua northward on the western side of the Rocky Mountains to southeastern Utah and adjacent parts of Colorado, and on the eastern side to Missouri, Kansas, and southern Nebraska.

*Elaphe flavirufa flavirufa* (Cope)

*Coluber flavirufus* Cope, 1867: 319.

*Elaphe flavirufa* (Cope), Gaige, 1936: 299 [*partim*].

*Elaphe flavirufa flavirufa* (Cope), Smith, 1941: 132, Fig. 2. Dowling, 1952: 3-6.

*Elaphe (Pseudoelaphe) flavirufa* (Cope), Mertens and Rosenberg, 1943: 60-63.

LOCATION OF TYPE SPECIMENS, AND TYPE LOCALITY.—The holotype is USNM 6566, collected in "Yucatan" (restricted to the vicinity of Campeche, Campeche [Dowling, 1952: 3]), by Arthur C. V. Schott. There is also a paratype, USNM 6626, which was collected in "Tabasco" by H. Berendt.

RANGE.—From southern Tamaulipas southward in the lowlands of the Gulf coast to Campeche, Mexico.

*Elaphe flavirufa matudai* Smith

*Elaphe flavirufa matudai* Smith, 1941: 132-34, Fig. 1. Dowling, 1952: 6-7.

LOCATION OF TYPE SPECIMEN, AND TYPE LOCALITY.—USNM 110303, collected at Salto de Agua (1200 feet altitude) on Cerro Ovando, four miles northeast of Escuintla, Distrito Soconusco, Chiapas, by Hobart M. Smith.

RANGE.—Known only from the type locality.

*Elaphe flavirufa phaescens* Dowling

*Elaphe flavirufa* (Cope), Gaige, 1936: 299 [*partim*].

*Elaphe flavirufa phaescens* Dowling, 1952: 7-9.

LOCATION OF TYPE SPECIMENS, AND TYPE LOCALITY.—The holotype is UMMZ 73074, collected at Chichén Itzá, Distrito Valladolid, Yucatán, by Edwin Creaser. There are four paratopotypes: MCZ 29241, UMMZ 73072-73, and USNM 46578.

RANGE.—Known only from the type locality.

*Elaphe flavirufa pardalina* (Peters)

*Elaphis pardalinus* Peters, 1868: 642.

*Elaphis rodriguezii* Bocourt, 1887: 168.

*Elaphe flavirufa pardalina* (Peters), Dowling, 1952: 9, 12-13.

LOCATION OF TYPE SPECIMEN, AND TYPE LOCALITY.—The type is in the Zoologisches Museum of Berlin (ZMB 3790). No type locality is known.

RANGE.—From the vicinity of Panzos, Alta Verapaz, Guatemala, southward along the Caribbean coast of Central America to Corn Island, Nicaragua.

*Elaphe vulpina* (Baird and Girard)

*Scotophis vulpinus* Baird and Girard, 1853: 75–76.

*Elaphe vulpinus* (Baird and Girard), Ruthven, 1909: 116.

*Elaphe vulpina* (Baird and Girard), Stejneger and Barbour, 1917: 84.

*Elaphe vulpina gloydi* Conant, 1940: 2–10, Pl. 1, Figs. 1–2.

LOCATION OF TYPE SPECIMENS, AND TYPE LOCALITY.—The type specimen was originally in the U. S. National Museum, but has since been lost. A neotype, USNM 9969, was designated by Conant (1940: 10). Both of these specimens were collected at Racine, Racine County, Wisconsin, by P. R. Hoy.

RANGE.—From northern Missouri and eastern Nebraska northward to central Minnesota and eastward to northwestern Indiana and the western half of the Upper Peninsula of Michigan, and from Georgian and Saginaw bays of Lake Huron southward to north-central Ohio and eastward along the north shore of Lake Erie to Long Point and perhaps to Buffalo, New York.

*Elaphe obsoleta obsoleta* (Say)

*Coluber obsoletus* Say, in James, 1823: 140.

*Scotophis confinis* Baird and Girard, 1853: 76–77.

*Scotophis laetus* Baird and Girard, 1853: 77–78.

*Coluber obsoletus obsoletus* (Say), Cope, 1900: 844, Fig. 194.

*Elaphe obsoletus* (Say), Dunn, 1915: 6.

*Elaphe obsoleta obsoleta* (Say), Stejneger and Barbour, 1917: 83.

LOCATION OF TYPE SPECIMENS, AND TYPE LOCALITY.—There were three cotypes of this form, probably originally in the Peale Museum of Philadelphia, but none is known to be extant. They were collected “on the Missouri River from the vicinity of Isle au Vache to Council Bluff.” Cow Island is near Leavenworth, Leavenworth County, Kansas, and is somewhat more than 100 miles downriver from Council Bluffs, Iowa. At present it appears unnecessary to restrict the type locality further. Should this seem necessary at some later date, however, it could be reasonably restricted to the vicinity of Cow Island, where Say carried on his investigations for some time.

RANGE.—Vermont and southern Ontario southward to northern Georgia and westward, avoiding the Mississippi embayment area, to northeastern Texas and southeastern Minnesota.

*Elaphe obsoleta quadrivittata* (Holbrook)

*Coluber quadrivittata* Holbrook, 1836: 113–14, Pl. 21.

*Elaphe quadrivittata* (Holbrook), Stejneger and Barbour, 1917: 83.

*Elaphe quadrivittata quadrivittata* (Holbrook), Brady, 1932: 5.

*Elaphe quadrivittata deckerti* Brady, 1932: 5.

*Elaphe williamsi* Barbour and Carr, 1940: 340–42.

*Elaphe quadrivittata parallela* Barbour and Engels, 1942: 103–4, Pl. 17.

*Elaphe obsoleta rossalleni* Neill, 1949: 1–12, map.

*Elaphe obsoleta quadrivittata* (Holbrook), Neill, 1949: 4.

LOCATION OF TYPE SPECIMEN, AND TYPE LOCALITY.—The disposition of the type was not given in the original description, but most of Holbrook's material is now in the collection of the Academy of Natural Sciences of Philadelphia. Among the snakes is one of this subspecies (ANSP 3773) which he donated. It comes from "South Carolina" and has the approximate dimensions and the same scutellation as that given for the type. In the absence of any evidence to the contrary, it appears reasonable to assume this to be the type specimen. The scutellation and coloration given in the original description leave no doubt that Holbrook had a specimen from the northern part of the range before him, and with the evidence at hand it appears plausible to restrict the type locality to the state of South Carolina.

Since this snake ranges over a narrow belt of the coastal plain of that state, and since Holbrook is known to have done much of his work at Charleston, the type specimen almost certainly came from that vicinity. Four other forms within the range of this subspecies (as recognized herein) have been described, and it seems advisable, therefore, to restrict the type locality further to the vicinity of Charleston, Charleston County, South Carolina.

RANGE.—From the vicinity of Cape Hatteras, North Carolina, southward along the coast to include all of peninsular Florida except the northwestern part.

*Elaphe obsoleta spiloides* (Duméril, Bibron, and Duméril)

*Elaphis spiloides* Duméril, Bibron, and Duméril, 1854: 269–70.

*Coluber obsoletus confinis* (Baird and Girard), Cope, 1875: 39 [*non Scotophis confinis* Baird and Girard, 1853: 76–77].

*Coluber obsoletus lemniscatus* Cope, 1888: 386 [*partim, non Coluber lemniscatus* Linnaeus, 1758: 224].

*Coluber obsoletus spiloides* (Duméril, Bibron, and Duméril), Cope, 1888: 387.  
*Elaphe obsoleta confinis* (Baird and Girard), Stejneger and Barbour, 1917: 83 [non  
*Scotophis confinis* Baird and Girard, 1853: 76-77].

LOCATION OF TYPE SPECIMEN, AND TYPE LOCALITY.—The type is in the collection of the Museum d'Histoire Naturelle, Paris (MHNP 827). The type locality was given as "la Nouvelle-Orleans."

RANGE.—From the vicinity of Tallahassee, Florida, and Macon, Georgia, northwestward to western Tennessee and eastern Arkansas, including the greater part of Alabama and Mississippi, and eastern Louisiana.

*Elaphe obsoleta lindheimeri* (Baird and Girard)

*Scotophis lindheimeri* Baird and Girard, 1853: 74-75.  
*Coluber obsoletus lindheimeri* (Baird and Girard), Brown, 1901a: 48.  
*Elaphe obsoleta lindheimeri* (Baird and Girard), Stejneger and Barbour, 1917: 83.  
*Elaphe obsoleta confinis* (Baird and Girard), Stejneger and Barbour, 1933: 99 [non  
*Scotophis confinis* Baird and Girard, 1853: 76-77].

LOCATION OF TYPE SPECIMENS, AND TYPE LOCALITY.—The specimen marked "Type of *Scotophis lindheimeri* Baird and Girard: 74" in the U. S. National Museum (USNM 1733) is almost certainly misidentified. It is bleached nearly white, so that the number of blotches may be made out only with difficulty; this probably partly accounts for the error of identification. It is of about the same length as the type (36 + 7 inches) but differs considerably in scutellation, having 218 ventrals rather than 227, supralabials 9-8 rather than 8-8, infralabials 14-13 rather than 12-12. It also differs in the number of dorsal blotches, having about 31 (plus or minus one) rather than 34. The dorsal scales of the type are described as smooth to row X, while in the present specimen they are smooth only to row III.

It appears that Stejneger attempted to identify many of the older specimens, which had not previously been marked as types. In the present case he found a specimen from the type locality, collected by the correct person (F. Lindheimer), which resembled the type in length and in some scale counts (i.e., dorsals and caudals). The differences given above, however, are sufficient to demonstrate that he was wrong in assuming this to be the type. I believe the specimen to be *E. guttata emoryi* rather than *E. obsoleta*. Thus the coloration given for the type (Baird and Girard, 1853: 74-75) could not have been obtained from the present specimen. The type of *Scotophis lindheimeri* Baird and Girard must, therefore, be presumed to be lost. The type locality is New Braunfels, Comal County, Texas.

The paratype, USNM 1734, collected at Indianola, Calhoun County, Texas, by J. D. Graham, appears to be correctly identified and compares favorably with the original description in all respects.

RANGE.—Western coastal Louisiana northwestward to the vicinity of Dallas, Texas, and skirting the edge of the Edwards Plateau southward at least to the vicinity of San Antonio and Corpus Christi.

*Elaphe obsoleta bairdi* (Yarrow)

*Coluber bairdi* Yarrow, in Cope, 1880: 41.

*Elaphe bairdi* (Yarrow), Stejneger and Barbour, 1917: 82.

LOCATION OF TYPE SPECIMEN, AND TYPE LOCALITY.—USNM 10403, collected near Fort Davis, Jeff Davis County, Texas, by William von Manteufel, in 1878.

RANGE.—From the eastern edge of the Edwards Plateau, Texas, westward to the Davis Mountains, and southward at least to the vicinity of Monterrey, Nuevo León.

*Elaphe triaspis triaspis* (Cope)

*Coluber triaspis* Cope, 1866: 128.

*Elaphe triaspis* (Cope), Amaral, 1929: 159.

LOCATION OF TYPE SPECIMEN, AND TYPE LOCALITY.—The type specimen (USNM 24903) was collected at "Belize" by Parsons. He is not known to have collected anywhere in British Honduras except in the vicinity of the town of that name, and the specimen was probably collected there. For this reason the restriction of the type locality to the vicinity of the town of Belize, British Honduras (Smith and Taylor, 1950: 316), is considered valid.

RANGE.—The Yucatán Peninsula: known from Chichén Itzá and Mérida southward to Uaxactún in the Petén of Guatemala.

*Elaphe triaspis mutabilis* (Cope)

*Coluber mutabilis* Cope, 1885: 175–76.

*Elaphe triaspis mutabilis* (Cope), Stuart, 1948: 68–70.

LOCATION OF TYPE SPECIMENS, AND TYPE LOCALITY.—The holotype is USNM 6745 (not 6735, as given in the original description) collected in "Vera Paz" (*vide infra*), Guatemala, by Henry Hague. The paratypes are USNM 24729–30 and USNM 61066, also from Vera Paz, and USNM 9777, from "Costa Rica" according to the catalogue of the U. S. National Museum, but with the more precise information "Pla-

teau near San José" according to Cope (1879: 271). Also included in the type series were two other specimens, one collected by Sumichrast from the "central or elevated part of the State of Tehuantepec," and one from "Guanajuato" in the Duges collection. Neither of these specimens is available (the Duges specimen now in the U. S. National Museum, USNM 11354, may be the same), but both fall into the geographic range of *E. triaspis intermedia* and should be removed from the type series.

Although the exact provenience of the "Vera Paz" specimens cannot be demonstrated, there is good reason to believe (Stuart, 1948: 10) that they were collected from the Caribbean slope of the highlands north of Cobán (between Cobán and Chisec [?]), Alta Verapaz, Guatemala.

RANGE.—From the highlands of Guatemala southward to the vicinity of San José, Costa Rica.

*Elaphe triaspis intermedia* (Boettger)

*Pityophis intermedius* Boettger, 1883: 148.

*Coluber chlorosoma* Günther, 1894: 115-16.

*Elaphe chlorosoma* (Günther), Stone, 1911: 231.

*Elaphe triaspis intermedia* (Boettger), Mertens and Dowling, 1952: 197.

LOCATION OF TYPE SPECIMEN, AND TYPE LOCALITY.—The type is in the Senckenberg Museum in Frankfurt a. M., Germany (SMF 34575). The type locality was given merely as "Mexico."

RANGE.—From the Santa Rita Mountains of Arizona southward in the highlands of Mexico to the Isthmus of Tehuantepec.

*Elaphe rosaliae* (Mocquard)

*Coluber rosaliae* Mocquard, 1899: 321-23, Pl. 12, Figs. 1-1b.

*Elaphe rosaliae* (Mocquard), Stejneger and Barbour, 1917: 84.

LOCATION OF TYPE SPECIMEN, AND TYPE LOCALITY.—An adult female in the Museum d'Histoire Naturelle, Paris (MHNP 92-438), collected at Santa Rosalia, Baja California (Distrito Sur), by Leon Diguët.

RANGE.—The lower half of the peninsula of Baja California.

*Elaphe subocularis* (Brown)

*Coluber subocularis* Brown, 1901b: 492-95, Pl. 29.

*Elaphe subocularis* (Brown), Stejneger and Barbour, 1917: 84.

*Elaphe sclerotica* Smith, 1941: 135-36 (substitute name for *Coluber subocularis* Brown, 1901b, a "secondary homonym" of *Bascanion suboculare* Cope, 1866).

LOCATION OF TYPE SPECIMENS, AND TYPE LOCALITY.—The holotype is ANSP 13733, collected "fifty miles southwest of Pecos, near the head



of Toyah Creek," in the Davis Mountains, Jeff Davis County, Texas, by E. Meyenburgh. There are three paratopotypes, ANSP 13734-36.

RANGE.—From southern New Mexico southward and eastward through West Texas and Coahuila to the vicinity of Saltillo.

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