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Trachemys Agassiz
Sliders

Trachemys Agassiz 1857:434. Type-species, *Trachemys scabra* Agassiz 1857:434 (= *Testudo scabra* Linnaeus 1758:198 = *Testudo scripta* Schoepff 1792:16). See **Comment**.
Emys: Gray 1858:286.
Clemmys: Strauch 1862:32.
Callichelys: Gray 1863:181. Type-species by original designation, *Emys ornata:* Gray 1831:30 (= *Trachemys ornata*).
Calliclemys: Gray 1863:181. *Lapsus calami*.
Redamia: Gray 1870:35. Type-species by monotypy, *Redamia olivacea* Gray 1870:36 (= *Emys olivacea* Gray 1856:30). See **Comment**.
Pseudemys: Gray 1870:45 (part).
Callicheys: Gray 1873:48. *Lapsus*.
Callechelys: Summichrast 1882a:268. *Lapsus*.
Emys (Callichelys): Summichrast 1882b:32.
Emys (Clemmys): Günther 1885:4.
Chrysemys: Boulenger 1889:69 (part).
Chrysemys (Trachemys): McDowell 1961:23.
Pseudemus: Acton, Weinheimer, Shelton, Niedermeier, and Bennett 1972:421. *Lapsus*.
Pseudamys: Leslie and Clem 1972:1656. *Lapsus*.
Pseudonyms: McDonald 1974:133. *Lapsus*.
Tracheymys: Tucker, Paukstis, and Janzen 2001:88. *Lapsus*.
Trachymes: Klenk and Komar 2003:260. *Lapsus*.

• **CONTENT**. Currently 15 species are recognized, 8 of which are polytypic: *Trachemys adiutrix, T. callirostris, T. decorata, T. decussata, T. dorbigni, T. emolli, T. gaigeae, T. nebulosa, T. ornata, T. scripta, T. stejnegeri, T. taylori, T. terrapen, T. venusta,* and *T. yaquia* (Bickham et al. 2007; Seidel 2002a).

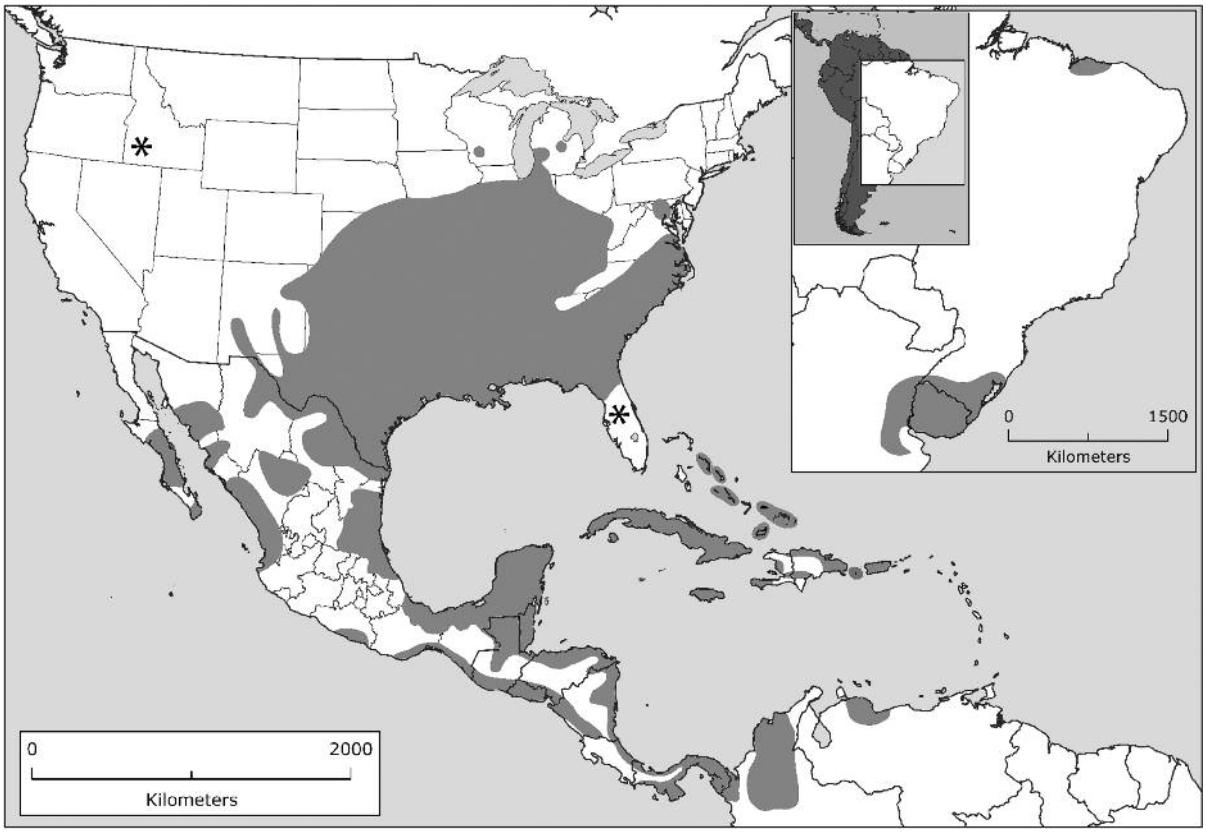
• **DEFINITION**. Turtles of the genus *Trachemys* are moderate to large aquatic emydid turtles. Sexually dimorphic size is evident; among the larger species, males grow to 35 cm carapace length and females to 48 cm. Males have elongate tails, when extended the vent is located beyond the posterior rim of the carapace.

The neck, limbs, and carapace of young individuals often have stripes or wavy markings of yellow and black. Old males frequently develop melanism involving loss of characteristic markings due to accumulation of brown and black pigments. The adult carapace is rugose, notched, serrated posteriorly; and usually has some evidence of a keel. The plastron is relatively large and hingeless, with a posterior notch. The plastron of young individuals is pale yellow to light orange, with a variety of dark markings among the different species. The entoplastron bone is not elongate and is at least as broad as it is long.

The ventral surface of the lower jaw is rounded, and the upper surface (alveolar) is narrow. Tuberculate denticles are absent on the alveolar surface of the upper jaw. The cutting surface of the upper jaw is uncusped and medially forms an angle. The cranium is shallow anterior to the basisphenoid (30–40% of condylobasal length) and the zygomatic arch and narial openings are relatively narrow.

FIGURE 1. Dorsolateral and ventral views of the holotype (ANSP 179) of *Emys troostii*, proposed type-species (see **Comment**). Photographs provided by Ned Gil-more, Academy of Natural Sciences of Philadelphia.

• **DESCRIPTIONS**. General descriptions are in Bringsøe (2001), Ernst (1990), Ernst and Barbour (1989), and Ernst et al. (2000), Seidel (2002a), and Seidel and Smith (1986). Weaver and Rose (1967) reviewed the osteological characters of the genus. Other descriptions are as follows: **skull** (Feuer 1970; Gaffney 1979), **vertebrae** (Hoffstetter and Gasc 1969; Williams 1950), **shell** (Tinkle 1959, 1962), **nuchal and peripheral bones** (Weaver and Robertson 1967), **pelvic girdle and hindlimbs** (Zug 1971), **phalangeal bones** (Guibé 1970a; McCoy and Jacobs 1991), **head patterns** (Ward 1980), **heart** (Fawcett and Selby 1958), **blood vessels** (Albrecht 1967; Burda 1965; Guibé 1970d), **lungs** (Perry 1998), **penis** (Kelly 2004; Zug 1966), **brain** (Anthony 1970), **cranial nerves** (Anthony 1970), **vomeronasal organ** (Guibé 1970b), **choanae and nose embryology** (Parsons, 1959, 1960, 1968), **buccopharyngeal mucosa** (Winokur 1988), **ear** (Guibé 1970c), **eye** (Verriet and Rabaey 1959), **orbital glands** (Paule 1953), **mental glands** (Winokur and Legler 1975), **rostral**



MAP. Distribution of the genus *Trachemys*. Extralimital records of fossils are indicated by stars.

pores (Winokur and Legler 1974), **pars tuberalis** (Pearson and Licht 1982), **oral glands** (Guibé 1970f), **adrenal gland** (Hebard and Charipper 1955), **liver** (Guibé 1970f), **pancreas** (Guibé 1970f), **gametic cycles** (Moll and Legler 1971), **courtship** (Fritz 1990; Krefft 1950), **egg shell** (Solomon and Reid 1983), **embryology** (Greenbaum 2002; Parsons 1959, 1960).

• **ILLUSTRATIONS**. The general morphology of a slider turtle (*Trachemys scripta*) is illustrated by numerous drawings in Ashley (1978). Other pertinent morphological illustrations are as follows: **karyotype** (Bickham and Baker 1976, 1979), **skeleton** (de Sousa et al. 2000), **shell** (Ernst 1990; Zangerl 1939), **embryonic carapace** (Gilbert et al. 2008), **skull** (Bringsøe 2001; Ernst 1990; Feuer 1970; Gaffney 1979; Obst 1985; Romer 1956; Ruckes 1937), **shell scute surface** (Andrews 1996; Obst 1985), **carapace scute seams** (Tinkle 1962), **flexure of cervical ver tebrae during head retraction** (White and Curtsinger 1986), **limb motion** (Blob et al. 2008), **nuchal and peripheral bones** (Adler 1968a; Weaver and Robertson 1967), **girdles and limb bones** (White and Curtsinger 1986), **head markings** (Legler and Webb 1970; Ward 1980), **melanism** (Lovich et al. 1990), **brain** (Anthony 1970; Cosans and Ulinski 1990; Heller and Ulinski 1987; Stark 1979), **cranial nerves** (Anthony 1970), **pineal body/epiphyseal stalk** (Quay 1979), **pituitary gland** (Oota and Kawada 1986), **eye structure and related vision diagrams** (Conners and Kriegstein 1986; Granda 1979; Kriegstein and Conners 1986; Ventura et al. 1999; Verriet and Rabaey 1959), **orbital glands** (Chieffi Baccari et al. 1992), **ear** (Jørgensen 1974; Wever 1978), **hearing sensitivity curves** (Wever 1978), **thyroid gland** (Lynn 1970), **parathyroid gland** (Clark 1965), **ultimobranchial body** (Sehe 1965), **adrenal gland** (Gabe 1970), **pancreas** (Ku et al. 2000; Miller and Lagois 1970), **heart** (Fawcett and Selby 1958), **position of viscera** (Wyneken 2008), **circulatory system** (Albrecht 1967; Burda 1965), **serum and hemoglobin electrophoretic patterns** (Frair 1964; Seidel 2002b; Sullivan and Riggs 1967a, b), **diagrams related to breathing and lung function** (Gaumer 1952; Gaumer and Goodnight 1957; D.C. Jackson 1979), **trachea** (Pastor et al. 1987), **tongue** (Beisser et al. 1998), **cloaca** (Coppoolse and Zwart 1986), **kidney** (Ditrich 1985), **renal portal system** (Holz et al. 1997), **male and female gametic cycles** (Brewer and Killebrew 1986; Moll 1979; Moll and Legler 1971), **myoglobins** (Seidel and Adkins 1989), **courtship behavior** (Carpenter 1977; Fritz 1990), **egg shell** (Solomon and Reid 1983), **embryology** (Gilbert et al. 2008; Greenbaum 2002; Hubrecht Laboratory 1953; Parsons 1959, 1960), **longevity curves** (Gibbons 1987)

• **DISTRIBUTION**. Natural populations of *Trachemys* occur throughout the central and southern United States (Seidel and Ernst 2006; Stuart and Ernst 2004), south into Mexico and Central America. In northern Mexico, populations are mostly isolated (Stuart and Ernst 2004; Ernst 2003a; Ernst and Seidel 2008;

Seidel 2002c, 2010), and in Central America they range along Caribbean and Pacific coastal lowlands (Ernst 2008; Ernst and Seidel 2006). *Trachemys* occurs in northern South America: Colombia, Venezuela, and Brazil (Ernst 2003b; Ernst et al. 2010; Pritchard and Trebbau 1984; Vanzolini 1995) and southern South America: Brazil, Argentina, and Uruguay (Seidel 1989). Populations also occur in the Greater Antilles on the islands of Cuba, Jamaica, Hispaniola, and Puerto Rico (Bickham 1980; Seidel 1988a–d). The natural origin of *Trachemys* inhabiting smaller West Indian islands (i.e. Bahamas, Cayman Islands and several in the Lesser Antilles) is uncertain (Seidel 1996). Additional papers discussing distribution include Ernst (1990), Gibbons (1990), Moll and Legler (1971), Seidel et al. (1999), and Smith and Smith (1979). Range maps are presented in Ernst (1990), Fritz (1990), Gibbons (1990), Iverson (1986, 1992), Legler (1990), Moll and Legler (1971), Obst (1985), Seidel (2002a), Seidel et al. (1999), and Smith and Smith (1979). *Trachemys* (mostly *T. scripta elegans*) has been introduced widely throughout the globe as a result of the pet, meat, and biological supply trades (Seidel and Ernst 2006).

• **FOSSIL RECORD**. There are numerous reports of Pliocene and Pleistocene fossil *Trachemys* in temperate North America (Baskin 1991; Hay 1908; Holman 1995; Hulbert 1997; Jackson 1988; Russell et al. 2009; Seidel and Ernst 2006; Seidel and Jackson 1990). There are also a few reports from the Upper Miocene (Adler 1968a; Parmalee et al. 2002; Weaver and Robertson 1967). Patton (1969) reported Oligocene fossils from Florida. Very little fossil material has been recovered in tropical America. For the West Indies, Pregill (1981) described a Late Pleistocene *Trachemys* from Puerto Rico, Olson et al. (1990) reported Late Pleistocene fragments from the Bahamian island of San Salvador, and Matthew (1919) makes general reference to a fossil from Cuba. Lindsay (1984) reported a fossil from the Late Cenozoic of Mexico. The only other fossil record of *Trachemys* in the tropics is in Gazin (1957). These remains were from a Pleistocene site in Panama, but the specimen (presumably deposited in the National Museum of Natural History) cannot be located. Additional records of fossil *Trachemys* appear in Galbreath (1938, 1948), Gilmore (1933), Preston (1966, 1971, 1979), Rogers (1976), Semken (1966), and Zug (1969). Extralimital archeological records appear in Adler (1968b). Fossils are routinely found associated with Native American sites (Baker et al. 1941; Bluhm and Fenner 1963; Butler 1975, 1976; Campbell 1958; Carder et al. 2004; Colburn 1989; Crook 1984; Fowler 1959; Fox et al. 1980; Gillette 1974; Hammond et al. 1979; Henry 1978; Henry et al. 1979; Hill 1976; Jackson and Scott 2003; Jones and Fox 1983; Kelley 1990; Lehmer 1952; Lorrain 1967 [1966]; McDonald 1974; Munson et al. 1971; Murry 1987; Parmalee 1958, 1960, 1962, 1964, 1965, 1966, 1969, 1973, 1980, 1990; Parmalee and Bogan 1980a,b; Parmalee et al. 1976; Patterson et al. 1987; Percy 1974; Reese 2000; Reitz 1986; Richards 1971; Scholtz 1989 [1991]; Scott and Jackson [1996] 1998; Sellards 1916; Shaffer 1990; Steele and DeMarcay 1985; Styles 1981; Styles et al. 1985; Van-Derwarker 2001; Voorhies et al. 2002; Walker 1998; Webb et al. 1984); burned shells and other evidence indicates these turtles were used extensively for food.

• **PERTINENT LITERATURE**. **Arterial canals** (Albrecht 1967; Burda 1965; McDowell 1961), **behavior** (Carpenter 1977; Ferguson 1977; Wever 1978), **blood** (Brown et al. 1997; Dessauer 1970, 1974; Duguy 1970b; Frair 1963, 1977; Gaumer 1952; Gaumer and Goodnight 1957; Gilles-Baillien 1974; Hirschfeld and Gordon 1961; Jensen et al. 2001; Kaplan 1956; Seidel 2002b; Skovgaard et al. 2005; Stenroos and Bowman 1968; Sullivan 1974; Sullivan and Riggs 1967a–c), **bouyancy** (Zug 1971), **brain structure and function** (Adolph 1985; Anthony 1970; Balaban and Ulinski 1981; Cosans and Ulinski 1990; Dacey and Ulinski 1983; Heller and Ulinski 1987; Kleiter and Lametschwandter 1995; Kunzle 1985a,b; Milton 2008; Oota and Kawada 1986; Pearson and Licht 1982; Pearson and Pearson 1976; Platel 1979; Quay 1979; Reiner 1994; Stark 1979), **cardiovascular system** (Guibé 1970d; Holz et al. 1997; Jackson 1979; Kleiter and Lametschwandter 1995; Oota and Kawada 1986; Overgaard et al. 2002; Rodriques et al. 2003; Seidel and Adkins 1989; Smits and Kozubowski 1985), **checklists** (Liner 2007), **cloacal bursae** (Peterson and Greenshields 2001), **conservation** (Burke et al. 2000; Nietschmann 1972), **courtship** (Fritz 1990; Krefft 1950; Seidel and Fritz 1997), **digestive tract morphology and function** (Agullerio et al. 1985; Coppoolse and Zwart 1986; Dandrifosse 1974; Guibé 1970f; Ku et al. 2000; Lope et al. 1954; Malvasio et al. 2002; Miller and Lagios 1970; Pastor et al. 1987; Rodriques et al. 2003; Romanini 1959; Secor and Diamond 1999; Skoczylas 1978; Tammar 1974; Ward 1980), **ear and hearing** (Art et al. 1985; Crawford and Fettiplace 1980; Guibé 1970c; Jørgensen 1974; Ricci et al. 2005; Schnee et al. 2005; Schwartzkoff 1960; Silber et al. 2004; Wever 1978), **ecology** (Gibbons 1990; Stephens and Wiens 2003a,b); **eggs** (Acuna Mesén 1989; Bowden et al. 2001; Janzen et al. 1998; Solomon and Reid 1983), **embryology** (Ewert 1985; Greenbaum et al. 2002; Kordikova 2000; Pearson 1959, 1985; Raynaud 1985; Spotila and Hall 1998), **endocrinology** (Agullerio et al. 1985; Bowden et al. 2001; Clark 1965, 1968, 1970; Duguy 1970a; Gabe 1970; Hebard and Charipper 1955; Hugenberger and Licht 1999; Hunt and Licht 1998; Janzen et al. 1998; Kehl and Combescot 1955; Licht 1974; Lopes et al. 1954; Lynn 1970; Oota and Kawada 1986; Overgaard et al. 2002; Pearson 1985; Raviola and Raviola 1967; Sehe 1965; Strauss et al. 1967; Thompson 1910), **excretory system, kidneys and osmoregulation** (Anderson et al. 1985; Baze and Horne 1970; Dantzler and Holmes 1974; Ditrich 1985; Dunson 1967; Holz et al. 1997; LeFevre et al. 1973; Leslie et al. 1973; Mahmoud and Klicka 1979; Malvasio et al. 1999), **eye and vision** (Armington 1954; Casteel 1911; Conners and Kriegstein 1986; Detwiler et al.

1978; Forbes et al. 1958; Granda 1962, 1978, 1979; Granda and Sisson 1989; Granda and Sterling 1966; Granda et al. 1972; Greschenfeld and Piccolino 1979; Kriegstein and Conners 1986; Lee et. al. 2005; Mrosovsky 1964; Neyton et al. 1985; Nguyen-Legros et al. 1985; Normann et al. 1985; Sisson and Granda 1989; Ventura et al. 1999, 2001; Verriet and Rabaey 1959; Walls 1963; Weber et al. 2003; Zhu and Keifer 2004), **general accounts** (Gibbons 1990; Obst 1985), **heart structure and function** (Farrell et al. 1998; Fawcett and Selby 1958; Henrotte and Cosmos 1959; Hicks 1998; Hicks et al. 1996; Katzung and Farah 1956; Schoemaker and Zandvliet 2005), **hybrids** (Fritz 1995; Seidel and Ernst 2006), **integumentary system** (Andrews 1996; Baden et al. 1973; Matoltsy and Bednarz 1973), **karyotype** (Bickham 1981; Bickham and Baker 1976, 1979; Forbes 1966; Gilboa 1974; Martinez e al. 2009; Stock 1972), **liver** (Guibé 1970f), **longevity** (Gibbons 1987), **melanism** (Ernst 1982; Lovich et al. 1990), **movement** (Stein 2005), **muscles** (Callister et al. 2005; Raviola and Raviola 1967; Strauss et al. 1967), **neurology** (Anthony 1970; Fernandez et al. 1993; Giffin 1990; Gorman et al. 2005; Luthman et al. 1991; Partata et al. 2003; Siemen and Kunzle 1994; Stein 2005; Trujillo-Cenoz et al. 1990; Winklemann et al. 2004; Zhu and Keifer 2004), **olfaction** (Guibé 1970b; Nemours 1930; Parsons 1959; Saint-Girons 1991; Scott 1979), **oral glands** (Kochva 1978), **orbital glands** (Chieffi Baccari et al. 1992; Paule 1953; Saint-Girons 1985), **parasites** (Ernst and Ernst 1977, 1979, 1980; Jackson et al. 1969; Lenis and García-Prieto 2009; Perkins 1928; Readel et al. 2008b), **penis** (Kelly 2004; Zug 1966), **population genetics and demography** (Gibbons 1990; Gibbs and Amato 2000; Smith and Scribner 1990), **reflexes** (Zhu and Keifer 2004), **reproductive system** (Gist et al. 2000; Malvasio et al. 1999), **respiratory structure and function** (Clark and Miller 1973; Gaumer 1952; Guibé 1970e; Jackson 1979; Perry 1998; Seidel 1977; Skovgaard et al. 2005; Wang et al. 1998; Wyneken 2008), **road mortality** (Shepard et al. 2008), **sexual cycles** (Brewer and Killebrew 1986; Gibbons 1990; Kehl and Combescot 1955; Marroni et al. 1973; Moll 1979; Moll and Legler 1971; Rahil and Narbaitz 1973; Sprando and Russell 1987a,b), **sexual dimorphism in juveniles** (Malvasio et al. 1999; Readel et al. 2008a), **shell** (Andrews 1996; Cebra-Thomas et al. 2005; Domokos and Várkonyi 2007; Kordikova 2000; Tinkle 1959, 1962; Zangerl 1969), **shell scute anomalies** (Zangerl 1969), **skeletal anatomy** (Blob et al. 2008; de Sousa et al. 2000; Enlow 1969; Gilbert et al. 2008; Guibé 1970a; Hoffstetter and Gasc 1969; McCoy and Jacobs 1991; Romer 1956; Ruckes 1937; Shufeldt 1921; Williams 1950; Zug 1971), **systematics, taxonomy and evolution** (Agassiz 1857; Albrecht 1967; Barbour and Carr 1940; Berry and Shine 1980; Bickham 1981; Bickham and Baker 1979; Boulenger 1889; Bour 2003; Bringsøe 2001; Carr 1938; Caspers et al. 1996; Claude et al. 2004; Ernst 1990; Ernst and Barbour 1989; Ernst and Ernst 1980; Ernst et al. 2000; Frair 1964; Fritz 1990, 1991; Fritz and Havas 2007; Grant 1948; Grant and DeSola 1934; Gray 1856; Hartweg 1939; Holman 1977; Hugenberger and Licht 1999; Hughes et al. 1999; Hughes and Mouchiroud 1999; Iverson et al. 2007; Iwabe et al. 2005; Jackson 1988; Jackson et al. 2008; Joyce et al. 2004; Kordikova 2000; Legler 1990; McCord et al. 2010; McCoy and Jacobs 1991; McDowell 1964; Merkle 1975; Meylan et al. 2000; Mlynarski 1976; Moen 2006; Moll and Legler 1971; Near et al. 2005; Obst 1985; Pritchard 1979; Pritchard and Trebbau 1984; Siebenrock 1909; Seidel 1988a, 2002a,b; Seidel and Adkins 1987, 1989; Seidel and Fritz 1997; Seidel and Jackson 1990; Seidel and Smith 1986; Seidel et al. 1999; Sites et al. 1984; Stephens and Wiens 2003a,b, 2009; Vogt and McCoy 1980; Ward 1980, 1984; Weaver and Robertson 1967; Weaver and Rose 1967; Wermuth and Mertens 1961, 1977; Williams 1950, 1956; Zug 1966, 1971), **thermoregulation** (Hutchison 1979), **tongue** (Beisser et al. 1998; Korte 1980), **zoogeography** (Darlington 1957; Legler 1990; Pritchard 1979; Savage 1960; Seidel 1988a).

• **KEY TO SPECIES**. The catalogue account numbers are given in parentheses after the species name.

1a. Young individuals with a symmetrical dendritic figure consisting of dark lines along most of the plastron length; pleural scutes of carapace usually have a black bordered yellow-orange ocellate figure (partial or complete) with a dark center…..4

1b. Young individuals without a connecting dendritic figure on the plastron; pleural scutes of the carapace have either yellow vertical bars or obscure, irregular orange lines……..2

2a. Plastral pattern of two rows of black elongate smudges; supratemporal (postorbital mark) orange and oval shaped; cervical scute underlap (ventral surface) short, < 3.5% of carapace length; markings on gular area reduced or faded…..*T. nebulosa* (**870**)

2b. Plastral pattern with isolated ocelli or black circles at least on gular scutes and frequently on other portions of the plastron; yellow “Y” figure present on gular surface…….....3

3a. Carapace pattern obscure; melanism in old males weakly developed; cervical scute underlap not especially long, < 5% of carapace length.*T. decorata* (**235**)

3b. Carapace pattern of yellow bars bordered by black; melanism in old males extensive, especially on posterior carapace; cervical scute underlap long, > 5% of carapace length.....*T. scripta* (**831**)

4a. Carapace of adults typically brown without distinct markings; yellow lines on head, neck, and limbs frequently faded or obscure; males with elongate foreclaws; old males melanistic.....5

4b. Carapace of adults usually with ocellate orange or yellow markings; plastral pattern distinct (except in

old individuals); males without elongate foreclaws or prominent melanism…..…..7

5a. Carapace broad and flared posteriorly; broad cervical scute underlap (5.0% of carapace length); broad gular scutes (anterior width, between left and right gular-humeral seam, > 24% of carapace length); little or no evidence of markings on head, limbs, and plastron of adults (except populations in northwest Jamaica)…….....……..*T. terrapen* (**442**)

5b. Carapace narrow or moderately wide, not prominently flared posteriorly; narrow cervical scute underlap (3.5–3.7% of carapace length); narrow gular scutes (21–22% of carapace length); some markings usually present on head, limbs (yellow stripes) and/or plastron (concentric dark lines)....……..…….6

6a. Epiplastron rounded anteriorly, turned up-ward and usually constricted at the gular-humeral seam; plastral surface convex; inguinal scutes rounded, not projecting laterally; deep median notch at posterior margin of carapace..…….....*T. stejnegeri* (**441**)

6b. Epiplastron truncate anteriorly, usually not turned upward or constricted at the gular-humeral seam; plastral surface flat or slightly concave; inguinal scutes project laterally to form an angle; shallow median notch at posterior margin of carapace..... .....*T. decussata* (**440**)

7a. Supratemporal (postorbital) marking a narrow or expanded stripe which contacts (or nearly so) the orbit of the eye…...……...……..…10

7b. Supratemporal marking an oval or irregular elliptical blotch which does not contact orbit the eye.....8

8a. Skin on ventral surface of mandible with several yellow dots or ovals encircled by dark lines; supratemporal figure red…..….....*T. callirostris* (**768**)

8b. Skin on ventral surface of mandible with yellow stripes or bars; supratemporal figure orange….....9

9a. Pleural scutes on carapace without a large black smudge-like spot; supratemporal mark oval..... .....……..……...*T. gaigeae* (**787**)

9b. A large black smudge broadly encircled by a yellow or orange line on each pleural scute; supratemporal mark pinched near center to resemble a figure "8".....*T. emolli* (**846**)

10a. Mandibular tomium serrate..…….....……12

10b. Mandibular tomium not serrate..…....……...11

11a. First vertebral scute anteriorly constricted; juveniles with an orange-centered ocellus on each pleural scute…….....….....…..*T. adiutrix* (**869**)

11b. First vertebral scute not anteriorly constricted; juveniles with an orange stripe or bar on each pleural scute…..…..…..*T. dorbigni* (**486**)

12a. Pygal bone of carapace extends beyond marginal-vertebral scute seam; supratemporal stripe orange…….....……..…..14

12b. Pygal bone not extended beyond marginal vertebral seam; supratemporal stripe yellow or red.....13

13a. Supratemporal stripe red; carapace < 22 cm long.....…*T. taylori* (**745**)

13b. Supratemporal stripe mostly yellow; maximum carapace length > 32 cm….....*T. venusta* (**832**)

14a. Ocelli on pleural scutes of carapace clearly defined; cervical scute underlap (ventral surface) short, < 3.5% carapace length……..…*T. ornata* (**847**)

14b. Ocelli on pleural scutes not clearly defined; cervical scute underlap long, > 3.7% carapace length .....*T. yaquia* (**769**)

• **ETYMOLOGY**. The genus name *Trachemys* is derived from the Greek words ΤΡΑΧΗΥΣ, meaning rough, referring to the rough carapace surface, and ΕΜΥΣ, a freshwater turtle.

• **COMMENT**. As pointed out by Iverson (1992), the name *Trachemys scabra* is a nomen dubium. Smith and Smith (1979:437–438) proposed that *Emys troostii* Holbrook (1836:55) be designated as the type-species, following Lindholm's (1929) original designation.

Redamia olivacea is listed in the synonymy of *Pseudemys* [= *Trachemys*] *stejnegeri* (Schmidt 1928:147).

McCord et al. (2010) recently described three new subspecies of T. *venusta*: *T. v. uhrigi* from Caribbean coastal Honduras, *T. v. iversoni* from the Yucatan Peninsula of Mexico, and *T. v. panamensis* from Pacific coastal Panama.

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