

## Catalogue of American Amphibians and Reptiles.

Ernst, C.H. and M.E. Seidel. 2008. *Trachemys ornata*.

***Trachemys ornata* (Gray)  
Ornate Slider**

*Emys ornata* Gray 1831:30. Type-locality, "Mazeland," corrected to Mazatlan, Sinaloa, Mexico by Gray (1856:21). See **Comment**. Syntypes, The Natural History Museum, London (BMNH) 1946.1.22.40–41, fluid preserved juveniles, collected by Alexander Collie of the British Royal Navy in 1825–1831 (examined by authors).

*Clemmys ornata*: Strauch 1862:32 (part).

*Pseudemys ornata*: Cope 1876:153 (part).

*Chrysemys ornata*: Boulenger 1889:80.

*Pseudemys scripta ornata*: Carr 1938:135.

*Chrysemys scripta ornata*: Smith and Taylor 1966:12.

*Chrysemys ornata ornata*: Slavens 1976:21.

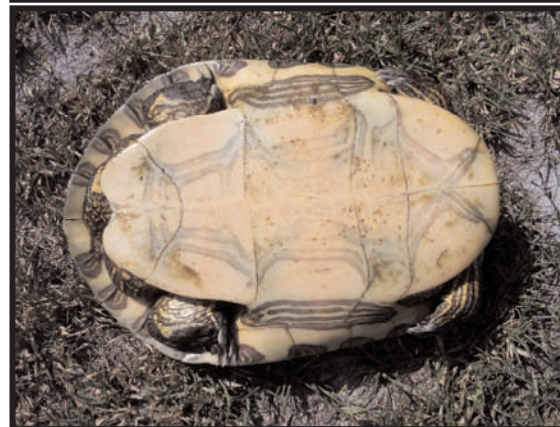
*Trachemys scripta ornata*: Iverson 1985:5.

*Trachemys ornata*: Seidel 2002:289. First use of present combination.

• **CONTENT.** *Trachemys ornata*, as currently defined, is a monotypic species.

• **DEFINITION.** Adult carapaces are normally 20–30 cm, with a maximum length of 38 cm. The oval adult carapace is weakly keeled, has a slightly serrate posterior rim, and is highest at the third vertebral scute and widest at the level of the eighth marginals. The pleural scutes may bear a series of low longitudinal ridges or wrinkles. The vertebral scutes are broader than long; the fifth is flared. The marginals anterior and posterior to the bridge are flared (more so in hatchlings and juveniles); those at the bridge are down-turned (reverted), and are the lowest of the series. The pygal bone extends beyond the marginal-vertebral seam. The adult carapace is green, olive or brown; that of hatchlings and juveniles brighter green. Each pleural has a yellow or orange, dark-centered, dark-bordered, complete ocellus; a yellow or orange vertical bar is usually present near the anterior seam. The vertebrals are patterned with yellow or orange wavy lines, and the dorsal surface of each marginal has a yellow to orange, dark-bordered half ocellus surrounding a dark blotch situated low near the posterior seam. Ventrally, each marginal has a dark blotch which partially covers the posterior seam. The light shell markings are pronounced in hatchlings and young individuals, but melanism may obscure them in older adults. The yellow bridge is usually over 33% of the carapace length, and is patterned with dark wavy lines. Large axillary and inguinal scutes are present. The large plastron is flat and hingeless, slightly broader in front of the bridge than behind it, convex anteriorly, and has a shallow posterior notch. The abdominal scute is the largest of the plastron series, and is usually followed by either the anal or femoral, and then the humeral, gular and pectoral, respectively (although some variation occurs). The plastron is

yellow with a large, variable pattern of four longitudinal, black-bordered, yellow lines surrounding the mid-seam and somewhat forked anteriorly at the gular scutes. The pattern does not extend posteriorly to the anal notch and is most pronounced in hatchlings and juveniles, but fades with age so that older adults may only have 1–2 of these dark lines remaining. The head is large with a somewhat protruding snout (more so in males), and a medially-notched upper jaw. The triturating surfaces of the jaws are narrow and lack elaborate serrations, although the mandibular tomium may be finely serrate. A medial ridge is present on the maxilla. The supratemporal stripe is usually orange and contacts the orbit. It may or may not be expanded in the temple region, but is continuous onto the neck (if a break occurs it is usually at the



**FIGURE 1.** Head, venter, and dorsum of an adult female *Trachemys ornata* from Sinaloa, Mexico (photographs by Dennis Uhrig).

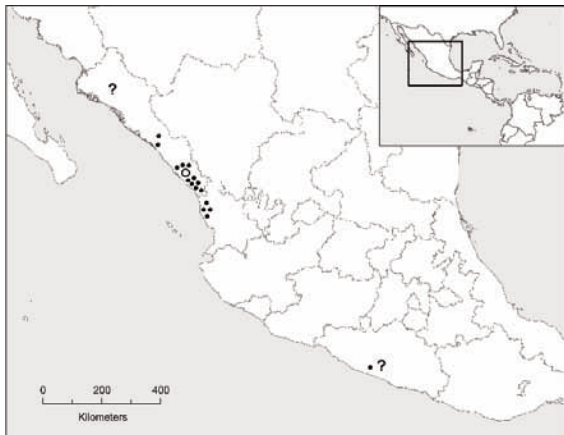
orbit). A diagonal light stripe extends posteriorly from the orbit to the angle of the lower jaw. The light lines on the chin are interrupted, and the medial one is posteriorly-forked. The skin is green to olive-brown. The toes are webbed; and the neck, limbs and tail are patterned with yellow stripes.

Males have smaller, less domed carapaces; longer, thicker tails with the vent positioned posterior to the rear marginals; narrower heads with more conical snouts; and foreclaws not particularly elongated. Females are larger, and have a more domed carapace, shorter tail with the vent positioned beneath the rear marginals, and a broader head.

• **DESCRIPTIONS.** General descriptions are in Bonin et al. (2006), Boulenger (1889), Bour (2003), Casas Andreu (1965), Duméril et al. (1870), Ernst (1990), Ernst and Barbour (1989), Ernst et al. (2000), Gray (1831, 1856), Günther (1890), Hardy and McDiarmid (1969), Legler and Webb (1970), Siebenrock (1909), and Smith and Smith (1980). The karyotype is described by Stock (1972).

• **ILLUSTRATIONS.** Black-and-white illustrations of adults are found in Casas Andreu (1965), Legler and Webb (1970), and Smith and Smith (1980). Color or black-and-white illustrations of juveniles are in Bour (2003), Rosado (1967), and Sowerby and Lear (1872). Color illustrations of adults are in Ernst et al. (2000), Vetter (2005), and of the head in Bonin et al. (2006). Other illustrations include: skull (Obst 1985, Siebenrock 1897), vertebrae (Hoffstetter and Gasc 1969), and glottis and trachea (Siebenrock 1899).

• **DISTRIBUTION.** *Trachemys ornata* occurs only in northwestern Mexico, where it ranges from Culiacán, Sinaloa southward to San Blas and the Río Santiago in Nayarit. Legler (1990) suggested that the range may extend northward into the Río Sinaloa watershed, and that a population of *Trachemys* near Acapulco, Guerrero, possibly may be of this species. There is also a record of an apparently introduced adult male from a pond at El Corro, Baja California Sur (photograph by Lee Gisner examined by authors). Publications discussing distribution include



**MAP.** Distribution of *Trachemys ornata*. The circle marks the type-locality; dots indicate other records.

Bonin et al. (1996, 2006), Bour (2003), Casas Andreu (1965), Ernst (1990), Ernst and Barbour (1989), Ernst et al. (2000), Hardy and McDiarmid (1969), Hartel and Plesker (1997), Iverson (1986, 1992), Legler (1990), Legler and Webb (1970), Moll and Legler (1971), Seidel (2002), and Smith and Smith (1980). Range maps are presented in Bonin et al. (2006), Ernst (1990), Ernst et al. (2000), Hardy and McDiarmid (1969), Iverson (1986, 1992), Seidel (2002), and Smith and Smith (1980).

• **FOSSIL RECORD.** No fossils have been reported.

• **PERTINENT LITERATURE.** Literature regarding *Trachemys ornata* is confusing because the name *ornata*, the earliest described form of slider turtle in Mesoamerica, has been applied to various populations of *Trachemys* from Mexico to Panama (e.g. Ernst 1990). The interpretation of the name used here is that of Legler (1990) and Seidel (2002) and applies only to populations occurring in Sinaloa and Nayarit of northwestern Mexico. **General accounts** are presented in Bonin et al. (2006), Casas Andreu (1965), Rosado (1967), and Smith and Smith (1980). Other topics include: **basking** (Hardy and McDiarmid 1969), **behavior** (Ashe et al. 1975), **bibliographies** (David 1994; Smith and Smith 1980), **bile salts** (Tamar 1974), **blood** (Frair 1977; Sullivan 1974), **checklists** (Flores-Villela 1993; Flores-Villela et al. 1995; Liner 2007; Nemuras 1968), **diet** (Moll and Legler 1971), **economic importance** (Dugès 1907), **eye** (Verriest et al. 1959), **habitat** (Hardy and McDiarmid 1969), **husbandry** (Anonymous 1995, Schmidt 1978), **karyotype** (Stock 1972), **longevity** (Snider and Bowler 1992), **medical treatment** (Bodri et al. 1992), **movements** (Hardy and McDiarmid 1969), **parasites** (Bravo Hollis 1946; Bravo-Hollis and Caballero Deloya 1973; Caballero 1938; Kasprzak et al. 1989), **reproduction** (Hardy and McDiarmid 1969; Moll and Legler 1971), **systematics, taxonomy, evolution** (Bour 2003; Bringsøe 2001; Carr 1938; David 1994; Ernst 1990; Ernst and Barbour 1989; Ernst et al. 2000; Hartweg 1939; Holman 1977; King and Burke 1989; Legler 1990; Legler and Webb 1970; Seidel 2002; Siebenrock 1909; Smith and Smith 1980; Weaver and Rose 1967; Wermuth and Mertens 1961, 1977), **vernacular names** (Iverson 1985; Liner 1994, 2007), and **vertebrae** (Hoffstetter and Gasc 1969).

• **ETYMOLOGY.** The specific name *ornata* is derived from the Latin word "ornatus", meaning decorated or adorned, and refers to the colorful shell and head patterns of ocelli and stripes in this species.

• **COMMENT.** Gray (1831:30), notorious for his poor spelling, originally stated the type-locality as "Mazetland," changed it to "Mazet Land" (1844:22), and finally corrected it to "Mazatlan, Sinaloa" (1856:24). Legler (1990) reported that *T. yaquia*, *T. ornata* and *T. venusta grayi* comprise "... a natural series" of closely related taxa. Seidel (2002) indicated that *T. ornata*

is closely related to all of the *Trachemys* isolates in northwestern Mexico, including *T. yaquia*, but not directly to *T. v. grayi*.

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