

Catalogue of American Amphibians and Reptiles.

HALL, RUSSELL J. 1976. *Eumeces obsoletus*.

***Eumeces obsoletus* (Baird and Girard)
Great Plains skink**

Plestiodon obsoletum Baird and Girard, 1852:129. Type-locality, "Valley of the Rio San Pedro [now Devil's River] of the Rio Grande del Norte," Texas. Holotype, U. S. National Museum 3133, collected by J. H. Clark (holotype not seen by author).

Lamprosaurus guttulatus Hallowell, 1852:206. Type-locality, "Fort Fillmore, below the Jornada del Muerte," New Mexico. Holotype, Acad. Nat. Sci. Philadelphia (now lost), collected by G. F. Hammond.

Plestiodon guttulatus: Hallowell, 1857:215.

Eumeces obsoletus: Cope, 1875:45. First use of combination, see NOMENCLATURAL HISTORY.

Eumeces guttulatus: Cope, 1875:45. See NOMENCLATURAL HISTORY.

• CONTENT. No subspecies have been described (see Comment).

• DEFINITION AND DIAGNOSIS. A large skink, adults ranging from 103 to 142 mm (snout-vent length). Females attain a maximum of approximately 130 mm, hatchlings average 36 mm. *Eumeces obsoletus* is the only North American skink in which the lateral scale rows are oblique to the dorsal rows. The pattern is ontogenetically and individually variable; juveniles are black with conspicuous gold-colored spots on the dorsal surface of the head, large white spots on each labial scale, and iridescent blue tail. This pattern transforms in the second year to the mottled adult pattern. In adults the grayish-brown ground color is broken by black on the free edges of the scales, sometimes producing indistinct dorso-lateral lines. The flanks are yellowish, flecked with salmon.

• DESCRIPTIONS. The holotype was described briefly by Baird and Girard (1852), and redescribed adequately by Cope (1900). Detailed descriptions of scalation, pattern, and variation appear in Van Denburgh (1922), Taylor (1936), and Smith (1946). Briefer descriptive notes are in Stebbins (1954, 1966), Cochran and Goin (1970), and Conant (1975).

• ILLUSTRATIONS. Black and white photographs appear in Van Denburgh (1922), Smith (1946, 1956), Fitch (1955), and Collins (1974). Color illustrations are in Stebbins (1966; adult and juvenile), Cochran and Goin (1970), and Conant (1975; adult and juvenile). Line drawings illustrating scalation appear in Cope (1900), Burt (1929), Taylor (1936), Stebbins (1954), and Fitch (1955).

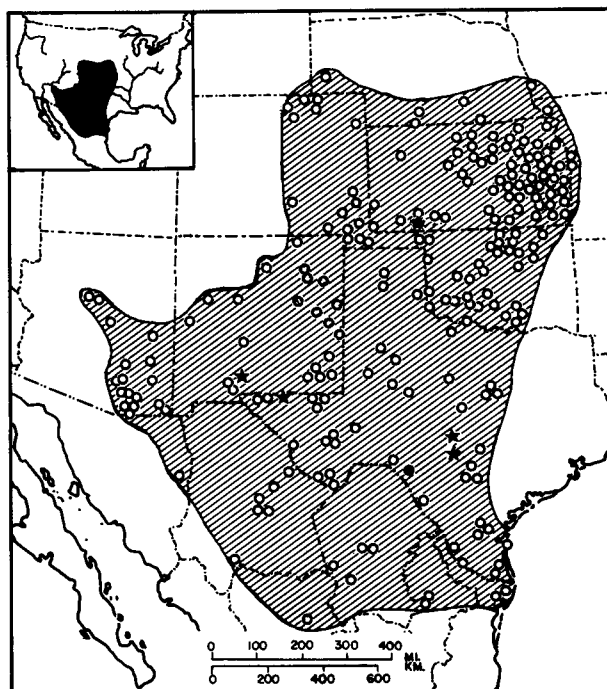
• DISTRIBUTION. *Eumeces obsoletus* is widely distributed in the central and northern plains region of the United States and northern Mexico. Northern limits of the range are in southwestern Iowa, central Nebraska, and north-central Colorado, possibly extending into southeastern Wyoming. The southern boundary of the range extends through northern parts of the Mexican states of Tamaulipas and Nuevo León, into Coahuila, Chihuahua, and Durango, and westward to northern Sonora (Conant, 1965). It is found westward from western Missouri, eastern Oklahoma and east Texas to central Arizona, northwest New Mexico, and Colorado east of the Rocky Mountains. The species is generally distributed in rocky open areas in the northeastern part of its range, but is restricted to significant topographic breaks in xeric regions. Complete distribution maps are in Smith (1946), Fitch (1955), Stebbins (1966), and Conant (1975). Photographs of typical habitat are in Fitch (1955) and Hall (1971). Distributional information is available as follows: *Arizona*—(no detailed survey)—Stone (1911), Quaintance (1935), Gloyd (1937), Little (1940), Woodin (1953), Gehlbach (1956), Williams (1960), Nickerson and Mays (1970), Lowe (1972); *New Mexico*—(no detailed survey)—Mosauer (1932), Little and Keller (1937), Lewis (1950), Gehlbach (1965), Tanner (1975), Cole (1975); *Colorado*—Maslin (1959), Banta and Brechbuhler (1965), Banta and Kimmel (1965), Smith, Maslin and Brown (1965); *Nebraska*—Hudson (1942); *Iowa*—Bailey (1943); *Missouri*—Anderson (1965), Watkins and Hinesley (1970); *Kansas*—Smith (1956), Collins (1974); *Oklahoma*—Webb (1970); *Texas*—Brown (1950), Raun and Gehlbach (1972); *Mexico*—Schmidt and Owens (1944), Cliff (1953), Martin del Campo (1953), Legler and Webb (1960), Smith, Williams and Moll (1963), Conant (1965).

• FOSSIL RECORD. The related *Eumeces striatulus* was described from Pliocene deposits in Kansas (Taylor, 1941). *Eumeces*

obsoletus is known from the Pleistocene Sangamon of Meade County (Cragin Quarry), Kansas (Etheridge, 1958, 1960), from several Pleistocene localities in Texas (Holman, 1966, 1969a, 1969b; Gehlbach and Holman, 1974), and from Pleistocene deposits in New Mexico (Brattsrom, 1964).

• PERTINENT LITERATURE. Taylor's (1936) account is the most recent consideration of the taxonomy of the *obsoletus* Group, and provides a complete review of the literature prior to 1936. Other thorough literature reviews are in Van Denburgh (1922), Smith (1946), Fitch (1955), and Raun and Gehlbach (1972). General accounts are in Strecker (1915), Grant (1927), Burt (1928a), Hudson (1942), Maslin (1947), Smith (1956), Anderson (1965), Webb (1970), and Collins (1974). Descriptions of habitat in various parts of the range are provided in Bailey (1905), Strecker (1915), Ruthven (1920), Gloyd (1928), Mosauer (1932), Burt (1933), Gloyd (1937), Trowbridge (1937), Little (1940), Marr (1944), Schmidt and Smith (1944), Maslin (1947), Smith and Buechner (1947), Jameson and Flury (1949), Blair (1950), Lewis (1950), Milstead, Mecham and McClintock (1950), Milstead (1953), Woodin (1953), Fouquette and Lindsay (1955), Clarke (1958), Axtell (1959), Minton (1959), Legler and Webb (1960), Gehlbach (1965), Nickerson and Mays (1970), and Lowe (1972). General accounts of life history and ecology include Fitch (1955, 1965, 1967, 1970), Hall (1971), and Hall and Fitch (1971). Life history notes are in Mosauer (1932), Little and Keller (1937), Bailey (1943), McCallion (1945), Fouquette and Lindsay (1955), Clarke (1958), Minton (1959), Fleet and Hall (1970), and Parker (1973). Food habits were considered by Hartman (1906), Grant (1927), Burt (1928b), Burt and Hoyle (1934), and Hall (1972). Energy content of eggs (Ballinger and Clark, 1973), maternal behavior (Evans, 1959, 1961), home range (Fitch, 1958), and hearing (Peterson, 1966; Wever, 1970) have been investigated. Thermal ecology (Fitch, 1956), and physiology (Dawson, 1960; Licht, 1964) are well known. Various aspects of endocrinology are considered by Hebard and Charipper (1955a, 1955b), Miller and Wurster (1956, 1958), and Abrahamson and Maher (1967). Internal (Hunsaker and Johnson, 1959) and external (Hutchison and Larimer, 1960) pigmentation have also been studied. Predation on *E. obsoletus* has been reported by Burt (1933), and Montanucci (1971).

• NOMENCLATURAL HISTORY. The species was described twice in one volume of a single journal. The description by Baird and Girard (1852) has page priority over that of Hallowell (1852), which was based on the distinctively patterned juvenile. It was not



MAP. The solid symbol marks the approximate location of the type-locality; hollow symbols mark other known localities. Question marks indicate unknown boundaries. Stars mark Pleistocene fossil localities.

until 1929 that the name *guttulatus* was formally synonymized (Burt, 1929), although Cope (1900) hinted that the two nominal species might be the same.

• **ETYMOLOGY.** The name *obsoletus* refers to the pattern in which dorsal lines, characteristic of most North American skinks, are absent.

COMMENT

Taylor (1936) described geographic variation in scalation, including data on the condition of the postnasal and anterior loreal scales that indicate a north-south cline. Smith (1946) described variation in the presence of dark margins on the mid-dorsal scales, and illustrated extreme examples. This variation produces individuals with a practically uniform dorsal pattern, more common in southern populations, and ones with a broad mid-dorsal stripe, characteristic of northern populations.

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