

REPTILIA: SQUAMATA: IGUANIDAE

Iguana delicatissima

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Iguana delicatissima.

***Iguana delicatissima* Laurenti**
Lesser Antillean Iguana, Iguane des Petites Antilles

Iguana delicatissima Laurenti 1768:48. Type-locality, "In Indiis [= Indies]," restricted to the island of Terre de Bas, Les Iles des Saintes, Departement de La Guadeloupe, French West Indies by Lazell (1973, but see **Remarks**). Holotype, not designated. See also **Remarks**.

Iguana nudicollis: Merrem 1820:48. Substitute name. See **Remarks**.

Iguana iguana: Boie 1826:col. 118. See **Remarks**.

Amblyrhynchus delicatissima: Wagler 1830:148.

Iguana Delesatisima: Gray 1831:370 (part). *Lapsus*.

Amblyrhincus delicatissimus: Duméril and Bibron 1837:208. *Lapsus*.

Hypsilophus nudicollis: Fitzinger 1843:54 (part).

Hypsilophus tuberculatus: Fitzinger 1843:55 (part; not *Iguana tuberculata* of Laurenti 1768:49).

Iguana tuberculata: Boettger 1893:63 (part). See **Comment**.

Iguana iguana reverti Hoffstetter 1940:269. Type-locality, "L'Anse-Belleville," Martinique. Holotype, Lab. Anat. Comp., Mus. Hist. Nat., Paris (MNHN) 1941-254, left humerus (examined by MB).

• **CONTENT.** No subspecies are recognized.

• **DEFINITION.** *Iguana delicatissima* is a large iguana. Maximum known SVL for males is 434 mm and for females 401 mm (Breuil 2002b), but considerable variation exists in the maximum sizes of animals from different islands (Breuil 2002b, 2003). No enlarged plate occurs at a distance of 12 or fewer small scales from the border of the tympanum. Lazell (1973) reported the following counts: dorsal crest scales number 53–62 (mean = 59), femoral pores 16–25 (mean = 20), lamellae 31–39 (mean = 35), and gular spikes 4–10. Schardt (1998a) amended those counts for individuals from La Desirade ($N = 38$): adult SVL/tail length 1:2.5, (one scale between rostral and nasals, supralabials on the right side 8–13 (mean = 10.8) and on the left 8–11 (mean = 9.4), infralabials on the right side 8–14 (mean = 9.4) and on the left 7–12 (mean = 10.2), enlarged scales on the lower right jaw 7–16 (mean = 11.5) and on the left 8–15 (mean = 10.3), and two postmentals. Ventrals are always tectiform and may be sharply keeled. Typical snout scales are flat and unaligned (Schwartz and Henderson 1991). Sexual dimorphism is evident in adults; males often show enlarged nuchal dorsal crest scales, enlarged gular spikes on the dewlap, and increased occipital scale development (Day et al. 2000, Gerber 1997, Schwartz and Henderson 1991).

Body color is usually uniform, but may vary greatly



Figure 1. Adult female *Iguana delicatissima* from St. Eustatius; note the remnant green color retained by many adult females (photograph by John S. Parmerlee, Jr.).

between individuals. Shoulder stripes are almost always missing. Juveniles range in coloration from bright lime green to apple green. Color darkens with age starting at the extremities and proceeding to the torso. The last area to change is the venter. Females retain their juvenile coloration longer than males. In most populations, all adults will change to a drab gray-brown, but in some populations females will retain green color throughout life. Consequently, adult coloration may include variations of green, slate gray, and gray-brown. The dewlap is green to slate gray. The jowls, jaw, throat, and snout whiten with age. Sexual dichromatism varies between populations, being much more distinct in the mesic southern populations and less varied in the xeric limestone island populations. In some populations, both sexes exhibit pink coloration around the jowls, although in most populations this trait is limited to males. Dorsal crest scales and dorsal head scales are pale blue in a few adult males. Some females show pink coloration around the occipital region, this may be related to scar tissue induced by mating behavior.

• **DIAGNOSIS.** *Iguana delicatissima* may be distinguished from its only currently recognized congener, *I. iguana*, by the absence of a greatly enlarged sub-tympanic plate and the absence of dark barring on the tail. Both species of *Iguana* may be distinguished from all species of *Cyclura* by the absence of distinct verticils on the tail, the presence of gular spikes on the dewlap, and a continuous dorsal crest (Day et al. 2000). Hybrids between *I. delicatissima* and *I. iguana* with varying proportions of parental phenotypes occur on Les Saintes, Basse-Terre, and Grande-Terre.

• **DESCRIPTIONS.** Detailed descriptions are in Day et al. (2000), Lazell (1973), Schwartz and Henderson (1991), Breuil (2002b), and Powell et al. (2005). Gerber (1997) provided a description of Anguillian animals. Cursory descriptions are included in a number of references listed below.

• **ILLUSTRATIONS.** Color photographs of live *Igu-*

na delicatissima are in Alberts (2000), Bénito-Espinal (1978, 1990), Breuil (2001; 2002b, including a cover photograph; 2002c; 2004), Breuil et al. (1994), Breuil and Breuil (2004), Gargomini (2003), Gibson (2001a), Malhotra and Thorpe (1999), Powell et al. (1996, 2005, including a cover photograph), Ramade (2002, book cover), Reichling (1995), Rojer (1997), Schardt (1998a, 1998b), Sprackland (1992), Tenlén (1997, including a cover photograph), van Ditzhuijen (2004), Wijffels (1976, 1997), and on outside or inside covers of the *Iguana Times* and *Iguana* (J. Int'l. Iguana Soc.): vol. 6, nos. 2 and 3 (1997); vol. 8, no. 1 (2000); vol. 11, nos. 3 and 4 (2004). Breuil (2001, 2002b) included photographs of carcasses and hybrids with *I. iguana*, and the latter also provided photographs of feces containing seeds of *Randia aculeata*, an iguana swimming underwater, copulation, digging, nesting, and nest emergence. Malhotra and Thorpe (1999) included a photograph of a female's tail emerging from a nesting burrow.

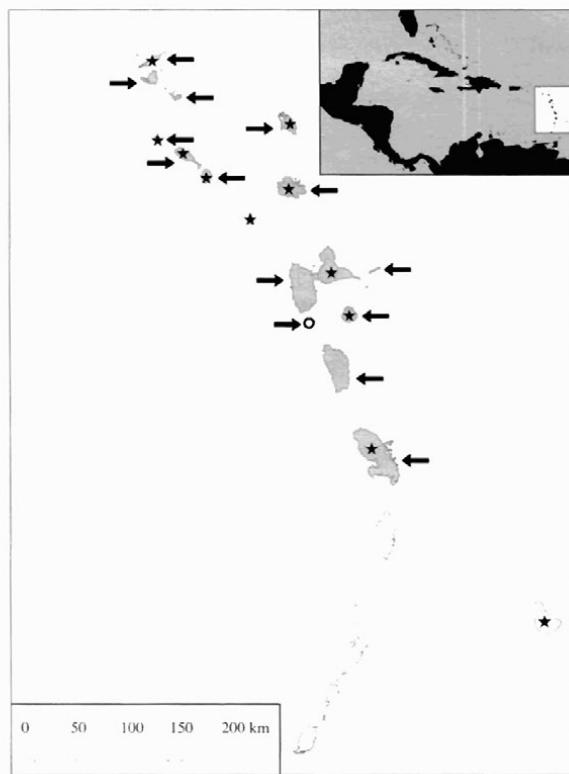
Black-and-white photographs are in Anonymous (1958, 1997, 2004a, 2005), Asmodé et al. (1994), Bendon (1997), Breuil (1994a, 1997a, 1999a, 2000a, 2003), Day and Thorpe (1992), Dunn (1934), Fogarty et al. (2004), Fuhri (1997), Gibson (2001b), Gutman (2002), Hodge 2003, Lazell (1973), Lemm (2004), Powell (2002, 2004a,b), Powell and Henderson (2005), Reichling (1999, 2000a,b), Roberts and Roberts (1996), and Wijffels (1966). Breuil (2000b, 2003, 2004) provided photographs of hybrid *I. delicatissima* × *I. iguana* from Guadeloupe and photographs of carcasses. Lessmann (1952) illustrated dentition.

Line drawings on which Laurenti (1768) based the original description are in Seba (1734; a colorized facsimile published in 2002 contained full color, half-size drawings of the iguanas). One of the original drawings was reproduced in Breuil (2002b) and the other is on the cover of Burghart and Rand (1982). The one in Breuil (2002b) is probably a hybrid *I. delicatissima* × *I. iguana* and the other is an *I. iguana* (see **Remarks**). Previously, Rochefort (1658), Du Tertre (1667), Sloane (1707–1725), Lochner and Lochner (1716), and Labat (1724) published line drawings of West Indian iguanas (those of Sloane and Labat were copies of that in Du Tertre 1667; Breuil 2002b). Guérin-Méneville (1829–1844) provided the first actual line drawing of *I. delicatissima*. Additional line drawings of whole animals perched in a tree, running, and swimming are in Lazell (1973). Currat (1980) illustrated a juvenile, an adult male head and nuchal region (a colored version of this drawing appeared on the cover), a skull, an eye, and sections through the skin (the latter might also apply to *I. iguana*). Breuil and Sastre (1994) published a drawing of a young male. Fuhri (1997) provided drawings of an adult male and female and of an illium. A drawing of a male is on the cover of Barré et al. (1997) and a profile of the head is in Rivero (1998).

In October 1997, the Anguilla General Post Office issued four postage stamps illustrating *Iguana delicatissima*; a black and white illustration of these stamps is in Anonymous (1998a) and a color illustration is in

Hodge et al. (2003). Lorvelec and Pavis (1999) featured color drawings by J. Chevalier on a poster sponsored by the Direction Régionale de l'Environnement de Guadeloupe and C. Pourcher represented a male of this species on a poster of reptiles from Martinique published in 2004 by the Direction Régionale de l'Environnement and l'Office de la Chasse et de la Faune Sauvage. The St. Eustatius National Parks Foundation (STENAPA) and the International Iguana Society produced educational signs featuring a drawing by J. Friesch (drawings of this sign appeared in Anonymous 2004b,c). Grouard (2001) provided numerous drawings of bones.

Color photographs of habitat on La Désirade appeared in Schardt (1998a); on St. Eustatius in Tenlén (1997), Reichling (2000a), and Powell et al. (2005); on Anguilla in Henderson (2001) and Hodge et al. (2003); on St.-Barthélemy (Ilet Fourchue, Ilet Fré-gate, where the vegetation was destroyed by goats) and on Guadeloupe in Breuil (2002b). Aerial photographs of Petite Terre are in Breuil (2002b) and Gargomini (2003), and photographs of vegetation of these islands are in Asmodé (1994), Breuil (2002b), and Ramade (2000).



Map. Distribution of *Iguana delicatissima*: Islands from which the species has been recorded are indicated by arrows (modified from Schwartz and Henderson 1991, Breuil 2002b, and Powell 2004b). The restricted type-locality (Lazell 1973) is indicated by a circle (but see **Remarks**) and fossil localities by stars, although some of these were identified only to genus, and that on Barbuda may be assigned to *Cyclura*. The stray reported from Puerto Rico by Lever (2003) is not indicated.

• **DISTRIBUTION.** *Iguana delicatissima* is distributed widely throughout the Lesser Antilles, and is found in a variety of habitats ranging from dry xeric thornforest, cactus-dominated rocky outcrops, to moister lowland forests at elevations from sea level to about 300 m. The species has been documented from Anguilla, St.-Martin/St. Maarten, Île Fourchue (including Ilet au Vent and Petite Islette), Les îles Frégates, Île Chevreau (or Bonhomme), St.-Barthélémy, St. Eustatius, St. Kitts, Nevis, Antigua, Barbuda, Grande-Terre, Basse-Terre, and îles de la Petite Terre (Guadeloupe), La Désirade, Les îles des Saintes (Terre-de-Bas, Terre-de-Haut), Dominica, Martinique (including Ilet Chancel), and Marie Galante.

Although Breuil (2002b) indicated that populations on Antigua and Les îles des Saintes are extant, other workers (e.g., Censky and Kaiser 1999, Day et al. 2000, Malhotra and Thorpe 1999, Powell 2004b, Pregill and Crother 1999, Schardt 1998b, Schwartz and Henderson 1991) have suggested that they, like those on St.-Martin/St. Maarten, Nevis, St. Kitts, Barbuda, and Marie-Galante (see **Remarks**) have been extirpated. Many other populations are critically endangered (see also **Remarks**). Distribution maps of the entire range are in Breuil (2002b), Powell (2004b), and Schwartz and Henderson (1991).

Rivero (1998) and Lever (2003) reported an apparent stray on Puerto Rico. The latter suggested that "some iguanas in Puerto Rico identified as *I. iguana* may in fact be *I. delicatissima*." We believe this to be highly unlikely.

Records from Brazil (Wiegmann 1828, Cuvier 1829; see Breuil 2002b for a discussion of the origin of the Brazilian specimens in the MNHN), the Cayman Islands (Cope 1869), the Swan Islands (Cope 1869), the Corn Islands (Barbour and Loveridge 1929), México (Wiegmann 1828), and St. Thomas and Trinidad (Boettger 1893) are in error (see also Dunn 1934). Some of these records were cited subsequently by various authors (e.g. Boulenger 1885, Barbour 1930, 1935, 1937). Barbour (1923, 1930, 1935, 1937) suggested that the species' "haphazard" distribution reflect human introductions. Harris (1965) questioned whether populations of the "outer Leewards" were native, but Wing et al. (1968) strongly disagreed.

• **FOSSIL RECORD.** Specimens from the late Quaternary have been found in archaeological sites on St. Eustatius, St. Kitts, Nevis, and Antigua (Harris 1965, Nokkert 2002, Ray 1964, van der Klift 1992, Wing et al. 1968, and Wing and Scudder 1980). Holocene materials assigned to *Iguana* sp. have been found on Antigua (Jones 1985, "presumably *I. delicatissima*"), St. Christopher, Marie-Galante (Wing 1973), Montserrat (Steadman et al. 1984), Barbados (Swinton 1937), Grande-Terre (Pregill and Watters 1994), and Martinique (Wetmore 1952). All but the last were found at archaeological sites. Breuil (2002b) assigned the fossil from Marie-Galante to *I. delicatissima* and noted the presence of additional fossil material on Guadeloupe (Grouard 2001). Lazell (1993) assigned a right tibia from an undated Pleistocene (pre-Columbian) site on Anguilla to *Iguana* cf.

delicatissima. Etheridge (1964) reported a basicranium assigned to Iguanidae found on Barbuda, but Schwartz and Henderson (1988) cited Pregill (*in litt.*), who suggested this material may belong to *Cyclura*.

• **PERTINENT LITERATURE.** Lazell (1973) provided an extensive overview of Lesser Antillean iguanas, with references to relationships between the two species, distributions, and natural history. Breuil (2002b) provided an equally extensive overview of the species in the French West Indies and synthesized the data concerning the relationship of the two species of *Iguana*. Breuil (2003) provided a historical perspective of the status of both species of *Iguana* in the French West Indies. Hodge et al. (2003) discussed in detail the status of iguanas (both species) on Anguilla and Powell et al. (2005) provided extensive information on both species on St. Eustatius, Saba, and St. Maarten.

Additional references pertaining to *Iguana delicatissima* are presented by topic: **activity** (Pasachnik et al. 2002, and Breuil 2002b); **anatomy** (Ananjeva et al. 1991, Arnold 1994, Etheridge 1965, 1967, Etheridge and de Queiroz 1988, Fürbringer 1922, Grouard 2001, Iverson 1980, Lécuru 1968a,b, 1969, and Matveyeva and Ananjeva 1995); **behavior** (Rivas and Levín 2004); **captive husbandry** (Anonymous 2004a, Bels 1984, Bloxam 2001, Bowler 1977, Brice 1995, Gibson 2001a,b, Hudson 1995, 1997, Lemm 2004, and Reichling 1995, 2000b); **competition** (Anonymous 1998b, Breuil 2002b, Day 1991, 1992, Day and Thorpe 1992, Fogarty et al. 2004, Goodyear and Lazell 1994, Hodge et al. 2003, and Powell 2004b); **conservation** (Anonymous 1997, 2004a, Bendon 1997, Blair 1993, Bloxam 2001, Breuil 1994a,b, 1997a,b, 1999b,c, 2000b, 2000c [2001], 2001, 2002a-c, 2003, Breuil and Breuil 1996, 2004, Breuil et al. 1994, Breuil and Day 2002, Breuil and Sastre 1993, Breuil and Thiébot 1994, Censky and Kaiser 1999, Daltry et al. 2001, Day 1992, 1993, Day and Morton 1993, Day and Thorpe 1992, Day et al. 1997, 2000, Fogarty et al. 2004, Franke and Telecky 2001, Gerber 2001, Hodge 2003, Hodge et al. 2003, Hudson 1995, 1997, Hudson and Alberts 2004, Malone and Davis 2004, Mitchell et al. 2002, Oldfield 1999, Plummers 2002, Powell 2004a,b, Powell and Henderson 2005, Powell et al. 2005, Reichling 1995, 2000a, Tenlén 1997, WIISG 1999, and Wijffels 1997); **consumption by humans** (Atwood 1791, Barbour 1930, Bouton 1640, Breton 1647, 1665–1667, Breuil 2002b, Bullock and Evans 1990, Day et al. 2000, Du Tertre 1654, 1667, Fogarty et al. 2004, Irvine 1960, Labat 1724, Mertens 1960, Nokkert 2002, Ober 1886, Powell 2004b, Reichling 1995, Rochefort 1658, Verrand 2001, and Verrill 1892); **dentition** (Lessmann 1952); **diet** (Barré et al. 1997, Breuil 1997a, 2002b, Breuil and Breuil 2004, Day and Morton 1993, and Roussette 1995); **distribution and zoogeography** (Breuil 1994a,b, 1999a,b, 2000a,b, 2002b, Censky et al. 1998, Hedges 1996, Powell 2004b, and Powell et al. 2005); **hybridization** (Anonymous 2004a, Breuil 1994a, 1998, 2000a,b, 2000c [2001], 2000d, 2001, 2002a,b, 2003, 2004, Breuil and Sastre 1993, 1994,

Day and Thorpe 1996, Powell 2004b, and Powell and Henderson 2005); **illegal trade** (Buckner 1999, and Knapp 2004); **longevity** (Breuil 2003, Slavens and Slavens 1998, and Snider and Bowler 1992); **mortality** (Breuil 2001, 2002a,b, 2003, Cabanis 1998, and Lorvelec et al. 2000, 2003); **natural history and reproduction** (Breuil 2002a,b, 2002b, Hayes et al. 2004, Hodge et al. 2003, Powell et al. 2005, Rand 1984, Schardt 1998a, and Tenlén 1997); **parasites** (de la Cruz 2001, Hacksterin 1997, Hackstein and van Aken 1996, and Kohls 1969); **postage stamps from Anguilla** (Anonymous 1998a, and Hodge et al. 2003); **systematics and phylogeny** (Avery and Tanner 1971, Blair 1993, Censky and Kaiser 1999, Crother 1999, de Queiroz 1982, 1987, Dunn 1934, Etheridge 1982, Gorman et al. 1971, Grouard 2001, Hoffstetter 1940, 1942, 1946, Hollingsworth 1998, Lazell 1989, 1997, Malone et al. 2000, Malone and Powell 2002, Sites et al. 1996, Thorpe and Malhotra 1996, Wiens and Hollingsworth 2000, Wijffels 1997, and Williams 1999); **variation among populations** (Day and Thorpe 1991, 1993, 1996, Breuil 2000b, 2002b, Malone 2000, 2001, and Malone and Davis 2004).

The species is included in **general works, miscellaneous notes, and checklists** (some may include references to relationships within the genus, brief descriptions, or notes on husbandry and natural history) by Barbour (1914, 1923, 1930, 1935, 1937), Bartlett and Bartlett (1995), Bérito-Espinal (1978, 1990), Blair (1993, 1995), Boettger (1893), Boulenger (1885), Brehm (1883), Breuil (1996, 1997b,c, 1999a), Bryggo (1989), Bullock and Evans (1990), Burghardt and Rand (1982), Chenu (1856), Cope (1869, 1886), Corke (1992), Currat (1980), Cuvier (1817, 1829, 1836), Dowling (1964), Duméril and Bibron (1837), Duméril and Duméril (1851), Eichwald (1831), Flower (1929), Frank and Ramus (1995), Frost and Etheridge (1989), Garman (1887), Goldfuss (1820), Good-year and Lazell (1994), Gray (1845), Grizmek (1971), Guibé (1954), Hollingsworth (2004), Hudson (1997), Hutchins et al. (2003), Kruyhoff (1938), Lang (1989), Lescure (1979, 1983, 1989, 2001), MacLean et al. (1977), Malhotra and Thorpe (1999), Mattison (1989), Obst et al. 1984, Pinchon (1967), Powell et al. (1996), Reinhardt and Lütken (1862), Rogner (1992), Rosenthal (1996), Roughgarden (1995), Schwartz and Henderson (1985, 1988, 1991), Schwartz and Thomas (1975), Sokolov (1988), Sonnini and Latreille (1801), Underwood (1953, 1962), van Buurt (2005), Wagler (1830), and Wiegmann (1828, 1834).

• **REMARKS.** Breuil (2002b) noted that the restriction of the type-locality by Lazell (1973) was invalid, because no neotype or lectotype was designated.

Laurenti (1768) described *I. delicatissima* from six figures in Seba (1734:95.1, 95.2, 96.4, 96.5, 97.3, 98.1) and specimens he found in the collections of the Earl of Thurn, which were preserved in Vienna but later lost (A. Olher and A. Dubois, pers. comm. to MB). Lazell (1973), followed by Etheridge (1982), stated that the type specimens were in the Museum of Torino (Italy). This mistake was attributable to an inaccurate translation of Laurenti.

In his Latin description, Laurenti (1768) noted that *I. delicatissima* had "capite postice tuberoso" (= posterior part of the head with protuberances), "antice gibbo" (= hump anteriorly), and "collo supra nudo" (= dorsum of neck naked), whereas *I. tuberculata* (= *I. iguana*) had "nuchabilis imbricatus" (= imbricated nuchals), "capite supra plano" (= upper part of the head flat), and "collo aculeis latis obtusissimus duris supra indique tecto" (= large, hard, blunted spikes cover the sides of the neck). Laurenti obviously described "true" *I. delicatissima* and *I. tuberculata* from the collection of the Earl of Thurn and these details in the two diagnoses were drawn mainly from specimens and not from the drawings in Seba (1734). For example, figure 96.5 in Seba (1734) is the only specimen without spikes on the neck. Laurenti apparently referred all of the captions to Seba's plates to *I. delicatissima*, in contrast to his description of *I. tuberculata*, to which he referred solely the specimens in the Earl of Thurn's collection.

Seba (1734) provided several descriptive polynomials for the six figures and may have given the impression that multiple species were described. Duméril and Bibron (1837) noted that Seba's figure 96.5 is *I. delicatissima* and that Laurenti should have been more careful to exclude this individual from his description of *I. tuberculata*. In fact, five of the six individuals considered by Laurenti to be *I. delicatissima* are *I. iguana*. Linnaeus (1758) had cited those five drawings of Seba (plus others from other sources) to describe *Lacerta iguana* (= *Iguana iguana*).

Lacepède (1788; German translation by Bechstein 1800) considered figures 95.1, 95.2, 96.4, 97.3, and 98.1 in Seba (1734) to represent the species he was describing, which he synonymized with *I. delicatissima* and *I. tuberculata*. He indicated that the descriptions of Rochefort (1658), Du Tertre (1667), and Sloane (1707–1725) referred to the same species. In his account, he used biological information (e.g., breeding season, number of eggs in a clutch) that pertained to *I. delicatissima*. The morphological description, however, was based on an individual from Cayenne. He also, probably following Seba (1734), stated that this species was to be found in Africa and Asia. Bonnaterre (1790), under the Linnaean name *Lacerta iguana*, provided a description nearly identical to that of Lacepède (1788), in which he cited the same information drawn from Du Tertre (1667).

Breuil (2002b) indicated that figure 96.5 probably illustrated a hybrid *I. delicatissima* × *iguana*. Thus, the type series of *I. delicatissima* Laurenti (i.e., the six drawings of Seba 1734) actually represents two species and probably does not contain a true *I. delicatissima*. Latreille (1801) considered Seba's figures "95.12" (sic, actually figures 1 and 2), 96.4, 97.3, and 98.1 to be *I. delicatissima*, which he named "l'iguane ordinaire." He explicitly excluded from the series figure number 96.5 and also made reference to the study of an iguana from Cayenne in the MNHN collection (the same specimen studied by Lacepède 1788 and Bonnaterre 1790) that was subsequently lost by 1851 (see Bryggo 1989). Duméril and Bibron (1837) placed *I. delicatissima* Latreille in the synon-

ymy of *I. tuberculata* Laurenti (= *Iguana iguana*) and not in the synonymy of *I. nudicollis*. Daudin (1802) considered *I. delicatissima* Laurenti a variety of "l'iguane ordinaire" (= *I. iguana*).

Cuvier (1817) described "Iguane à col nu" (no new Latin name), but used the name *Iguana delicatissima* Laurenti from an imprecise drawing by B. and M. Besler (tab. XIII, fig. 3, in Lochner and Lochner 1716). Cuvier noted that this species had neither a subtympanic plate nor tubercles on the sides of the neck and that the dewlap was of medium size and had no spikes, but the position of the animal in the drawing precludes a determination as to whether spikes are present on the anterior part of the dewlap. The Besler's drawing looks more like a *Cyclura* than an *I. delicatissima*: the head is too angular and prominent scales occur around the eyes and on the posterior part of the dewlap. Cuvier (1817) noted that "l'iguane cornu de Saint-Domingue" (= *C. cornuta*) is very close to his "iguane à col nu," except for the conical scale between the eyes of the former. For his "iguane ordinaire d'Amérique," Cuvier (1817) cited only figures 95.1, 97.3, and 98.1 from Seba (1734). Figures 95.2 and 96.4 were considered by Cuvier (1817) to be another species, "l'iguane ardoisé," named by Daudin (1802). Three years later, Merrem (1820) coined the name *Iguana nudicollis*, based on the description of Cuvier, to clarify the confusion between l'Iguane ordinaire de Cuvier (= *Lacerta iguana* Linnaeus 1758 = *Iguana tuberculata* Laurenti 1768: figs. 95.1, 95.2, 96.4, 97.3, and 98.1 from Seba 1734) and *Iguana delicatissima* Laurenti 1768 (fig. 96.5). Merrem (1820) also coined the binomen *Iguana sapidissima* as a substitute name for *Lacerta iguana* Linnaeus 1758. Boie (1826) synonymized all five names (*I. squamosa*, *I. viridis*, *I. coerulea*, *I. emarginata*, *I. lophyroides*) used by Spix (1825) with *Iguana delicatissima* Laurenti and *Iguana tuberculata* Cuvier. Boie (1826) clearly based this conclusion on Seba's figures instead of Laurenti's (1768) diagnosis. Cuvier (1829) improved his description of *I. nudicollis*, noting that the dewlap is of medium size and has few spikes, and that those are restricted to the anterior portion. This emendation of the description is attributable to the fact that the MNHN had in the interim received specimens from Guadeloupe (probably from Felix-Louis L'Herminier; Breuil 2002b). Nevertheless, Cuvier (1829, 1836) consistently used the Besler's drawing (in Lochner and Lochner 1716) as a reference. He thought also that the five species of Spix (1825) were varieties of his *Iguana tuberculata*. The first accurate post-Linnaean drawing of *I. delicatissima* was in Guérin-Méneville (1829–1844), which illustrated Cuvier's Règne Animal (1829, 1836).

Kaup (1825) noted under "*Iguana sapidissima*" that "*Ig. tuberculata*" is the female of *cornuta* (now *Cyclura cornuta*) and cited Seba (1734). Duméril and Bibron (1837) made a similar mistake when they indicated that *Iguana rhinolopha* (= *I. tuberculata* = *I. iguana*) from Mexico is found in Saint-Domingue because they saw an excellent line drawing of this species made by Father Plumier in the seventeen century. Wagler (1830) included *I. delicatissima* in the genus

Amblyrhynchus with *A. cristatus* (from the Galápagos Islands), because Cuvier (1829) thought (wrongly) that extant specimens of *A. cristatus* were nothing but badly prepared examples of *I. nudicollis*.

Gray (1831) used the name *I. nudicollis* and was followed by Wiegmann (1834) and Duméril and Bibron (1837). Later, Gray (1845), undoubtedly describing *I. delicatissima* as currently defined, used that name because of the priority of Laurenti (1768). See also **Comment**.

Although records from Marie-Galante are restricted to fossil remains (see **Fossil Record**), Columbus reportedly encountered numerous large iguanas (probably *I. delicatissima*, Breuil 2002b) when he arrived on the island in 1493 (d'Anghiera 1511, 1531; Columbus 1571).

Populations of *Iguana delicatissima*, like those of all large iguanians found on small islands, are extremely vulnerable to human exploitation, habitat alteration, and introduced predators and competitors. The species is listed under CITES, Appendix 1, and the IUCN (1996) listed the species as "vulnerable" (Breuil and Day 2002, Powell 2004b). Breuil (2002b) listed populations on Antigua, Anguilla, Île Fourchue and satellites (St.-Barthélemy), Les îles des Saintes, Grande-Terre, Martinique, St. Eustatius, and St.-Martin as critically endangered; those on Basse-Terre, îlet Chancel (Martinique), and St.-Barthélemy as endangered; and those on Dominica, îles de la Petite Terre, and La Désirade as vulnerable (but see **Distribution**).

Especially during the 18th and 19th centuries, considerable confusion existed regarding the relative status of *Iguana iguana* and *I. delicatissima*. For example, Latreille (in Sonnini and Latreille 1801), Daudin (1802), and Gray (1831) used the name *I. delicatissima* in reference to specimens that were *I. iguana*. Additional references using names that have been relegated to the synonymy of *I. iguana* also may refer to at least some populations subsequently assigned to *I. delicatissima*. Conversely, populations of *I. iguana* may be included in discussions under the name *I. delicatissima* (e.g. Goldfuss 1820 listed only *I. delicatissima*, but gave the range as South America; see also **Distribution**). Ober (1886) and Kruythoff (1938) spoke of Lesser Antillean iguanas, but did not distinguish between the two species. More recently, Murphy (1952) provided a black-and-white photograph of a purported *I. delicatissima* from Isla la Blanquilla, Venezuela; it was an *I. iguana*. A study of spermiogenesis (Saita et al. 1989), supposedly on *I. delicatissima*, was based on a specimen from Brazil. Conversely, Leussink (1958) reported on nematodes in *Iguana iguana*, but the hosts were actually *I. delicatissima* (Lazell 1973).

Taylor (1936) recorded the Dominican Carib word for "iguana lizard" as "wayàmaka."

• **ETYMOLOGY.** The specific epithet is undoubtedly a superlative of the Latin *delicatus*, meaning "tender," an obvious reference to the frequent exploitation of this large lizard as a delicacy throughout much of its range. In his description, Seba (1734) said that the

iguana in fig. 95.1 is "un mets délicieux" (= a delicious dish). So, Laurenti (1768) may have considered this species to be more delicious than other lizards, thus justifying the superlative. Also, Daudin (1802) provided the common name, l'iguane mangeable (= edible iguana). Pianka and Vitt (2004) referred to the naming of the species for its palatability to humans as a "cruel joke." However, Gotch (1986) indicated that *delicatus* should be translated as "giving pleasure" or "delicate," and that the latter was applicable to the tail, "which easily breaks off if seized by a predator." This is unlikely, as iguana tails do not readily break.

• **COMMENT.** *Iguana delicatissima* Laurenti 1768 (see the review of the historical taxonomy in **Remarks**) is actually part of *Iguana iguana* Linnaeus 1758. The specimens in the Earl of Thurn's collection included both *I. delicatissima* and *I. iguana*, which Laurenti clearly differentiated in his diagnosis, but the name *I. delicatissima* was applied to Seba's (1734) drawings, all but one of which illustrated *I. iguana*. The first accurate post-Linnaean description of the Lesser Antillean Iguana was by Cuvier (1829) under the name *I. nudicollis*, which was coined by Merrem (1820). However, the first uses of that name (Merrem 1820, Cuvier 1829) referred to a species of *Cyclura* (the Besler's drawing in Lochner and Lochner 1716). Consequently, no name can be accurately applied to *I. delicatissima* as currently defined.

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