

SSAR Common Names Checklist ver. 2016-10-17

Anura – Frogs

Acris Duméril and Bibron 1841

A. blanchardi Harper 1947 – Blanchard's Cricket Frogs

Gamble et al. (2008, Mol. Phylogenet. Evol. 48: 112–125) recognized *Acris blanchardi* as distinct from *A. crepitans* on the basis of molecular evidence (and included *Acris crepitans paludicola* as a synonym of *A. blanchardi*), although McCallum and Trauth (2006, Zootaxa 1104: 1–21) previously rejected the distinctiveness of *A. c. blanchardi* from *A. c. crepitans* on the basis of morphology. Reviewed by Dodd (2013, Frogs U.S. and Canada, 1: 205–219).

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A. crepitans Baird 1854 – Eastern Cricket Frog

See comment under *Acris blanchardi*. Reviewed by Gray, Brown, and Blackburn (2005, in Lannoo, M. [ed.], Amph. Declines: 441–443), and Dodd (2013, Frogs U.S. and Canada, 1: 219–226).

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A. gryllus (Leconte 1825) – Southern Cricket Frogs

The lineages delimited on the basis of the molecular evidence of Gamble et al. (2008, Mol. Phylogenet. Evol. 48: 112–125) do not correspond to the nominal subspecies occasionally employed by various previous authors. It seems on that basis that recognition of the subspecies *A. g. dorsalis* and *A. g. gryllus*, is not warranted. Reviewed by Jensen (2005, in Lannoo, M. [ed.], Amph. Declines: 443–444).

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Anaxyrus Tschudi 1845

A. americanus (Holbrook 1836) – American Toad

Geographic variation has been insufficiently studied, although careful evaluation of call and/or molecular data might provide considerable evidence of divergent lineages. See comments under *A. baxteri*, *A. fowleri*, *A. hemiophrys*, *A. terrestris*, and *A. woodhousii*. Masta et al. (2002, Mol. Phylogenetic Evol. 24: 302–314) provided evidence that suggests that *A. a. charlesmithi* may be a distinct species. Reviewed by Green, 2005, in Lannoo, M. (ed.), Amph. Declines: 692–704, and Dodd, 2013, Frogs U.S. and Canada, 1: 219–226

Note on genus:

This taxon of strictly North American toads was removed from "*Bufo*" (as well as were a number of other taxa) by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297) as a revision to render a monophyletic taxonomy and with genera delimited to be more compact than the unwieldy "*Bufo*". The phylogenetic study of bufonids by Van Bocxlaer et al. (2010, Science 327: 679–682) also suggests that New World "*Bufo*" do not form a monophyletic group. Smith and Chiszar (2006, Herpetol. Conserv. Biol. 1: 6-8) recommend retaining the North American taxa *Anaxyrus*, *Incilius*, and *Rhinella* (as well as such long-recognized extralimital taxa such as *Ansonia*, *Capensibufo*, *Crepidophryne*, *Didynamipus*, *Mertensophryne*, *Nectophryne*, *Nectophrynoides*, *Pedostibes*, *Pelophryne*, *Schismaderma*, *Werneria*, and *Wolterstorffina*) as subgenera of *Bufo* to obviate the need for generic changes in North American species. More recently, Fouquette and Dubois (2014, Checklist N. Am. Amph. Rept.) followed this approach in a modified form. This approach, though, would visit considerable nomenclatural instability on many countries outside of the USA and Canada. See Pauly et al. (2009, Herpetologica 65: 115–128) and Frost et al. (Herpetologica 65: 136–153) for discussion.

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A. americanus americanus (Holbrook 1836) – Eastern American Toad

A. americanus charlesmithi (Bragg 1954) – Dwarf American Toad

A. baxteri (Porter 1968) – Wyoming Toad

Recognized as a species, rather than a subspecies of *A. hemiophrys* by Packard (1971, J. Herpetol. 5: 191–193), and more recently by Smith et al. (1998, Contemp. Herpetol. 1). Nevertheless, Cook (1983, Publ. Nat. Sci. Natl. Mus. Canada 3) considered *A. baxteri* to be undiagnosable against the background of geographic variation in *A. hemiophrys* (as *Bufo americanus hemiophrys*), and this has not been addressed by subsequent authors. Reviewed by Odum and Corn (2005, in Lannoo, M. [ed.], Amph. Declines: 390–392), and Dodd (2013, Frogs U.S. and Canada, 1: 43–47).

Notes on genus:

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A. boreas Baird and Girard 1852 – Western Toad

See Schuierer (1963, *Herpetologica* 18: 262–267). Two nominal subspecies are generally recognized, although Goebel (2005, In Lannoo, M. [ed.], *Amphibian Declines*, Univ. California Press, pp. 210–211) discussed geographic variation and phylogenetics of the *A. boreas* (as the *Bufo boreas*) group (i.e., *A. boreas*, *A. canorus*, *A. exsul*, and *A. nelsoni*), and noted other unnamed populations of nominal *A. boreas* that may be species. Populations in Alberta, Canada, assigned to *A. boreas* have a distinct breeding call and vocal sacs (Cook, 1983, *Publ. Nat. Sci. Natl. Mus. Canada* 3; Pauly 2008, PhD Dissertation, Univ. Texas at Austin); the taxonomic implications of this warrant investigation. Goebel et al. (2009, *Mol. Phylogenet. Evol.* 50: 209–225) suggested on the basis of molecular evidence that nominal *Anaxyrus boreas* is a complex of species (as suggested previously by Bogert, 1960, *Animal Sounds Commun.*: 179) that do not conform to the traditional limits of taxonomic species and subspecies (and which we do not recognize here for this reason) and that some populations assigned to this taxon may actually be more closely related to *Anaxyrus canorus* and *A. nelsoni*—a problem that calls for additional elucidation. Reviewed by Muths and Nanjappa (2005, in Lannoo, M. [ed.], *Amph. Declines*: 392–396; Dodd, 2013, *Frogs U.S. and Canada*, 1: 47–65).

Notes on genus:

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A. californicus (Camp 1915) – Arroyo Toad

See Gergus (1998, *Herpetologica* 54: 317–325) for justification for this to be considered a distinct species from *Anaxyrus microscaphus* Reviewed by Price and Sullivan (1988, *Cat. Am. Amph. Rept.* 415, as *Bufo microscaphus californicus*), Sweet and Sullivan (2005, in Lannoo, M. [ed.], *Amph. Declines*: 396–400), and Dodd (2013, *Frogs U.S. and Canada*, 1: 65–70).

Note on genus:

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A. canorus (Camp 1916) – Yosemite Toad

Reviewed by Karlstrom (1973, *Cat. Am. Amph. Rept.* 132), Davidson and Fellers (2005, in Lannoo, M. [ed.], *Amph. Declines*: 400–401), and Dodd (2013, *Frogs U.S. and Canada*, 1: 70–77). See comment under *A. boreas*.

Note on genus:

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A. cognatus (Say 1822) – Great Plains Toad

Reviewed by Krupa (1990, Cat. Am. Amph. Rept. 457), Graves and Krupa (2005, in Lannoo, M. [ed.], Amph. Declines: 440–404) and Dodd (2013, Frogs U.S. and Canada, 1: 78–87).

Notes on genus:

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A. debilis (Girard 1854) – Chihuahuan Green Toad

Notes on genus:

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A. debilis debilis (Girard 1854) – Eastern Chihuahuan Green Toad

See accounts in Sanders and Smith (1951, Field and Laboratory 19: 141–160) and by Bogert (1962, Am. Mus. Novit. 2100) as *Bufo debilis*. Reviewed by Painter (2005, in Lannoo, M. [ed.], Amph. Declines: 404–406, as *Bufo debilis*) and Dodd (2013, Frogs U.S. and Canada, 1: 88–91). The nominal subspecies are unlikely to be anything other than arbitrarily defined sections of clines although this remains to be investigated adequately. Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 301) rejected subspecies but presented no evidence for this conclusion.

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A. debilis insidior (Girard 1854) – Western Chihuahuan Green Toad

See accounts in Sanders and Smith (1951, Field and Laboratory 19: 141–160) and by Bogert (1962, Am. Mus. Novit. 2100) as *Bufo debilis*. Reviewed by Painter (2005, in Lannoo, M. [ed.], Amph. Declines: 404–406, as *Bufo debilis*) and Dodd (2013, Frogs U.S. and Canada, 1: 88–91). The nominal subspecies are unlikely to be anything other than arbitrarily defined sections of clines although this remains to be investigated adequately. Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 301) rejected subspecies but presented no evidence for this conclusion.

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A. exsul (Myers 1942) – Black Toad

See comment under *A. boreas*. Reviewed by Fellers (2005, in Lannoo, M. [ed.], Amph. Declines: 406–408, as *Bufo exsul*) and Dodd (2013, Frogs U.S. and Canada, 1: 92–96).

Notes on genus:

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A. fowleri (Hinckley 1882) – Fowler's Toad

Green (1996, Israel J. Zool. 42: 95–109) discussed the problem of interspecific hybridization in the *A. americanus* complex and briefly addressed the publication by Sanders (1987, Evol. Hybrid. Spec. N. Am. Indig. Bufonids), in which Sanders recognized a number of dubiously delimited taxa within the *A. americanus* complex (his *Bufo hobarti*, which would be in the synonymy of *A. fowleri*; *Bufo copei*, which would be in *A. americanus*, and *Bufo planiorum* and *Bufo antecessor*, both of which would be in the synonymy of *A. woodhousii woodhousii*). None have been formally synonymized, nor have any attracted recognition by those working on the complex. See comment under *A. woodhousii*. Masta et al. (2002, Mol. Phylogenet. Evol. 24: 302–314) provided evidence for the distinctiveness of this species from *A. woodhousii* and noted (as did Smith and Green, 2004, Mol. Ecol. 13: 3723–3733) that at the molecular level there are multiple, distinct mitochondrially-recognizable populations in *A. fowleri*. Reviewed by Green (2005, in Lannoo, M. [ed.], Amph. Declines: 408–412, as *Bufo fowleri*) and Dodd (2013, Frogs U.S. and Canada, 1: 96–113).

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A. *hemiophrys* (Cope 1886) – Canadian Toad

See comment under *A. baxteri*. Cook (1983, Publ. Nat. Sci. Natl. Mus. Canada 3) regarded *A. hemiophrys* and *A. americanus* as forming very distinctive subspecies of one species, although subsequent authors (e.g., Green and Pustowka, 1997, *Herpetologica* 53: 218–228) have regarded the contact zone between these taxa as a hybrid zone between two species. Reviewed by Ewert and Lannoo (2005, in Lannoo, M. [ed.], *Amph. Declines*: 412–415, as *Bufo hemiophrys*) and Dodd (2013, *Frogs U.S. and Canada*, 1: 113–120).

Notes on genus:

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A. *houstonensis* (Sanders 1953) – Houston Toad

Reviewed by Brown (1973, *Cat. Am. Amph. Rept.* 133, as *Bufo houstonensis*), Shepard and Brown (2005, in Lannoo, M. [ed.], *Amph. Declines*: 415–417, as *Bufo houstonensis*), and Dodd (2013, *Frogs U.S. and Canada*, 1: 120–126).

Notes on genus:

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A. microscaphus (Cope 1867) – Arizona Toad

Reviewed by Price and Sullivan (1988, Cat. Am. Amph. Rept. 415, as *Bufo microscaphus*), Schwaner and Sullivan (2005, in Lannoo, M. [ed.], Amph. Declines: 422–424, as *Bufo microscaphus*), and Dodd, 2013, Frogs U.S. and Canada, 1: 127–13). See comment under *A. californicus*. Formerly included *A. californicus* and *A. mexicanus* (extralimital) as subspecies, both of which were recognized as species by Gergus (1998, Herpetologica 54: 317–325).

Notes on genus:

This taxon of strictly North American toads was removed from "*Bufo*" (as well as were a number of other taxa) by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297) as a revision to render a monophyletic taxonomy and with genera delimited to be more compact than the unwieldy "*Bufo*". The phylogenetic study of bufonids by Van Bocxlaer et al. (2010, Science 327: 679–682) also suggests that New World "*Bufo*" do not form a monophyletic group. Smith and Chiszar (2006, Herpetol. Conserv. Biol. 1: 6–8) recommend retaining the North American taxa *Anaxyrus*, *Incilius*, and *Rhinella* (as well as such long-recognized extralimital taxa such as *Ansonia*, *Capensibufo*, *Crepidophryne*, *Didynamipus*, *Mertensophryne*, *Nectophryne*, *Nectophrynoides*, *Pedostibes*, *Pelophryne*, *Schismaderma*, *Werneria*, and *Wolterstorffina*) as subgenera of *Bufo* to obviate the need for generic changes in North American species. More recently, Fouquette and Dubois (2014, Checklist N. Am. Amph. Rept.) followed this approach in a modified form. This approach, though, would visit considerable nomenclatural instability on many countries outside of the USA and Canada. See Pauly et al. (2009, Herpetologica 65: 115–128) and Frost et al. (Herpetologica 65: 136–153) for discussion.

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A. nelsoni (Stejneger 1893) – Amargosa Toad

Stebbins (1985, A Field Guide to Western Reptiles and Amphibians, Houghton Mifflin, Boston) and Altig et al. (1998, Contemp. Herpetol. Inform. Serv. 2) regarded *A. nelsoni* as a species, rather than a subspecies of *A. boreas*. Reviewed by Goebel, Smith, Murphy, and Morafka (2005, in Lannoo, M. [ed.], Amph. Declines: 427–430, as *Bufo nelsoni*) and Dodd (2013, Frogs U.S. and Canada, 1: 132–136). See comment under *A. boreas*.

Notes on genus:

This taxon of strictly North American toads was removed from "*Bufo*" (as well as were a number of other taxa) by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297) as a revision to render a monophyletic taxonomy and with genera delimited to be more compact than the unwieldy "*Bufo*". The phylogenetic study of bufonids by Van Bocxlaer et al. (2010, Science 327: 679–682) also suggests that New World "*Bufo*" do not form a monophyletic group. Smith and Chiszar (2006, Herpetol. Conserv. Biol. 1: 6–8) recommend retaining the North American taxa *Anaxyrus*, *Incilius*, and *Rhinella* (as well as such long-recognized extralimital taxa such as *Ansonia*, *Capensibufo*, *Crepidophryne*, *Didynamipus*, *Mertensophryne*, *Nectophryne*, *Nectophrynoides*, *Pedostibes*, *Pelophryne*, *Schismaderma*, *Werneria*, and *Wolterstorffina*) as subgenera of *Bufo* to obviate the need for generic changes in North American species. More recently, Fouquette and Dubois (2014, Checklist N. Am. Amph. Rept.) followed this approach in a modified form. This approach, though, would visit considerable nomenclatural instability on many countries outside of the USA and Canada. See Pauly et al. (2009, Herpetologica 65: 115–128) and Frost et al. (Herpetologica 65: 136–153) for discussion.

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A. punctatus (Baird and Girard 1852) – Red-Spotted Toad

Reviewed by Korky (1999, Cat. Am. Amph. Rept. 1104, as *Bufo punctatus*), Sullivan (2005, in Lannoo, M. [ed.], Amph. Declines: 430–432, as *Bufo punctatus*), and Dodd (2013, Frogs U.S. and Canada, 1: 136–144).

Notes on genus:

This taxon of strictly North American toads was removed from "*Bufo*" (as well as were a number of other taxa) by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297) as a revision to render a monophyletic taxonomy and with genera delimited to be more compact than the unwieldy "*Bufo*". The phylogenetic study of bufonids by Van Bocxlaer et al. (2010, Science 327: 679–682) also suggests that New World "*Bufo*" do not form a monophyletic group. Smith and Chiszar (2006, Herpetol. Conserv. Biol. 1: 6-8) recommend retaining the North American taxa *Anaxyrus*, *Incilius*, and *Rhinella* (as well as such long-recognized extralimital taxa such as *Ansonia*, *Capensibufo*, *Crepidophryne*, *Didynamipus*, *Mertensophryne*, *Nectophryne*, *Nectophrynoides*, *Pedostibes*, *Pelophryne*, *Schismaderma*, *Werneria*, and *Wolterstorffina*) as subgenera of *Bufo* to obviate the need for generic changes in North American species. More recently, Fouquette and Dubois (2014, Checklist N. Am. Amph. Rept.) followed this approach in a modified form. This approach, though, would visit considerable nomenclatural instability on many countries outside of the USA and Canada. See Pauly et al. (2009, Herpetologica 65: 115–128) and Frost et al. (Herpetologica 65: 136–153) for discussion.

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A. quercicus (Holbrook 1840) – Oak Toad

Reviewed by Ashton and Franz (1979, Cat. Am. Amph. Rept. 222, as *Bufo quercicus*), Punzo (2005, in Lannoo, M. [ed.], Amph. Declines: 432–433, as *Bufo quercicus*), and Dodd (2013, Frogs U.S. and Canada, 1: 144–149).

Notes on genus:

This taxon of strictly North American toads was removed from "*Bufo*" (as well as were a number of other taxa) by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297) as a revision to render a monophyletic taxonomy and with genera delimited to be more compact than the unwieldy "*Bufo*". The phylogenetic study of bufonids by Van Bocxlaer et al. (2010, Science 327: 679–682) also suggests that New World "*Bufo*" do not form a monophyletic group. Smith and Chiszar (2006, Herpetol. Conserv. Biol. 1: 6-8) recommend retaining the North American taxa *Anaxyrus*, *Incilius*, and *Rhinella* (as well as such long-recognized extralimital taxa such as *Ansonia*, *Capensibufo*, *Crepidophryne*, *Didynamipus*, *Mertensophryne*, *Nectophryne*, *Nectophrynoides*, *Pedostibes*, *Pelophryne*, *Schismaderma*, *Werneria*, and *Wolterstorffina*) as subgenera of *Bufo* to obviate the need for generic changes in North American species. More recently, Fouquette and Dubois (2014, Checklist N. Am. Amph. Rept.) followed this approach in a modified form. This approach, though, would visit considerable nomenclatural instability on many countries outside of the USA and Canada. See Pauly et al. (2009, Herpetologica 65: 115–128) and Frost et al. (Herpetologica 65: 136–153) for discussion.

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A. retiformis (Sanders and Smith 1951) – Sonoran Green Toad

Reviewed by Hulse (1978, Cat. Am. Amph. Rept. 207, as *Bufo retiformis*), Blomquist (2005, in Lannoo, M. [ed.], Amph. Declines: 433–435, as *Bufo retiformis*), and Dodd (2013, Frogs U.S. and Canada, 1: 149–152).

Notes on genus:

This taxon of strictly North American toads was removed from "*Bufo*" (as well as were a number of other taxa) by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297) as a revision to render a monophyletic taxonomy and with genera delimited to be more compact than the unwieldy "*Bufo*". The phylogenetic study of bufonids by Van Bocxlaer et al. (2010, Science 327: 679–682) also suggests that New World "*Bufo*" do not form a monophyletic group. Smith and Chiszar (2006, Herpetol. Conserv. Biol. 1: 6-8) recommend retaining the North American taxa *Anaxyrus*, *Incilius*, and *Rhinella* (as well as such long-recognized extralimital taxa such as *Ansonia*, *Capensibufo*, *Crepidophryne*, *Didynamipus*, *Mertensophryne*, *Nectophryne*, *Nectophrynoides*, *Pedostibes*, *Pelophryne*, *Schismaderma*, *Werneria*, and *Wolterstorffina*) as subgenera of *Bufo* to obviate the need for generic changes in North American species. More recently, Fouquette and Dubois (2014, Checklist N. Am. Amph. Rept.) followed this approach in a modified form. This approach, though, would visit considerable nomenclatural instability on many countries outside of the USA and Canada. See Pauly et al. (2009, Herpetologica 65: 115–128) and Frost et al. (Herpetologica 65: 136–153) for discussion.

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A. speciosus (Girard 1854) – Texas Toad

Older literature confused this species with *A. cognatus*, *A. mexicanus* (extralimital), and *A. compactilis* (extralimital). Rogers (1972, Copeia 1972: 381–383) demonstrated its morphological distinctiveness. Reviewed by Dayton and Painter (2005, in Lannoo, M. [ed.], Amph. Declines: 435–436, as *Bufo speciosus*), and Dodd (2013, Frogs U.S. and Canada, 1: 152–155).

Notes on genus:

This taxon of strictly North American toads was removed from "*Bufo*" (as well as were a number of other taxa) by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297) as a revision to render a monophyletic taxonomy and with genera delimited to be more compact than the unwieldy "*Bufo*". The phylogenetic study of bufonids by Van Bocxlaer et al. (2010, Science 327: 679–682) also suggests that New World "*Bufo*" do not form a monophyletic group. Smith and Chiszar (2006, Herpetol. Conserv. Biol. 1: 6-8) recommend retaining the North American taxa *Anaxyrus*, *Incilius*, and *Rhinella* (as well as such long-recognized extralimital taxa such as *Ansonia*, *Capensibufo*, *Crepidophryne*, *Didynamipus*, *Mertensophryne*, *Nectophryne*, *Nectophrynoides*, *Pedostibes*, *Pelophryne*, *Schismaderma*, *Werneria*, and *Wolterstorffina*) as subgenera of *Bufo* to obviate the need for generic changes in North American species. More recently, Fouquette and Dubois (2014, Checklist N. Am. Amph. Rept.) followed this approach in a modified form. This approach, though, would visit considerable nomenclatural instability on many countries outside of the USA and Canada. See Pauly et al. (2009, Herpetologica 65: 115–128) and Frost et al. (Herpetologica 65: 136–153) for discussion.

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A. terrestris (Bonnaterre 1789) – Southern Toad

No reports of geographic variation exist in the literature, although extensive geographic variation is evident on examination of specimens. Hybridization with *A. americanus* along the Fall Line may have strong effects on geographic variation, although data on this have not been published. Reviewed by Blem (1979, Cat. Am. Amph. Rept. 223, as *Bufo terrestris*), Jensen (2005, in Lannoo, M. [ed.], Amph. Declines: 436–438, as *Bufo terrestris*), and Dodd (2013, Frogs U.S. and Canada, 1: 155–166).

Notes on genus:

This taxon of strictly North American toads was removed from "*Bufo*" (as well as were a number of other taxa) by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297) as a revision to render a monophyletic taxonomy and with genera delimited to be more compact than the unwieldy "*Bufo*". The phylogenetic study of bufonids by Van Bocxlaer et al. (2010, Science 327: 679–682) also suggests that New World "*Bufo*" do not form a monophyletic group. Smith and Chiszar (2006, Herpetol. Conserv. Biol. 1: 6–8) recommend retaining the North American taxa *Anaxyrus*, *Incilius*, and *Rhinella* (as well as such long-recognized extralimital taxa such as *Ansonia*, *Capensibufo*, *Crepidophryne*, *Didynamipus*, *Mertensophryne*, *Nectophryne*, *Nectophrynoides*, *Pedostibes*, *Pelophryne*, *Schismaderma*, *Werneria*, and *Wolterstorffina*) as subgenera of *Bufo* to obviate the need for generic changes in North American species. More recently, Fouquette and Dubois (2014, Checklist N. Am. Amph. Rept.) followed this approach in a modified form. This approach, though, would visit considerable nomenclatural instability on many countries outside of the USA and Canada. See Pauly et al. (2009, Herpetologica 65: 115–128) and Frost et al. (Herpetologica 65: 136–153) for discussion.

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A. woodhousii (Girard 1854) – Woodhouse's Toad

See comments under *A. fowleri*. The incorrect spelling of the species name to *woodhousei* has been used widely. The status of taxa recognized by Sanders (1987, Evol. Hybrid. Spec. N. Am. Indig. Bufonids) has not been evaluated closely by any author, although neither have they enjoyed any recognition. Evidence provided by Masta et al. (2002, Mol. Phylogenet. Evol. 24: 302–314) suggests that *A. w. australis* may be a distinct species and that former *A. w. velatus* is a hybrid population of *A. woodhousii* × *A. fowleri*, and therefore should not be recognized. Reviewed by Sullivan (2005, in Lannoo, M. [ed.], Amph. Declines: 438–440, as *Bufo woodhousii*) and Dodd (2013, Frogs U.S. and Canada, 1: 166–176).

Notes on genus:

This taxon of strictly North American toads was removed from "*Bufo*" (as well as were a number of other taxa) by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297) as a revision to render a monophyletic taxonomy and with genera delimited to be more compact than the unwieldy "*Bufo*". The phylogenetic study of bufonids by Van Bocxlaer et al. (2010, Science 327: 679–682) also suggests that New World "*Bufo*" do not form a monophyletic group. Smith and Chiszar (2006, Herpetol. Conserv. Biol. 1: 6–8) recommend retaining the North American taxa *Anaxyrus*, *Incilius*, and *Rhinella* (as well as such long-recognized extralimital taxa such as *Ansonia*, *Capensibufo*, *Crepidophryne*, *Didynamipus*, *Mertensophryne*, *Nectophryne*, *Nectophrynoides*, *Pedostibes*, *Pelophryne*, *Schismaderma*, *Werneria*, and *Wolterstorffina*) as subgenera of *Bufo* to obviate the need for generic changes in North American species. More recently, Fouquette and Dubois (2014, Checklist N. Am. Amph. Rept.) followed this approach in a modified form. This approach, though, would visit considerable nomenclatural instability on many countries outside of the USA and Canada. See Pauly et al. (2009, Herpetologica 65: 115–128) and Frost et al. (Herpetologica 65: 136–153) for discussion.

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A. woodhousii australis (Shannon and Lowe 1955) – Southwestern Woodhouse's Toad

A. woodhousii woodhousii Girard 1854 – Rocky Mountain Toad

Ascaphus Stejneger 1899

A. montanus Mittleman and Myers 1949 – Rocky Mountain Tailed Frog

See Nelson et al. (2001, *Evolution* 55: 147–160) for evidence supporting the recognition of this species distinct from *A. truei*. Adams (2005, in Lannoo, M. [ed.], *Amph. Declines*: 382) provided a brief but detailed review as did Dodd (2013, *Frogs U.S. and Canada*, 1: 1–7).

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A. truei Stejneger 1899 – Coastal Tailed Frog

See Metter (1968, *Cat. Am. Amph. Rept.* 69) for review (as including *A. montanus*). Reviewed by Adams and Pearl (2005, in Lannoo, M. [ed.], *Amph. Declines*: 382–385) and Dodd (2013, *Frogs U.S. and Canada*, 1: 7–16).

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Craugastor Cope 1862

C. augusti (Duges 1879) – Barking Frogs

Note on genus:

This taxon of predominantly Mexican and Central American frogs was removed from a paraphyletic "*Eleutherodactylus*" by Crawford and Smith (2005, *Mol. Phylogenet. Evol.* 35: 536–555).

Reviewed by Zweifel (1967, *Cat. Am. Amph. Rept.* 41, as *Eleutherodactylus augusti*) and Schwalbe and Goldberg, (2005, in Lannoo, M. [ed.], *Amph. Declines*: 491–492). Goldberg et al. (2004, *Herpetologica* 60: 312–320) suggested that *C. a. cactorum* and *C. a. latrans* are different species but did not provide a formal new taxonomy.

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C. augusti cactorum Taylor 1939 "1938" – Western Barking Frog

Note on genus:

This taxon of predominantly Mexican and Central American frogs was removed from a paraphyletic "*Eleutherodactylus*" by Crawford and Smith (2005, *Mol. Phylogenet. Evol.* 35: 536–555).

Reviewed by Zweifel (1967, *Cat. Am. Amph. Rept.* 41, as *Eleutherodactylus augusti*) and Schwalbe and Goldberg, (2005, in Lannoo, M. [ed.], *Amph. Declines*: 491–492). Goldberg et al. (2004, *Herpetologica* 60: 312–320) suggested that *C. a. cactorum* and *C. a. latrans* are different species but did not provide a formal new taxonomy.

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C. augusti latrans (Cope 1880) – Balcones Barking Frog

Note on genus:

This taxon of predominantly Mexican and Central American frogs was removed from a paraphyletic "*Eleutherodactylus*" by Crawford and Smith (2005, *Mol. Phylogenet. Evol.* 35: 536–555).

Reviewed by Zweifel (1967, *Cat. Am. Amph. Rept.* 41, as *Eleutherodactylus augusti*) and Schwalbe and Goldberg, (2005, in Lannoo, M. [ed.], *Amph. Declines*: 491–492). Goldberg et al. (2004, *Herpetologica* 60: 312–320) suggested that *C. a. cactorum* and *C. a. latrans* are different species but did not provide a formal new taxonomy.

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Dendrobates Wagler 1830

D. auratus Girard 1855 – Green-And-Black Poison Dart Frog

Alien Species:

The most recent review of this genus and its relatives is Grant et al. (2006, *Bull. Amer. Mus. Nat. Hist.* 299: 1–262).

The Green-and-black Poison Dart Frog is native to Central America and Colombia and is established in Hawaii.

Fred Kraus, 2015-01-19

Eleutherodactylus Duméril and Bibron 1841

E. coqui Thomas 1966 – Coqui

Alien Species:

The Coquí is native to Puerto Rico, has been reported from five states, and is reported as established in California, Florida and Hawaii. It is widely established on Hawaii Island but is more restricted and the target of eradication efforts on the other Hawaiian Islands. Populations in California and Florida appear to be limited to nurseries (Dalrymple, 1994, *Non-indigenous Amphibians and Reptiles in Florida* in Schmitz, D.C. and T.C. Brown [eds.], *An Assessment of Invasive Non-indigenous Species in Florida's Public Lands*, Technical Rpt. TSS-94-100. Florida Department of Env. Protection, Tallahassee, FL., Pp. 67–78; K. Krysko, pers. comm.; D. Schnabel, pers. comm.), it is uncertain to what extent they are maintained by constant re-introduction, and they perhaps should not truly be considered established.

Fred Kraus, 2015-01-19

E. cystignathoides (Cope 1877) – Rio Grande Chirping Frog

Note on genus:

See *Craugastor*. Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297) recognized *Syrrhophus* for a monophyletic group containing *E. cystignathoides*, *E. guttilatus* and *E. marnocki* and *Euhyas* for a group containing *E. planirostris*. Heinicke et al. (2007, Proc. Natl. Acad. Sci. USA 104: 10092–97) and Hedges et al. (2008, Zootaxa 1737: 1-182) redelimited *Eleutherodactylus* as monophyletic by exclusion of a number of South American taxa and treated (and redelimited) *Euhyas* and *Syrrhophus* as subgenera of *Eleutherodactylus*.

Two nominal subspecies named, of which only one of which enters the USA. The status of these taxa, whether they represent arbitrarily delimited parts of a single population or different lineages is unknown. Reviewed by Wallace, (2005, in Lannoo, M. [ed.], Amph. Declines: 494–495) and Dodd (2013, Frogs U.S. and Canada, 1: 197–199).

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E. cystignathoides campi Stejneger 1915 – Rio Grande Chirping Frog

Note on genus:

See *Craugastor*. Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297) recognized *Syrrhophus* for a monophyletic group containing *E. cystignathoides*, *E. guttilatus* and *E. marnocki* and *Euhyas* for a group containing *E. planirostris*. Heinicke et al. (2007, Proc. Natl. Acad. Sci. USA 104: 10092–97) and Hedges et al. (2008, Zootaxa 1737: 1-182) redelimited *Eleutherodactylus* as monophyletic by exclusion of a number of South American taxa and treated (and redelimited) *Euhyas* and *Syrrhophus* as subgenera of *Eleutherodactylus*.

Two nominal subspecies named, of which only one of which enters the USA. The status of these taxa, whether they represent arbitrarily delimited parts of a single population or different lineages is unknown. Reviewed by Wallace, (2005, in Lannoo, M. [ed.], Amph. Declines: 494–495) and Dodd (2013, Frogs U.S. and Canada, 1: 197–199).

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E. guttilatus (Cope 1879) – Spotted Chirping Frog

Geographic variation is poorly known. Some authors (e.g. Morafka, 1977, Biogeographica 9) considered *E. guttilatus* to be a synonym of *E. c. campi* (and by extension, of *E. cystignathoides*) but this remains to be sufficiently tested. Reviewed by Wallace (2005, in Lannoo, M. [ed.], Amph. Declines: 496–497) and Dodd (2013, Frogs U.S. and Canada, 1: 199–201).

Note on genus:

See *Craugastor*. Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297) recognized *Syrrhophus* for a monophyletic group containing *E. cystignathoides*, *E. guttilatus* and *E. marnocki* and *Euhyas* for a group containing *E. planirostris*. Heinicke et al. (2007, Proc. Natl. Acad. Sci. USA 104: 10092–97) and Hedges et al. (2008, Zootaxa 1737: 1-182) redelimited *Eleutherodactylus* as monophyletic by exclusion of a number of South American taxa and treated (and redelimited) *Euhyas* and *Syrrhophus* as subgenera of *Eleutherodactylus*.

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E. marnockii (Cope 1878) – Cliff Chirping Frog

See account by Lynch (1970, Univ. Kansas Publ. Mus. Nat. Hist. 20: 1–45) and reviews by Wallace, (2005, in Lannoo, M. [ed.], Amph. Declines: 496–499) and Dodd (2013, Frogs U.S. and Canada, 1: 201–204). Geographic variation is not well studied.

Note on genus:

See *Craugastor*. Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297) recognized *Syrrhophus* for a monophyletic group containing *E. cystignathoides*, *E. guttillatus* and *E. marnockii* and *Euhyas* for a group containing *E. planirostris*. Heinicke et al. (2007, Proc. Natl. Acad. Sci. USA 104: 10092–97) and Hedges et al. (2008, Zootaxa 1737: 1-182) redelimited *Eleutherodactylus* as monophyletic by exclusion of a number of South American taxa and treated (and redelimited) *Euhyas* and *Syrrhophus* as subgenera of *Eleutherodactylus*.

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E. planirostris (Cope 1862) – Greenhouse Frog

Alien Species:

The Greenhouse Frog is native to Cuba, the Bahamas, and Cayman Islands and is established in Alabama, Florida, Georgia, Hawaii, Louisiana, and Mississippi.

Fred Kraus, 2015-01-19

Gastrophryne Fitzinger 1843

G. carolinensis (Holbrook 1835) – Eastern Narrow-Mouthed Toad

Reviewed by Nelson (1972, Cat. Am. Amph. Rept. 120) and Mitchell and Lannoo (2005, in Lannoo, M. [ed.], Amph. Declines: 501–503) and Dodd (2013, Frogs U.S. and Canada, 1: 439–448).

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G. mazatlanensis Hallowell 1856 – Sinaloan Narrow-Mouthed Toad

Recognized as distinct from *G. olivacea* by Streicher, Cox, Campbell, Smith, and de Sa (2012, Mol. Phylogenet. Evol. 64: 645-653).

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G. olivacea (Hallowell 1856) – Western Narrow-Mouthed Toad

Reviewed by Nelson (1972, Cat. Am. Amph. Rept. 122), Sredl and Field (2005, in Lannoo, M. [ed.], Amph. Declines: 503–506), and Dodd (2013, Frogs U.S. and Canada, 1: 448–455) in the sense of including *G. mazatlanensis* of s. Arizona.

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Glandirana Fei, Ye, and Huang 1991

G. rugosa (Temminck and Schlegel 1838) – Japanese Wrinkled Frog

Alien Species:

This genus of Asian frogs was recently removed from a polyphyletic "*Rana*" by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297).

The Japanese Wrinkled Frog is native to Japan and is established in Hawaii.

Fred Kraus, 2015-01-19

Hyla Laurenti 1768

H. andersonii Baird 1854 – Pine Barrens Treefrog

Reviewed by Gosner and Black (1967, Cat. Am. Amph. Rept. 54), Means (2005, in Lannoo, M. [ed.], Amph. Declines: 445–447), and Dodd (2013, Frogs U.S. and Canada, 1: 235–239). The widely disjunct populations have been examined with allozymes and only subtle (no fixed differences) geographic variation was documented (Karlin et al., 1982, Copeia 1982: 175–178).

Note on genus:

Faivovich et al. (2005, Bull. Am. Mus. Nat. Hist., 294) redelimited this monophyletic taxon to include only North American and Eurasian species. Hua et al. (2009, Herpetologica 65: 246–259) discussed relationships within the group. Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) recently recognized a suite of subgenera based on genetic and morphological evidence but, pending a more thorough evidentiary review, we hesitate to employ this taxonomy.

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H. arenicolor Cope 1866 – Canyon Treefrog

Barber (1999, Mol. Ecol. 8: 563–576) examined geographic variation and suggested that at least two other species should be recognized within the Mexican component of its range. Bryson et al. (2010, Evolution, 64: 2315–2340) also reported on molecular geographic variation and demonstrated introgression with *Hyla wrightorum*. Reviewed by Painter (2005, in Lannoo, M. [ed.], Amph. Declines: 447–448) and Dodd (2013, Frogs U.S. and Canada, 1: 239–245).

Note on genus:

Faivovich et al. (2005, Bull. Am. Mus. Nat. Hist., 294) redelimited this monophyletic taxon to include only North American and Eurasian species. Hua et al. (2009, Herpetologica 65: 246–259) discussed relationships within the group. Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) recently recognized a suite of subgenera based on genetic and morphological evidence but, pending a more thorough evidentiary review, we hesitate to employ this taxonomy.

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H. avivoca Neil 1948 – Bird-Voiced Treefrog

Note on genus:

Faivovich et al. (2005, Bull. Am. Mus. Nat. Hist., 294) redelimited this monophyletic taxon to include only North American and Eurasian species. Hua et al. (2009, Herpetologica 65: 246–259) discussed relationships within the group. Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) recently recognized a suite of subgenera based on genetic and morphological evidence but, pending a more thorough evidentiary review, we hesitate to employ this taxonomy.

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H. avivoca avivoca Viosca 1928 – Bird-Voiced Treefrog

Smith (1953, Herpetologica 9: 169–173) discussed geographic variation and recognized two nominal subspecies which are rarely employed. Reviewed by Smith (1966, Cat. Am. Rept. Amph. 28), Redmer (2005, in Lannoo, M. [ed.], Amph. Declines: 448–449) and Dodd (2013, Frogs U.S. and Canada, 1: 245–250).

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H. avivoca ogechiensis Viosca 1928 – Eastern Bird-Voiced Treefrog

Smith (1953, Herpetologica 9: 169–173) discussed geographic variation and recognized two nominal subspecies which are rarely employed. Reviewed by Smith (1966, Cat. Am. Rept. Amph. 28), Redmer (2005, in Lannoo, M. [ed.], Amph. Declines: 448–449) and Dodd (2013, Frogs U.S. and Canada, 1: 245–250).

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H. chrysoscelis Cope 1880 – Cope's Gray Treefrog

See comment under *H. versicolor*. Reviewed by Hoffman (1988, Cat. Am. Amph. Rept. 436), Cline, (2005, in Lannoo, M. [ed.], Amph. Declines: 449–452), and Dodd (2013, Frogs U.S. and Canada, 1: 250–262).

Note on genus:

Faivovich et al. (2005, Bull. Am. Mus. Nat. Hist., 294) redelimited this monophyletic taxon to include only North American and Eurasian species. Hua et al. (2009, Herpetologica 65: 246–259) discussed relationships within the group. Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) recently recognized a suite of subgenera based on genetic and morphological evidence but, pending a more thorough evidentiary review, we hesitate to employ this taxonomy.

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H. cinerea (Schneider 1799) – Green Treefrog

Subspecies occasionally are recognized (*H. c. cinerea* and *H. c. evittata*) without discussion, and on the basis of a single populationally variable character. See Duellman and Schwartz (1958, Bull. Florida State Mus., Biol. Sci. 3: 241) for discussion and rejection of subspecies. Reviewed by Redmer and Brandon (2003, Cat. Am. Amph. Rept. 766), Redmer and Brandon (2005, in Lannoo, M. [ed.], Amph. Declines: 452–454), and Dodd (2013, Frogs U.S. and Canada, 1: 262–273).

Note on genus:

Faivovich et al. (2005, Bull. Am. Mus. Nat. Hist., 294) redelimited this monophyletic taxon to include only North American and Eurasian species. Hua et al. (2009, Herpetologica 65: 246–259) discussed relationships within the group. Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) recently recognized a suite of subgenera based on genetic and morphological evidence but, pending a more thorough evidentiary review, we hesitate to employ this taxonomy.

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H. femoralis Bosc 1800 – Pine Woods Treefrog

Reviewed by Hoffman (1988, Cat. Am. Amph. Rept. 436), Mitchell (2005, in Lannoo, M. [ed.], Amph. Declines: 454–456), and Dodd (2013, Frogs U.S. and Canada, 1: 274–280).

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H. gratioosa Leconte 1856 – Barking Treefrogs

Reviewed by Caldwell (1982, Cat. Am. Amph. Rept. 298), Mitchell (2005, in Lannoo, M. [ed.], Amph. Declines: 455–456), and Dodd (2013, Frogs U.S. and Canada, 1: 280–288).

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H. squirella Bosc 1800 – Squirrel Treefrog

Reviewed by Martof (1975, Cat. Am. Amph. Rept. 168), Mitchell and Lannoo (2005, in Lannoo, M. [ed.], Amph. Declines: 456–458), and Dodd (2013, Frogs U.S. and Canada, 1: 288–294).

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H. versicolor Leconte 1825 – Gray Treefrog

H. wrightorum Taylor 1939 "1938" – Arizona Treefrog

Gergus et al. (2004, Copeia 2004: 758–769) reported on the distinctiveness of this species with respect to *H. eximia* (extralimital). See comment under *H. arenicolor*. Reviewed by Gergus, Wallace, and Sullivan (2005, in Lannoo, M. [ed.], Amph. Declines: 461–463) and Dodd (2013, Frogs U.S. and Canada, 1: 309–332).

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Hypopachus Keferstein 1867

H. variolosus (Cope 1866) – Sheep Frog

See Nelson (1973, Herpetologica 29: 6–17; 1974, Herpetologica 30: 250–274) for discussion of geographic variation and rejection of subspecies. USA population reviewed by Judd and Irwin (2005, in Lannoo, M. [ed.], Amph. Declines: 506–508) and Dodd (2013, Frogs U.S. and Canada, 1: 455–457). Although only two species are currently recognized within this genus, very strong geographic variation in coloration, call, and toe structure suggests that several species are masquerading under this particular name. Given that the type locality of *H. variolosus* is in Costa Rica, the scientific name applied to the U.S. form is likely to change.

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Incilius Cope 1863

I. alvarius (Girard 1859) – Sonoran Desert Toad

Reviewed by Fouquette (1970, Cat. Am. Amph. Rept. 93, as *Bufo alvarius*), Fouquette, Painter, and Nanjappa, (2005, in Lannoo, M. [ed.], Amph. Declines: 384–386, as *Bufo alvarius*), and Dodd (2013, Frogs U.S. and Canada, 1: 177–180).

Note on genus:

This taxon of predominantly Central American toads was removed from a paraphyletic "*Bufo*" by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297; as *Cranopsis*). However, the oldest name for this taxon is *Incilius* Cope, 1863 (see Frost et al., 2009, Copeia 2009: 418–419) which therefore takes precedence. See comment under *Anaxyrus*. Van Bocxlaer et al. (2010, Science, 327: 679–682) presented evidence that *Incilius* may be paraphyletic with respect to *Anaxyrus* due to the placement of one extralimital species, although this was based on a small dataset (Mendelson et al., 2011, Zootaxa, 3138: 1-34). See comment under *Anaxyrus*, regarding the treatment of this genus as a subgenus of *Bufo* by some although the effect extraliminally of subgeneric status would be to require a number well-marked genera (e.g., *Ansonia*) to be treated as subgenera as well.

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I. nebulifer (Girard 1854) – Gulf Coast Toad

Mulcahy and Mendelson (2000, Mol. Phylogenet. Evol. 17: 173) recognized this species, as *Bufo nebulifer*, and as distinct from *I. valliceps*, an extralimital species. Reviewed by Mendelson (2005, in Lannoo, M. [ed.], Amph. Declines: 424–427, as *Bufo nebulifer*) and Dodd (2013, Frogs U.S. and Canada, 1: 180–186).

Note on genus:

This taxon of predominantly Central American toads was removed from a paraphyletic "*Bufo*" by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297; as *Cranopsis*). However, the oldest name for this taxon is *Incilius* Cope, 1863 (see Frost et al., 2009, Copeia 2009: 418–419) which therefore takes precedence. See comment under *Anaxyrus*. Van Bocxlaer et al. (2010, Science, 327: 679–682) presented evidence that *Incilius* may be paraphyletic with respect to *Anaxyrus* due to the placement of one extralimital species, although this was based on a small dataset (Mendelson et al., 2011, Zootaxa, 3138: 1-34). See comment under *Anaxyrus*, regarding the treatment of this genus as a subgenus of *Bufo* by some although the effect extraliminally of subgeneric status would be to require a number well-marked genera (e.g., *Ansonia*) to be treated as subgenera as well.

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Leptodactylus Fitzinger 1826

L. fragilis (Brocchi 1877) – Mexican White-Lipped Frogs

Reviewed by Heyer et al. (2006, Cat. Am. Amph. Rept. 830), Heyer (2005, in Lannoo, M. [ed.], Amph. Declines: 500–501), Dodd, 2013, Frogs U.S. and Canada, 1: 436–438. Much of the older literature about this species refers to it incorrectly as *Leptodactylus labialis*.

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Lithobates Fitzinger 1843

L. areolatus (Baird and Girard 1852) – Crawfish Frog

See comment under *L. capito*. Reviewed by Altig and Lohoefer (1983, Cat. Am. Amph. Rept. 324, as *Rana areolata*), Parris and Redmer (2005, in Lannoo, M. [ed.], Amph. Declines: 526–528), and Dodd (2013, Frogs U.S. and Canada, 2 : 461–466). Geographic variation deserves further study to determine status of the nominal subspecies.

Notes on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. areolatus areolatus (Baird and Girard 1852) – Southern Crawfish Frog

See comment under *L. capito*. Reviewed by Altig and Lohoefer (1983, Cat. Am. Amph. Rept. 324, as *Rana areolata*), Parris and Redmer (2005, in Lannoo, M. [ed.], Amph. Declines: 526–528), and Dodd (2013, Frogs U.S. and Canada, 2 : 461–466). Geographic variation deserves further study to determine status of the nominal subspecies.

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L. areolatus circulosus (Rice and Davis 1878) – Northern Crawfish Frog

See comment under *L. capito*. Reviewed by Altig and Lohoefer (1983, Cat. Am. Amph. Rept. 324, as *Rana areolata*), Parris and Redmer (2005, in Lannoo, M. [ed.], Amph. Declines: 526–528), and Dodd (2013, Frogs U.S. and Canada, 2 : 461–466). Geographic variation deserves further study to determine status of the nominal subspecies.

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L. berlandieri (Baird 1859) – Rio Grande Leopard Frog

Geographic variation is not well documented and relationships with extralimital Mexican forms (e.g., *L. forreri*, *L. brownorum*) are not well understood. Reviewed with special reference to the USA populations by Rorabaugh (2005, in Lannoo, M. [ed.], *Amph. Declines*: 530–532) and Dodd (2013, *Frogs U.S. and Canada*, 2 : 466–471).

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, *Bull. Am. Mus. Nat. Hist.*, 297). Hillis and Wilcox (2005, *Mol. Phylogenet. Evol.* 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, *Mol. Phylogenet. Evol.* 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, *Mol. Phylogenet. Evol.* 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, *Mol. Phylogenet. Evol.* 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (*Mol. Phylogenet. Evol.* 42: 331–338) and Wiens et al. (2009, *Evolution* 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, *Mol. Phylogenet. Evol.* 42: 317–330; 2007, *Cladistics* 23: 390–402), Hillis (2007, *Mol. Phylogenet. Evol.* 42: 331–338), Pauly et al. (2009, *Herpetologica* 65: 115–128), Frost et al. (2009, *Herpetologica*, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, *Checklist N.A. Amph. Rept.*: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. blairi (Mecham, Littlejohn, Oldham, Brown, and Brown 1973) – Plains Leopard Frog

Reviewed by Brown (1992, Cat. Am. Amph. Rept. 536, as *Rana blairi*) and Dodd (2013, Frogs U.S. and Canada, 2: 472–479). Isolated western populations have not been well studied.

Notes on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. capito (Leconte 1855) – Gopher Frog

Lithobates capito is considered by some to be part of *L. areolatus* (but see Case, 1978, Syst. Zool. 27: 299–311, who considered them distinct). Reviewed by Altig and Lohoefer (1983, Cat. Am. Amph. Rept. 324, as *Rana areolata capito*), Jensen and Richter (2005, in Lannoo, M. [ed.], Amph. Declines: 536–538), and Dodd (2013, Frogs U.S. and Canada, 2 : 479–485). Recognized as distinct from *L. areolatus* by Young and Crother (2001, Copeia, 2001: 382–388), who also rejected subspecies. Richter et al. (2014, Copeia: 231–237) presented mitochondrial evidence on interpopulational variation at the molecular level and suggested an historical structure among these.

Notes on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. catesbeianus (Shaw 1802) – American Bullfrog

Geographic variation within the natural range *L. catesbeianus* is not well understood although Austin et al. (2004, Mol. Phylogenet. Evol. 32: 799–816) presented mitochondrial DNA evidence of distinct eastern and western lineages. Reviewed by Casper and Hendricks (2005, in Lannoo, M. [ed.], Amph. Declines: 540–546) and Dodd (2013, Frogs U.S. and Canada, 2 : 486–515).

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. chiricahuensis (Platz and Mecham 1979) – Chiricahua Leopard Frog

The status of southern Arizona and Mexican populations needs study. *Rana subaquavocalis* Platz, 1993, is a synonym according to Goldberg et al. (2004, J. Herpetol. 38: 313–319), although some authors (e.g., Hillis and Wilcox, 2005, Mol. Phylogenet. Evol. 34: 299–314; Dubois, 2006, C. R. Biol., Paris 329: 823–840) have continued to recognize the two taxa as distinct species, without comment. Reviewed by Sredl and Jennings (2005, in Lannoo, M. [ed.], Amph. Declines: 546–549, in the sense of including the central Arizona populations now transferred to *Lithobates fisheri*), and Dodd (2013, Frogs U.S. and Canada, 2 : 515–522). See comment under *L. fisheri*.

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. clamitans (Latreille 1801) – Green Frog

Austin and Zamudio (2008, *Mol. Phylogenet. Evol.* 48: 1041-1053) reported on interpopulational variation at the molecular level and suggested an historical structure inconsistent with the recognized subspecies, which are here rejected on that basis. Reviewed by Stewart (1968, *Cat. Am. Amph. Rept.* 337), Pauley and Lannoo (2005, in Lannoo, M. [ed.], *Amph. Declines*: 549–552), and Dodd (2013, *Frogs U.S. and Canada*, 2: 522–547) as *Rana clamitans*.

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, *Bull. Am. Mus. Nat. Hist.*, 297). Hillis and Wilcox (2005, *Mol. Phylogenet. Evol.* 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, *Mol. Phylogenet. Evol.* 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, *Mol. Phylogenet. Evol.* 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, *Mol. Phylogenet. Evol.* 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (*Mol. Phylogenet. Evol.* 42: 331-338) and Wiens et al. (2009, *Evolution* 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, *Mol. Phylogenet. Evol.* 42: 317–330; 2007, *Cladistics* 23: 390–402), Hillis (2007, *Mol. Phylogenet. Evol.* 42: 331-338), Pauly et al. (2009, *Herpetologica* 65: 115–128), Frost et al. (2009, *Herpetologica*, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, *Checklist N.A. Amph. Rept.*: 390-391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. fisheri (Stejneger 1893) – Vegas Valley Leopard Frog

Until recently, this species has been considered to be highly restricted in range and extinct. However, Hekkala et al. (2011, *Conserv. Genet.* 12: 1379–1385) used DNA sequence data from museum specimens to show that *L. fisheri* and frogs ascribed to *R. chiricahuensis* from near the Mogollon Rim in central Arizona comprise a lineage that is distinct from *R. chiricahuensis* populations to the south and east. Platz (1993, *J. Herpetol.* 27: 154–162) previously noted the various lines of evidence suggesting that *L. chiricahuensis* was composed of more than one species, with the central Arizona population notably distinctive, but it was not possible, at that time, to compare those frogs genetically with *L. fisheri*. Reviewed by Jennings (2005, in Lannoo, M. [ed.], *Amph. Declines*: 554–555, in the sense of only referring to the Vegas Valley population, which is now was then considered to be? extinct) and Dodd (2013, *Frogs U.S. and Canada*, 2 : 547–551).

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, *Bull. Am. Mus. Nat. Hist.*, 297). Hillis and Wilcox (2005, *Mol. Phylogenet. Evol.* 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, *Mol. Phylogenet. Evol.* 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, *Mol. Phylogenet. Evol.* 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, *Mol. Phylogenet. Evol.* 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (*Mol. Phylogenet. Evol.* 42: 331–338) and Wiens et al. (2009, *Evolution* 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, *Mol. Phylogenet. Evol.* 42: 317–330; 2007, *Cladistics* 23: 390–402), Hillis (2007, *Mol. Phylogenet. Evol.* 42: 331–338), Pauly et al. (2009, *Herpetologica* 65: 115–128), Frost et al. (2009, *Herpetologica*, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, *Checklist N.A. Amph. Rept.*: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. grylio (Stejneger 1901) – Pig Frog

Reviewed by Altig and Lohofener (1982, Cat. Am. Amph. Rept. 286, as *Rana grylio*), Richter (2005, in Lannoo, M. [ed.], Amph. Declines: 555–557, as *Rana grylio*) and Dodd (2013, Frogs U.S. and Canada, 2 : 551–556).

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. heckscheri (Wright 1924) – River Frog

Reviewed by Sanders (1984, Cat. Am. Amph. Rept. 348) as *Rana heckscheri*, Butterfield and Lannoo, (2005, in Lannoo, M. [ed.], Amph. Declines: 557–558, as *Rana heckscheri*), and Dodd (2013, Frogs U.S. and Canada, 2 : 556–560).

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. kauffeldi (Feinberg, Newman, Watkins-Colwell, Schlesinger, Zarate, Curry, Shaffer, Burger 2014) – Atlantic Coast Leopard Frog

The recognition of this species may require revision of the range of *L. pipiens* to exclude areas of southern New York, southern Connecticut, Rhode Island, and parts of Massachusetts.

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. okaloosae (Moler 1985) – Florida Bog Frog

Reviewed by Moler (1993, Cat. Am. Amph. Rept. 561, as *Rana okaloosae*) and Dodd (2013, Frogs U.S. and Canada, 2 : 561–564). Austin et al. (2003, Biol. J. Linn. Soc. 80: 601–624) discussed the genetic relationship of *L. okaloosae* and *L. clamitans*.

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. onca (Cope 1875) – Relict Leopard Frog

The status of this taxon is controversial. Jaeger et al. (2001, *Copeia* 2001: 339–351) noted a close relationship with *L. yavapaiensis*, and Pfeiler and Markow (2008, *Mol. Phylogenet. Evol.* 49: 343–348) reported evidence consistent with a close or identical relationship with *L. yavapaiensis*. Reviewed by Jennings (1988, *Cat. Am. Amph. Rept.* 417, as *Rana onca*) and Bradford, Jennings, and Jaeger (2005, in Lannoo, M. [ed.], *Amph. Declines: 567–568*) and Dodd (2013, *Frogs U.S. and Canada*, 2 : 565–568).

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, *Bull. Am. Mus. Nat. Hist.*, 297). Hillis and Wilcox (2005, *Mol. Phylogenet. Evol.* 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, *Mol. Phylogenet. Evol.* 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, *Mol. Phylogenet. Evol.* 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, *Mol. Phylogenet. Evol.* 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (*Mol. Phylogenet. Evol.* 42: 331–338) and Wiens et al. (2009, *Evolution* 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, *Mol. Phylogenet. Evol.* 42: 317–330; 2007, *Cladistics* 23: 390–402), Hillis (2007, *Mol. Phylogenet. Evol.* 42: 331–338), Pauly et al. (2009, *Herpetologica* 65: 115–128), Frost et al. (2009, *Herpetologica*, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, *Checklist N.A. Amph. Rept.*: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. palustris (Leconte 1825) – Pickerel Frog

Geographic variation studied by Pace (1974, Misc. Publ. Mus. Zool. Univ. Michigan 148). Reviewed by Schaaf and Smith (1971, Cat. Am. Amph. Rept. 117, as *Rana palustris*) and Dodd (2013, Frogs U.S. and Canada, 2 : 568–578).

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. pipiens (Schreber 1782) – Northern Leopard Frog

Synonymy and discussion in Pace (1974, Misc. Publ. Mus. Zool. Univ. Michigan 148) as *Rana pipiens*. Reviewed by Rorabaugh (2005, in Lannoo, M. [ed.], Amph. Declines: 570–576) and Dodd (2013, Frogs U.S. and Canada, 2 : 578–608).

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. septentrionalis (Baird 1854) – Mink Frog

Reviewed by Hedeon (1977, Cat. Am. Amph. Rept. 202, as *Rana septentrionalis*) and Dodd (2013, Frogs U.S. and Canada, 2 : 608–617).

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. sevosus (Goin and Netting 1940) – Dusky Gopher Frog

Reviewed by Altig and Lohofener (1983, Cat. Am. Amph. Rept. 324, as *Rana areolata sevosus*), Richter and Jensen (2005, in Lannoo, M. [ed.], Amph. Declines: 584–586), and Dodd (2013, Frogs U.S. and Canada, 2 : 617–621). Recognized as distinct from *L. capito* and *L. areolatus* by Young and Crother (2001, Copeia, 2001: 382–388).

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. sphenoccephalus (Cope 1886) – Southern Leopard Frog

Pace (1974, Misc. Publ. Mus. Zool. Univ. Michigan 148) revived the older name *Rana utricularius* Harlan, 1825, for this species, which Pace emended to *R. utricularia*. Subsequently, the International Commission of Zoological Nomenclature moved (Opinion, 1685, 1992, Bull. Zool. Nomencl. 49: 171–173) to suppress *R. utricularia* for purposes of priority in favor of *R. sphenoccephala*, leaving the unusual situation of the subspecies name *sphenoccephalus* having priority over the older species name, *utricularius*. The status of the nominal subspecies requires detailed examination (see Brown et al., 1977, Bull. Zool. Nomencl. 33: 199–200; Zug, 1982, Bull. Zool. Nomencl. 39: 80–81; and Uzzell, 1982, Bull. Zool. Nomencl. 39: 83). Reviewed by Butterfield, Lannoo, and Nanjappa (2005, in Lannoo, M. [ed.], Amph. Declines: 586–590) and Dodd (2013, Frogs U.S. and Canada, 2 : 621–637).

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. sphenoccephalus sphenoccephalus (Cope 1886) – Florida Leopard Frog

L. sphenoccephalus utricularius (Harlan 1825) – Coastal Plains Leopard Frog

L. sylvaticus (Leconte 1825) – Wood Frog

The extensive morphological variation in this species was examined by Martof and Humphries (1959, Amer. Midl. Nat. 61: 350–389), who rejected previously recognized taxonomic divisions; however a study of DNA sequence variation by Lee-Yaw et al. (2008, Mol. Ecol. 17: 867–884) revealed two distinct clades corresponding to eastern and western populations. Reviewed by Martof (1970, Cat. Am. Amph. Rept. 86, as *Rana sylvatica*), Redmer and Trauth (2005, in Lannoo, M. [ed.], Amph. Declines: 590–593, as *Rana sylvatica*), and Dodd (2013, Frogs U.S. and Canada, 2 : 637–669).

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. tarahumarae (Boulenger 1917) – Tarahumara Frog

Extinct in the USA although persisting in Mexico. Attempts are being made to reintroduce the species into former Arizona localities. Reviewed by Zweifel (1968, Cat. Am. Amph. Rept. 66, as *Rana tarahumarae*), Rorabaugh and Hale (2005, in Lannoo, M. [ed.], Amph. Declines: 593–595, as *Rana tarahumarae*), and Dodd (2013, Frogs U.S. and Canada, 2 : 669–637).

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. virgatipes (Cope 1891) – Carpenter Frog

Reviewed by Gosner and Black (1968, Cat. Am. Amph. Rept. 67, as *Rana virgatipes*), Mitchell (2005, in Lannoo, M. [ed.], Amph. Declines: 595–596, as *Rana virgatipes*), and Dodd (2013, Frogs U.S. and Canada, 2 : 674–681). Data provided by Pytel (1986, Herpetologica 42: 273–282) suggest that careful evaluation for cryptic species is warranted.

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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L. yavapaiensis (Platz and Frost 1984) – Lowland Leopard Frog

See comment under *L. onca*. Reviewed by Sredl (2005, in Lannoo, M. [ed.], Amph. Declines: 596–599, as *Rana yavapaiensis*) and Dodd (2013, Frogs U.S. and Canada, 2: 681–636).

Note on genus:

This taxon of North, Central, and South American frogs was removed from the large and predominantly Eurasian genus *Rana* by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297). Hillis and Wilcox (2005, Mol. Phylogenet. Evol. 34: 299–314) provided a phylogenetic taxonomy that retained the species now under *Lithobates* within *Rana* and restricted the use of that name to a small part of what was subsequently assigned to *Lithobates* by Frost et al. (2006). Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330) criticized the nomenclatural proposals of Hillis and Wilcox and regarded their names as *nomina nuda* and their approach outside of the International Code of Zoological Nomenclature (1999). This criticism was responded to by Hillis (2006, Mol. Phylogenet. Evol. 42: 331–338), who argued that most of the new names proposed by Hillis and Wilcox do have nomenclatural status under the International Code of Zoological Nomenclature (1999). The revision by Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) which recognized *Lithobates* as a genus, we think best reflects the majority opinion of members of the international community who are actively working on large-scale ranid relationships, although Hillis, 2007 (Mol. Phylogenet. Evol. 42: 331–338) and Wiens et al. (2009, Evolution 63: 1217–1231) expressed reluctance to accept this taxonomy. Dubois (2006, Mol. Phylogenet. Evol. 42: 317–330; 2007, Cladistics 23: 390–402), Hillis (2007, Mol. Phylogenet. Evol. 42: 331–338), Pauly et al. (2009, Herpetologica 65: 115–128), Frost et al. (2009, Herpetologica, 65: 136–153) discussed the issues surrounding the nomenclature of North American ranids and most recently Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.: 390–391), suggested that *Lithobates* be considered a subgenus of *Rana*.

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Osteopilus Fitzinger 1843

O. septentrionalis Duméril and Bibron 1841 – Cuban Treefrog

Alien Species:

The Cuban Treefrog is native to Cuba, the Bahamas, and Cayman Islands, has been introduced into six states, and is established in Florida. It has been claimed to be established in Hawaii (McKeown, 1996, A Field Guide to Reptiles and Amphibians in the Hawaiian Islands, Diamond Head Publishing, Inc., Los Osos, California) but there is no supporting evidence.

Fred Kraus, 2015-01-19

Pseudacris Fitzinger 1843

P. brachyphona (Cope 1889) – Mountain Chorus Frog

Reviewed by Hoffmann (1980, Cat. Am. Amph. Rept. 234), Mitchell and Pauley (2005, in Lannoo, M. [ed.], Amph. Declines: 465–466) and Dodd (2013, Frogs U.S. and Canada, 1: 313–318).

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrata* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hylliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

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P. brimleyi Brandt and Walker 1933 – Brimley's Chorus Frog

Reviewed by Hoffmann (1983, Cat. Am. Amph. Rept. 311, Mitchell (2005, in Lannoo, M. [ed.], Amph. Declines: 466 - 467)) and Dodd (2013, Frogs U.S. and Canada, 1: 319–322).

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrata* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hylliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

P. cadaverina (Cope 1866) – California Treefrog

Reviewed by Gaudin (1979, Cat. Am. Amph. Rept. 225, as *Hyla cadaverina*), Ervin (2005, in Lannoo, M. [ed.], Amph. Declines: 467–470) and Dodd (2013, Frogs U.S. and Canada, 1: 322–328). Phillipsen and Metcalf (2009, Mol. Phylogenet. Evol. 53: 152–170) reported on considerable geographic structure at the molecular level among populations.

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrata* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hylliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

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P. clarkii (Baird 1854) – Spotted Chorus Frog

Reviewed by Pierce and Whitehurst (1990, Cat. Am. Amph. Rept. 458), Sredl (2005, in Lannoo, M. [ed.], Amph. Declines: 470–472), and Dodd (2013, Frogs U.S. and Canada, 1: 328–331).

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrita* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hyliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

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P. crucifer (Wied-Neuwied 1838) – Spring Peeper

Moriarty and Cannatella (2004, Mol. Phylogenet. Evol. 30: 409–420) rejected subspecies. Reviewed by Butterfield, Lannoo, and Nanjappa (2005, in Lannoo, M. [ed.], Amph. Declines: 472–474), and Dodd (2013, Frogs U.S. and Canada, 1: 331–348).

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrita* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hyliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

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P. feriarum (Baird 1854) – Upland Chorus Frog

Platz (1989, Copeia 1989: 704–712) retained *P. feriarum* and *P. kalmi* as subspecies of one species but suggested that they might also be distinct species on the basis of data presented by Hedges (1986, Syst. Zool. 35: 1–21). Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) confirmed that *P. kalmi* and *P. feriarum* are distinct species although the contact zone between these taxa is poorly understood.

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrita* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hyliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

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P. fouquettei Lemmon, Lemmon, Collins, and Cannatella 2008 – Cajun Chorus Frog

Reviewed by Dodd (2013, Frogs U.S. and Canada, 1: 357–363).

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrita* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hylliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

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P. hypochondriaca (Hallowell 1854) – Baja California Treefrog

Recuero et al. (2006, Mol. Phylogenet. Evol. 39: 293–304) recognized this species as distinct from *P. regilla* and composed of two subspecies, one of which is extralimital, and whose mutual status is unclear. Barrow et al. (2014, Mol. Phylogenet. Evol. 75: 78-900) suggested that the distinction of *P. hypochondriaca* and *P. sierra*, drawn on the basis of mtDNA, was not supported by nuDNA analysis. This suggests that this taxon will ultimately be included in the synonymy of *Pseudacris regilla*.

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrita* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hylliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

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P. illinoensis Smith 1951 – Illinois Chorus Frog

Moriarty and Cannatella (2004, Mol. Phylogenet. Evol. 30: 409–420) discussed the arguable distinctiveness of this taxon with respect to *Pseudacris streckeri*. Reviewed by Dodd (2013, Frogs U.S. and Canada, 1: 363–367).

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrita* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hylliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

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P. kalmi Harper 1955 – New Jersey Chorus Frog

Platz (1989, Copeia 1989: 704–712) retained *P. feriarum* and *P. kalmi* as subspecies of one species but suggested that they might also be distinct species on the basis of data presented by Hedges (1986, Syst. Zool. 35: 1–21). Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) confirmed that *P. kalmi* and *P. feriarum* are distinct species although the contact zone between these taxa is poorly understood.

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrita* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hylliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

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P. maculata (Agassiz 1850) – Boreal Chorus Frog

Considered a species distinct from *P. triseriata* by Platz (1989, Copeia 1989: 704–712). Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the geographic limits of this species although the evidence based only on mitochondrial DNA variation was not accepted by Green et al. (2013, N.A. Amphibians). Reviewed by Dodd (2013, Frogs U.S. and Canada, 1: 371–384).

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrita* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hylliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

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P. nigrita (Leconte 1825) – Southern Chorus Frog

Reviewed by Gates (1988, Cat. Am. Amph. Rept. 416), Leja (2005, in Lannoo, M. [ed.], Amph. Declines: 474–475), and Dodd (2013, Frogs U.S. and Canada, 1: 385–390). Subspecies rejected by Moriarty and Cannatella (2004, Mol. Phylogenet. Evol. 30: 409–420).

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrita* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hylliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

P. ocularis (Bosc and Daudin 1801) – Little Grass Frog

Reviewed by Franz and Chantell (1978, Cat. Am. Amph. Rept. 209, as *Limnaoedus ocularis*), Jensen, (2005, in Lannoo, M. [ed.], Amph. Declines: 475–477), and Dodd (2013, Frogs U.S. and Canada, 1: 391–395).

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrata* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hylliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

P. ornata (Holbrook 1836) – Ornate Chorus Frog

For discussion see Harper (1937, Am. Midl. Nat. 18: 260–272). Reviewed by Jensen (2005, in Lannoo, M. [ed.], Amph. Declines: 477–478), and Dodd (2013, Frogs U.S. and Canada, 1: 395–400).

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrata* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hylliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

P. regilla (Baird and Girard 1852) – Pacific Treefrog

Recuero et al. (2006, Mol. Phylogenet. Evol. 39: 293–304) redelimited this species and revised its range. Rorabaugh and Lannoo (2005, in Lannoo, M. [ed.], Amph. Declines: 478–484) provided a detailed account that summarized the literature (in the sense of including *Pseudacris sierra* and *Pseudacris hypochondriaca*). Dodd (2013, Frogs U.S. and Canada, 1: 400–416) also provided a review.

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrata* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hylliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

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P. sierra (Jameson, Mackey, and Richmond 1966) – Sierran Treefrog

Recognized as distinct from *P. regillaby* Recuero et al. (2006, Mol. Phylogenet. Evol. 39: 293–304; 2006, Mol. Phylogenet. Evol. 41: 511). See comment under *P. hypochondriaca*

Note on genus:

Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the *P. nigrita* group (*P. brimleyi*, *P. brachyphona*, *P. clarkii*, *P. feriarum*, *P. kalmi*, *P. maculata*, and *P. triseriata* and an unnamed species, which was subsequently named as *Pseudacris fouquettei*). Fouquette and Dubois (2014, Checklist N.A. Amph. Rept.) deployed a system of subgenera based on the work of Lemmon et al., placing the eastern species in the subgenus *Pseudacris* and the western members (*P. cadaverina*, *P. hypochondriaca*, *P. regilla*, and *P. sierra*) in the subgenus *Hyliola*, and the species *P. ocularis* and *P. crucifer* in the subgenus *Limnaoedus* but we have not adopted subgenera in this list.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

P. streckeri Wright and Wright 1933 – Strecker's Chorus Frog

Reviewed by Smith (1966, Cat. Am. Amph. Rept. 27), and Shepard, Brown, and Butterfield, (2005, in Lannoo, M. [ed.], Amph. Decline: 484–485) provided reviews in the sense of including *Pseudacris illinoensis*. Dodd (2013, Frogs U.S. and Canada, 1: 416–421) also provided a review. See comment under *Pseudacris illinoensis*.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

P. triseriata (Wied-Neuwied 1838) – Western Chorus Frog

See comment under *P. maculata*. Lemmon et al. (2007, Mol. Phylogenet. Evol. 44: 1068–1082) revised the geographic limits of this species based on mitochondrial DNA evidence. Dodd (2013, Frogs U.S. and Canada, 1: 421–428) reviewed the species.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

Rana Linnaeus 1758

R. aurora Baird and Girard 1852 – Northern Red-Legged Frog

Reviewed by Altig and Dumas (1972, Cat. Am. Amph. Rept. 160, in the sense of including *R. draytonii*), Pearl (2005, in Lannoo, M. [ed.], Amph. Declines: 528–530), and Dodd (2013, Frogs U.S. and Canada, 2 : 687–697). Evidence of the distinctiveness of this species from *R. draytonii* was provided by Hayes and Miyamoto (1984, Copeia 1984: 1018–1022), Shaffer et al. (2004, Mol. Phylogenet. Evol. 13: 2667–2677), Conlon et al. (2006, Peptides 27: 1305–1312), and Pauly et al. (2008, J. Herpetol. 42: 668–679).

Note on genus:

This large taxon of predominantly Eurasian frogs was redelimited by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297, and Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) to exclude a number of taxa (e.g., *Lithobates*, *Glandirana*, *Odorrana*, *Pelophylax*). See *Lithobates* for most North American species formerly associated with *Rana* and comments regarding taxonomy.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

R. boylei Baird 1854 – Foothill Yellow-Legged Frog

Reviewed by Zweifel (1968, Cat. Am. Amph. Rept. 71), Fellers (2005, in Lannoo, M. [ed.], Amph. Declines: 534–536), and Dodd (2013, Frogs U.S. and Canada, 2 : 697–707). Molecular study of geographic variation of this rapidly disappearing species should prove illuminating.

Note on genus:

This large taxon of predominantly Eurasian frogs was redelimited by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297, and Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) to exclude a number of taxa (e.g., *Lithobates*, *Glandirana*, *Odorrana*, *Pelophylax*). See *Lithobates* for most North American species formerly associated with *Rana* and comments regarding taxonomy.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

R. cascadae Slater 1939 – Cascades Frog

Reviewed by Altig and Dumas (1971, Cat. Am. Amph. Rept. 105), Pearl and Adams (2005, in Lannoo, M. [ed.], Amph. Declines: 538–540), and Dodd (2013, Frogs U.S. and Canada, 2 : 707–715). The disjunct populations should be investigated with respect to call and molecular parameters.

Note on genus:

This large taxon of predominantly Eurasian frogs was redelimited by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297, and Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) to exclude a number of taxa (e.g., *Lithobates*, *Glandirana*, *Odorrana*, *Pelophylax*). See *Lithobates* for most North American species formerly associated with *Rana* and comments regarding taxonomy.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

R. draytonii Baird and Girard 1852 – California Red-Legged Frog

See comment under *R. aurora*. Reviewed by Fellers (2005, in Lannoo, M. [ed.], Amph. Declines: 552–554) and Dodd (2013, Frogs U.S. and Canada, 2 : 715–722).

Note on genus:

This large taxon of predominantly Eurasian frogs was redelimited by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297, and Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) to exclude a number of taxa (e.g., *Lithobates*, *Glandirana*, *Odorrana*, *Pelophylax*). See *Lithobates* for most North American species formerly associated with *Rana* and comments regarding taxonomy.

R. luteiventris Thompson 1913 – Columbia Spotted Frog

Green et al. (1996, Evolution 50: 374–390) and Cuellar (1996, Biogeographica 72: 145–150) suggested that *R. pretiosa* was composed of two sibling species. Subsequently Green et al. (1997, Copeia 1997: 1–8) recognized the eastern and northern form, *R. luteiventris*, as a species distinct from *R. pretiosa*. Reviewed by Reaser and Pilliod (2005, in Lannoo, M. [ed.], Amph. Declines: 559–563) and Dodd (2013, Frogs U.S. and Canada, 2: 723–732).

Note on genus:

This large taxon of predominantly Eurasian frogs was redelimited by Frost et al. (2006, Bull. Am. Mus. Nat. Hist., 297, and Che et al. (2007, Mol. Phylogenet. Evol. 42: 1–13) to exclude a number of taxa (e.g., *Lithobates*, *Glandirana*, *Odorrana*, *Pelophylax*). See *Lithobates* for most North American species formerly associated with *Rana* and comments regarding taxonomy.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

R. muscosa Camp 1917 – Southern Mountain Yellow-legged Frog

Reviewed by Zweifel (1968, Cat. Am. Amph. Rept. 65), Vredenburg, Fellers, and Davidson (2005, in Lannoo, M. [ed.], Amph. Declines: 563–566), and Dodd (2013, Frogs U.S. and Canada, 2 : 733–739). Vredenburg et al. (2007, J. Zool. 271: 361–374) discussed the systematics of this species and its disappearance from large parts of its former range.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

R. pretiosa Baird and Girard 1853 – Oregon Spotted Frog

See comment under *R. luteiventris*. Reviewed by Pearl and Hayes (2005, in Lannoo, M. [ed.], Amph. Declines: 577–580) and Dodd (2013, Frogs U.S. and Canada, 2 : 739–747).

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

R. sierrae Camp 1917 – Sierra Nevada Yellow-legged Frog

Vredenburg et al. (2007, J. Zool. 271: 361–374) recognized this species as distinct from *R. muscosa*. Reviewed by Dodd (2013, Frogs U.S. and Canada, 2 : 747–752).

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

Rhinella Fitzinger 1826

R. marina (Linnaeus 1758) – Cane Toad

Reviewed by Easteal (1986, Cat. Am. Amph. Rept. 395, as *Bufo marinus*). Hero and Stoneham (2005, in Lannoo, M. [ed.], Amph. Declines: 417–422, as *Bufo marinus*) and Dodd (2013, Frogs U.S. and Canada, 1: 186–191), provided a detailed account for the USA. Vallinoto et al. (2010, Zool. Scripta 39: 128–140) provided molecular evidence that the North and Central American population may be a distinct species from the South American populations (at least one of which bears the name *R. marina*), which suggests that the name applied to the USA population likely will change as relationships become more clear.

Note on genus:

This genus of predominantly South American toads was redelimited by Chaparro et al. (2007, Herpetologica 63: 203–212) to reflect the phylogenetic results of Pramuk (2006, Zool. J. Linn. Soc. 146: 407–452). Van Bocxlaer et al. (2010, Science 327: 679–682) suggested that *Rhinella* is only distantly related to North American toads of the genera *Incilius* and *Anaxyrus*. See comment under *Anaxyrus*, regarding the treatment of this genus as a subgenus by some.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

Rhinophrynus Dum 1841

R. dorsalis Dum 1841 – Burrowing Toad

Geographic variation has not been studied in any detail and cryptic lineages are a possibility. Reviewed by Fouquette (1969, Cat. Am. Amph. Rept. 78) and Fouquette (2005, in Lannoo, M. [ed.], Amph. Declines: 599–600).

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

Scaphiopus Holbrook 1836

S. couchii Baird 1854 – Couch's Spadefoot

Reviewed by Wasserman (1970, Cat. Am. Amph. Rept. 85), Morey (2005, in Lannoo, M. [ed.], Amph. Declines: 508–511), and Dodd (2013, Frogs U.S. and Canada, 2 : 753–760). Geographic variation is poorly documented.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

S. holbrookii (Harlan 1835) – Eastern Spadefoot

Reviewed by Wasserman (1968, Cat. Am. Amph. Rept. 70, as *Scaphiopus h. holbrookii*), Palis (2005, in Lannoo, M. [ed.], Amph. Declines: 511–512), and Dodd (2013, Frogs U.S. and Canada, 2: 772–776).

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

S. hurterii Strecker 1910 – Hurter's Spadefoot

Reviewed by Wasserman (1968, Cat. Am. Amph. Rept. 70, as *Scaphiopus holbrookii hurterii*), briefly by Lannoo (2005, in Lannoo, M. [ed.], Amph. Declines: 512–513), and Dodd (2013, Frogs U.S. and Canada, 2: 772–776).

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

Smilisca Cope 1865

S. baudinii (Dum 1841) – Mexican Treefrog

Reviewed by Duellman (1968, Cat. Am. Amph. Rept. 59), Malone (2005, in Lannoo, M. [ed.], Amph. Declines: 489–491), and Dodd (2013, Frogs U.S. and Canada, 1: 431–435).

Note on genus:

The content of this taxon was redelimited by Faivovich et al. (2005, Bull. Am. Mus. Nat. Hist. 294) to include former *Pternohyla*.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

S. fodiens (Boulenger 1882) – Lowland Burrowing Treefrog

Reviewed by Trueb (1969, Cat. Am. Amph. Rept. 77, as *Pternohyla fodiens*), Sredl (2005, in Lannoo, M. [ed.], Amph. Declines: 488–489), and Dodd (2013, Frogs U.S. and Canada, 1: 428–431).

Note on genus:

The content of this taxon was redelimited by Faivovich et al. (2005, Bull. Am. Mus. Nat. Hist. 294) to include former *Pternohyla*.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

S. bombifrons (Cope 1863) – Plains Spadefoot

Known to hybridize with *S. multiplicata* in parts of their ranges (Brown, 1976, Contrib. Sci. Nat. Hist. Mus. Los Angeles Co. 286). Geographic variation is poorly documented. Reviewed by Farrar and Hey (2005, in Lannoo, M. [ed.], Amph. Declines: 513–514) and Dodd (2013, Frogs U.S. and Canada, 2: 777–785).

Note on genus:

Tanner (1989, Great Basin Nat. 49: 38–70) and Wiens and Titus (1991, Herpetologica 47: 21–28) recognized *Spea* as distinct from *Scaphiopus*, within which it was previously regarded as a subgenus.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

S. hammondi (Baird 1859 "1857") – Western Spadefoot

This name formerly covered populations now referred to *S. multiplicata* and *S. intermontana* until separated by Brown (1976, Contrib. Sci. Nat. Hist. Mus. Los Angeles Co. 286). See Tanner (1989, Great Basin Nat. 49: 503–510) for discussion, although he continued to retain these species as subspecies of *S. hammondi*, a position rejected by Wiens and Titus (1991, Herpetologica 47: 21–38). Reviewed by Morey (2005, in Lannoo, M. [ed.], Amph. Declines: 514–517) and Dodd (2013, Frogs U.S. and Canada, 2: 786–790).

Note on genus:

Tanner (1989, Great Basin Nat. 49: 38–70) and Wiens and Titus (1991, Herpetologica 47: 21–28) recognized *Spea* as distinct from *Scaphiopus*, within which it was previously regarded as a subgenus.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

S. intermontana (Cope 1863) – Great Basin Spadefoot

Geographic variation very poorly documented, and, according to evidence provided by Titus and Wiens (1991, Herpetologica 47: 21–29), this nominal species may be a paraphyletic composite of at least two species. Reviewed by Hall (1999, Cat. Am. Amph. Rept. 650), Morey (2005, in Lannoo, M. [ed.], Amph. Declines: 517–519), and Dodd (2013, Frogs U.S. and Canada, 2: 791–797).

Note on genus:

Tanner (1989, Great Basin Nat. 49: 38–70) and Wiens and Titus (1991, Herpetologica 47: 21–28) recognized *Spea* as distinct from *Scaphiopus*, within which it was previously regarded as a subgenus.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

S. multiplicata (Cope 1863) – Mexican Spadefoot

Considered a species distinct from *S. hammondi* by Brown (1976, Contrib. Sci. Nat. Hist. Mus. Los Angeles Co. 286) and by Titus and Wiens (1991, Herpetologica 47: 21–28). Regarded, on the basis of overall similarity and paleoclimatic inference to be conspecific with *S. hammondi* by Van Devender, Mead, and Rea (1991, Southwest. Nat. 36: 302–314) and by Tanner (1989, Great Bas. Nat. 49: 503–510). Tanner recognized *S. h. stagnalis* Cope as the northern (Arizona to central Chihuahua) subspecies of his *Spea hammondi*, though the phylogenetic evidence presented by Titus and Wiens indicated it to be part of *S. multiplicata*. Geographic variation has not been carefully studied and cryptic species are possible. Reviewed by Morey (2005, in Lannoo, M. [ed.], Amph. Declines: 519–522) and Dodd (2013, Frogs U.S. and Canada, 2: 798–806).

Note on genus:

Tanner (1989, Great Basin Nat. 49: 38–70) and Wiens and Titus (1991, Herpetologica 47: 21–28) recognized *Spea* as distinct from *Scaphiopus*, within which it was previously regarded as a subgenus.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

S. multiplicata stagnalis (Cope 1875) – Chihuahuan Desert Spadefoot

See comment in *S. multiplicata*.

Note on genus:

Tanner (1989, Great Basin Nat. 49: 38–70) and Wiens and Titus (1991, Herpetologica 47: 21–28) recognized *Spea* as distinct from *Scaphiopus*, within which it was previously regarded as a subgenus.

Darrel R. Frost, David M. Green, Emily Moriarty Lemmon, Roy W. McDiarmid, and Joseph R. Mendelson III, 2014-12-22

Xenopus Wagler 1827

X. laevis (Daudin 1802) – African Clawed Frog

Alien Species:

The African Clawed Frog is native to southern Africa, has been reported from nine states, and is established in Arizona and California.

Fred Kraus, 2015-01-19

Caudata – Salamanders

Ambystoma Tschudi 1838

A. annulatum Cope 1886 – Ringed Salamander

A. barbouri Kraus and Pentaka 1989 – Streamside Salamander

A. bishopi Goin 1950 – Reticulated Flatwoods Salamander

Pauly, Piskurek and Shaffer (2006, Mol. Ecol. 16: 415 - 429) recognized western populations of *A. cingulatum* as a distinct species. They inadvertently reversed the proposed vernacular name with that for *A. cingulatum*.

Stephen G. Tilley (Chair), Richard Highton, David B. Wake, 2014-07-10

A. californiense Gray 1853 – California Tiger Salamander

A. cingulatum Cope 1868 – Frosted Flatwoods Salamander

Pauly, Piskurek and Shaffer (2006, Mol. Ecol. 16: 415 - 429) recognized western populations of *A. cingulatum* as a distinct species (*A. bishopi*) and proposed a new vernacular name for this species. They inadvertently reversed the proposed vernacular name with that for *A. bishopi*.

Stephen G. Tilley (Chair), Richard Highton, David B. Wake, 2014-07-10

A. gracile (Baird 1859) – Northwestern Salamander

A. jeffersonianum (Green 1827) – Jefferson Salamander

Taxonomic recognition of asexual forms that combine genomes of this species, *A. laterale*, *A. texanum*, and *A. tigrinum* raises complex issues. These include discordance between cytoplasmic and nuclear genes, reticulate evolution, and genome - swapping (Bogart, 2003, in Sever, D.M. [ed.], Reproductive Biology and Phylogeny of Urodela, Science Publishers, Inc., Pp. 109-134). Bi and Bogart (2010, BMC Evol. Biol. 10: 238) confirm an ancient origin for the mitochondrial genome shared by asexual forms of this complex. Dubois and Rafaëlli (2012, Alytes 28: 77–161) resurrected the name *platineum* for the asexual forms.

Stephen G. Tilley (Chair), Richard Highton, David B. Wake, 2014-07-10

A. laterale Hallowell 1856 – Blue-Spotted Salamander

Taxonomic recognition of asexual forms that combine genomes of this species, *A. laterale*, *A. texanum*, and *A. tigrinum* raises complex issues. These include discordance between cytoplasmic and nuclear genes, reticulate evolution, and genome-swapping (Bogart, 2003, in Sever, D.M. [ed.], Reproductive Biology and Phylogeny of Urodela, Science Publishers, Inc., Pp. 109–134). Bi and Bogart (2010, BMC Evol. Biol. 10: 238) confirm an ancient origin for the mitochondrial genome shared by asexual forms of this complex. Dubois and Rafaëlli (2012, Alytes 28: 77–161) resurrected the name *platineum* for the asexual forms.

Stephen G. Tilley (Chair), Richard Highton, David B. Wake, 2014-07-10

A. mabeei Bishop 1928 – Mabee's Salamander

A. macrodactylum Baird 1850 – Long-Toed Salamander

A. macrodactylum columbianum Ferguson 1961 – Eastern Long-Toed Salamander

A. macrodactylum croceum Russel and Anderson 1956 – Santa Cruz Long-toed Salamander

A. macrodactylum krausei Peters 1882 – Northern Long-Toed Salamander

A. macrodactylum macrodactylum Baird 1850 – Western Long-Toed Salamander

A. macrodactylum sigillatum Ferguson 1961 – Southern Long-Toed Salamander

A. maculatum (Shaw 1802) – Spotted Salamander

A. mavortium Baird 1850 '1849' – Western Tiger Salamander

Shaffer and McKnight (1996, *Evolution* 50: 417–433) provided molecular data indicating that the eastern and western tiger salamanders should be regarded as distinct species, and treated the western forms as subspecies of *Ambystoma mavortium*. Lannoo (2005, in Lannoo M., [ed.], *Amphibian Declines, Status of United States Species*, Univ. California Press, Pp. 636–639) includes *A. mavortium* in *A. tigrinum*.

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A. mavortium diaboli Dunn 1940 – Gray Tiger Salamander

A. mavortium mavortium Baird 1850 "1849" – Barred Tiger Salamander

A. mavortium melanostictum Baird 1860 – Blotched Tiger Salamander

A. mavortium nebulosum Hallowell 1853 – Arizona Tiger Salamander

A. mavortium stebbinsi Lowe 1954 – Sonoran Tiger Salamander

A. opacum (Gravenhorst 1807) – Marbled Salamander

A. talpoideum (Holbrook 1838) – Mole Salamander

A. texanum (Matthes 1855) – Small-Mouthed Salamander

A. tigrinum (Green 1825) – Eastern Tiger Salamander

Shaffer and McKnight (1996, *Evolution* 50: 417–433) provided molecular data indicating that the eastern and western tiger salamanders should be regarded as distinct species, and treated the western forms as subspecies of *Ambystoma mavortium*. Lannoo (2005, in Lannoo M., [ed.], *Amphibian Declines, Status of United States Species*, Univ. California Press, Pp. 636–639) includes *A. mavortium* in *A. tigrinum*.

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Amphiuma Garden 1821

A. means Garden 1821 – Two-Toed Amphiuma

A. pholeter Neill 1964 – One-Toed Amphiuma

A. tridactylum Cuvier 1827 – Three-Toed Amphiuma

Aneides Baird 1851

A. aeneus (Cope and Packard 1881) – Green Salamander

A. ferreus Cope 1869 – Clouded Salamander

A. flavipunctatus (Strauch 1870) – Black Salamander

Rissler and Apodaca (2007, Syst. Biol. 56: 924–942) conclude, on the basis of mitochondrial DNA phylogeography and ecological niche modeling, that this taxon should be subdivided into two or more species. Dubois and Raffaelli (2012, Alytes 28: 77–161) formally recognize *A. iecanus* Cope, 1883, *niger* Myers and Maslin, 1948, and a *nomen nudum*, "sequoiensis" Lowe, 1950, the latter based on an unpublished thesis. Reilly et al. (2013, Diversity 5: 657–679) used nuclear and mitochondrial DNA to show that northern populations in the Klamath, Smith and Rogue River drainages are genetically distinct from other populations but made no taxonomic changes. Raffaelli (2013, Les Urodèles du Monde, 2e edition, Penclen Édition, France – no city given) recognizes *A. niger* and *A. iecanus* (although diacritical marks are not to be used in scientific names), and also refers to an unnamed subspecies of *A. flavipunctatus* that he formerly treated as "sequoiensis" by the French vernacular name "Anéides noir de l'Est". Furthermore, he refers to the populations identified by Reilly et al. (2012, Molec. Ecol. 2012: 5745–5761) as an unnamed species, to which he applies the French vernacular name "Anéides noir du Nord". Fouquette and Dubois (2014, A Checklist of North American Amphibians and Reptiles, The United States and Canada, Seventh Edition, Vol. 1 – Amphibians, Xlibris, San Bernardino, CA, 613 p.) do not recognize the subspecies listed below. Studies in progress will clarify the taxonomy of this complex.

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A. flavipunctatus flavipunctatus Strauch 1870 – Speckled Black Salamander

A. flavipunctatus niger Myers and Maslin 1948 – Santa Cruz Black Salamander

A. hardii (Taylor 1941) – Sacramento Mountain Salamander

A. lugubris (Hallowell 1849) – Arboreal Salamander

A. vagrans Wake and Jackman 1999 – Wandering Salamander

Batrachoseps Bonaparte 1839

B. altasierrae Jockusch, Martinez-Solano, Hansen and Wake 2012 – Greenhorn Mountains Slender Salamander

B. attenuatus (Eschscholtz 1833) – California Slender Salamander

This species is highly differentiated with respect to mitochondrial DNA and Martinéz-Solano et al. (2007, Molec. Ecol., 16: 4335 - 4355) recognized five major clades. Highton (2014, Molec. Phylo. and Evol., 71: 127 - 141), using only the mtDNA data, suggested that as many as 39 species should be recognized.

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B. bramei Jockusch, Yanev, and Wake 2012 – Fairview Slender Salamander

B. campi Marlow, Brode and Wake 1979 – Inyo Mountain Salamander

B. diabolicus Jockusch, Yanev, and Wake 1998 – Hell Hollow Slender Salamander

B. gabrieli Wake 1996 – San Gabriel Mountains Slender Salamander

B. gabilanensis Jockusch, Yanev, and Wake 2001 – Gabilan Mountains Salamander

B. gregarius Jockusch, Yanev, and Wake 1998 – Gregarious Slender Salamander

B. incognitus Jockusch, Yanev, and Wake 2001 – San Simeon Slender Salamander

B. kawia Jockusch, Yanev, and Wake 1998 – Sequoia Slender Salamander

B. luciae Jockusch, Yanev, and Wake 2001 – Santa Lucia Mountain Slender Salamander

B. major Camp 1915 – Southern California Slender Salamander

Fouquette and Dubois (2014, A Checklist of North American Amphibians and Reptiles, The United States and Canada, Seventh Edition, Vol. 1 – Amphibians, Xlibris, San Bernardino, CA, 613 p.) follow Hansen and Wake (2005, in Lannoo M., [ed.], Amphibian Declines, Status of United States Species, Univ. California Press, Pp. 666–667) in treating this form as a full species. The status of this taxon is considered in Martínez-Solano et al. (2012, Mol. Phylog. Evol. 63: 131–149), who document discordance between nuclear and mitochondrial sequence data in *B. major*. *B. m. aridus* is one of six clades of “southern” major with mtDNA data, but “northern” and “southern” components of major are not supported by data from nuclear genes.

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B. major aridus Brame 1970 – Desert Slender Salamander

Fouquette and Dubois (2014, A Checklist of North American Amphibians and Reptiles, The United States and Canada, Seventh Edition, Vol. 1 – Amphibians, Xlibris, San Bernardino, CA, 613 p.) follow Hansen and Wake (2005, in Lannoo M., [ed.], Amphibian Declines, Status of United States Species, Univ. California Press, Pp. 666–667) in treating this form as a full species. The status of this taxon is considered in Martínez-Solano et al. (2012, Mol. Phylog. Evol. 63: 131–149), who document discordance between nuclear and mitochondrial sequence data in *B. major*. *B. m. aridus* is one of six clades of “southern” major with mtDNA data, but “northern” and “southern” components of major are not supported by data from nuclear genes.

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B. major major Camp 1915 – Garden Salamander

Fouquette and Dubois (2014, A Checklist of North American Amphibians and Reptiles, The United States and Canada, Seventh Edition, Vol. 1 – Amphibians, Xlibris, San Bernardino, CA, 613 p.) follow Hansen and Wake (2005, in Lannoo M., [ed.], Amphibian Declines, Status of United States Species, Univ. California Press, Pp. 666–667) in treating this form as a full species. The status of this taxon is considered in Martínez-Solano et al. (2012, Mol. Phylog. Evol. 63: 131–149), who document discordance between nuclear and mitochondrial sequence data in *B. major*. *B. m. aridus* is one of six clades of “southern” major with mtDNA data, but “northern” and “southern” components of major are not supported by data from nuclear genes

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B. minor Jockusch, Yanev, and Wake 2001 – Lesser Slender Salamander

B. nigriventris Cope 1869 – Black- Bellied Slender Salamander

B. pacificus (Cope 1865) – Channel Islands Slender Salamander

B. regius Jockusch, Yanev, and Wake 1998 – Kings River Slender Salamander

B. relictus Brame and Murray 1968 – Relictual Slender Salamander

B. robustus Wake and Jackman 2002 – Kern Plateau Salamander

B. simatus Brame and Murray 1968 – Kern Canyon Slender Salamander

B. stebbinsi Brame and Murray 1968 – Tehachapi Slender Salamander

B. wrighti (Bishop 1937) – Oregon Slender Salamander

Cryptobranchus Leuckart 1821

C. alleganiensis (Daudin 1803) – Hellbender

C. alleganiensis alleganiensis Daudin 1803 – Eastern Hellbender

C. alleganiensis bishopi Grobman 1943 – Ozark Hellbender

Collins (1991, Herpet. Rev. 22: 42–43) elevated this form to species status. Molecular data presented by Crowhurst et al. (2011, Cons. Genet. 12: 637–646) are ambiguous with respect to taxonomy.

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Desmognathus Baird 1850

D. abditus Anderson and Tilley 2003 – Cumberland Dusky Salamander

D. aeneus Brown and Bishop 1947 – Seepage Salamander

D. apalachicola Means and Karlin 1989 – Apalachicola Dusky Salamander

D. auriculatus (Holbrook 1838) – Southern Dusky Salamander

Divergent mitochondrial DNA lineages occur among Atlantic Coastal Plain populations that are morphologically assignable to this species. These lineages do not comprise a monophyletic unit (Beamer and Lamb, 2008, Mol. Phylogenet. Evol. 47: 143–153).

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D. brimleyorum Stejneger 1895 – Ouachita Dusky Salamander

D. carolinensis Dunn 1916 – Carolina Mountain Dusky Salamander

Tilley et al. (2013, Ecol. and Evol., 3: 2547–2567) reported on a molecularly distinctive form in the southern Bald Mountains and northern foothills of the Great Smoky Mountains that is phenotypically indistinguishable from this species. This form appears to hybridize with both *D. carolinensis* and *D. santeetlah* in the Blue Ridge Physiographic Province, and with an innominate lowland form further west in the Ridge and Valley Physiographic Province.

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D. conanti Rossman 1958 – Spotted Dusky Salamander

Populations in the Ridge and Valley Physiographic Province of eastern Tennessee appear to hybridize with this form but Tilley et al. (2013, *Ecol. and Evol.*, 3: 2547–2567) declined to assign them to *D. conanti* due to their unique mitochondrial haplotypes.

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D. folkertsii Camp, Tilley, Austin, and Marshall 2002 – Dwarf Black-Bellied Salamander

D. fuscus (Rafinesque 1820) – Northern Dusky Salamander

Molecular data suggest deep differentiation among populations that morphologically resemble *D. fuscus* (Bonett, 2002, *Copeia* 2002: 344–355; Kozak, et al., 2005, *Evolution* 59: 2000–2016), and additional species almost certainly await resolution.

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D. imitator Dunn 1927 – Imitator Salamander

D. marmoratus (Moore 1899) – Shovel-Nosed Salamander

Molecular data indicate that this taxon and *D. quadramaculatus* may not be reciprocally monophyletic (Rissler and Taylor, 2003, *Mol. Phylogenet. Evol.* 27: 197–211; Kozak, et al., 2005, *Evolution* 59: 2000–2016; Jones et al. 2006, *Mol. Phylogenet. Evol.* 38: 280–287; Wooten and Rissler, 2011, *Acta Herpetol.* 6: 175–208). None of these studies propose taxonomic revisions but Dubois and Rafaëlli (2012, *Alytes* 28: 77–161) and Fouquette and Dubois (2014, *A Checklist of North American Amphibians and Reptiles, The United States and Canada, Seventh Edition, Vol. 1 – Amphibians*, Xlibris, San Bernardino, CA, 613 p.) resurrect two taxa, *D. aureatus* and *D. melanius*, from synonymy under this species (Martof, 1962, *Am. Midl. Nat.*, 67: 30).

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D. monticola Dunn 1916 – Seal Salamander

D. ochrophaeus Cope 1859 – Allegheny Mountain Dusky Salamander

D. ocoee Nicholls 1949 – Ocoee Salamander

This form consists of numerous parapatric units that occupy different mountain ranges in the southern Blue Ridge and Cumberland Plateau physiographic provinces and probably represent distinct species (Tilley and Mahoney, 1996, *Herpetol. Monogr.* 10: 1–42; Tilley, 1997, *J. Heredity* 88: 305–315; Highton, 2000, in R. C. Bruce, B. G. Jaeger and L. D. Houck [eds.], *The Biology of Plethodontid Salamanders*. Kluwer Academic/Plenum Publishers, New York, Pp. 215–241).

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D. orestes Tilley and Manhoney 1996 – Blue Ridge Dusky Salamander

This taxon consists of two genetically differentiated units that may represent cryptic species (Tilley and Mahoney, 1996, *Herpetol. Monogr.* 10: 1–42; Tilley, 1997, *J. Heredity* 88: 305–315; Highton, 2000, in R. C. Bruce, B. G. Jaeger and L. D. Houck [eds.], *The Biology of Plethodontid Salamanders*. Kluwer Academic/Plenum Publishers, New York, pp. 215–241).

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D. organi Crespi, Brown, and Rissler 2010 – Northern Pygmy Salamander

D. planiceps Newman 1955 – Flat-Headed Salamander

Removed from synonymy under *D. fuscus* (Martof and Rose, 1962, Copeia, 1962: 215–216) by Tilley, Eriksen, and Katz (2008, Zool. J. Linnean Soc. 152: 115–130).

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D. quadramaculatus (Holbrook 1840) – Black-Bellied Salamander

D. santeetlah Tilley 1981 – Santeetlah Dusky Salamander

D. welteri Barbour 1950 – Black Mountain Salamander

D. wrighti King 1936 – Pygmy Salamander

Dicamptodon Strauch 1870

D. aterrimus (Cope 1868) – Idaho Giant Salamander

D. copei Nussbaum 1970 – Cope's Giant Salamander

D. ensatus (Eschscholtz 1833) – California Giant Salamander

D. tenebrosus (Baird and Girard 1852) – Coastal Giant Salamander

Ensatina Gray 1850

E. eschscholtzii Gray 1850 – Ensatina

The taxonomy of this complex is controversial. Some authors would recognize from two (e.g., Frost and Hillis, 1990, Herpetologica 46: 87–104) to as many as 11 or more species (e.g., Highton, 1998, Herpetologica 54: 254–278), whereas others (e.g., Wake, 1997, Proc. Natl. Acad. Sci. USA, 94: 7761–7767; Wake and Schneider, 1998, Herpetologica 54: 279–298; Pereira and Wake, 2009, Evolution 68: 2288–2301) consider evidence for evolutionary independence of segments of the complex to be inadequate or equivocal. Narrow hybrid zones have been demonstrated to exist between populations assigned to the subspecies *xanthoptica* and *platensis*, and between *klauberi* and *eschscholtzii*, and one site of sympatry with no hybridization between the latter pair has been reported (Wake et al., 1989, in D. Otte and J. A. Endler, [eds.], Speciation and its Consequences, Sinauer, Pp. 134–157). Broader zones of genetic admixture and reticulation between units of the complex in many areas raise questions about evolutionary independence, and borders of taxa are elusive.

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E. eschscholtzii croceater (Cope 1868) – Yellow-Blotched Ensatina

E. eschscholtzii eschscholtzii Gray 1850 – Monterey Ensatina

E. eschscholtzii klauberi Dunn 1929 – Large-Blotched Ensatina

E. eschscholtzii oregonensis (Girard 1865) – Oregon Ensatina

E. eschscholtzii picta Wood 1940 – Painted Ensatina

E. eschscholtzii platensis (Jimenez De Al Espada 1875) – Sierra Nevada Ensatina

E. eschscholtzii xanthoptica Stebbins 1949 – Yellow- Eyed Ensatina

Eurycea Rafinesque 1822

E. aquatica Rose and Bush 1863 – Brown-Backed Salamander

E. bislineata (Green 1818) – Northern Two-Lined Salamander

E. chamberlaini Harrison and Guttman 2003 – Chamberlain's Dwarf Salamander

E. chisholmensis Chippindale, Price, Wiens, and Hillis 2000 – Salado Salamander

E. cirrigera (Green 1831) – Southern Two-Lined Salamander

E. guttolineata (Holbrook 1838) – Three-Lined Salamander

E. junaluska Sever, Dundee and Sullivan 1976 – Junaluska Salamander

E. latitans Smith and Potter 1946 – Cascade Caverns Salamander

E. longicauda (Green 1818) – Long-Tailed Salamander

E. longicauda longicauda (Green 1818) – Eastern Long-Tailed Salamander

E. longicauda melanopleura (Cope 1894) – Dark-Sided Salamander

E. lucifuga Rafinesque 1822 – Cave Salamander

E. multiplicata Cope 1822 – Many-Ribbed Salamander

Formerly subdivided into the subspecies *E. m. griseogaster* and *E. m. multiplicata*. Biochemical data indicate that populations assigned to *E. m. griseogaster* are conspecific with *E. tynerensis*, while those of the nominate subspecies fall into two or three divergent clades that may represent distinct species (Bonett and Chippindale, 2004, Mol. Ecol. 13: 1189–1203).

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E. nana Bishop 1941 – San Marcos Salamander

E. naufragia Chippindale, Price, Wiens, and Hillis 2000 – Georgetown Salamander

E. neotenes Bishop and Wright 1937 – Texas Salamander

E. pterophila Burger, Smith, and Potter 1950 – Fern Bank Salamander

E. quadridigitata (Holbrook 1842) – Dwarf Salamander

E. rathbuni (Stejneger 1896) – Texas Blind Salamander

E. robusta (Longley 1978) – Blanco Bind Salamander

E. sosorum Chippindale, Price, and Hillis 1993 – Barton Springs Salamander

E. spelaea Stejneger 1892 – Grotto Salamander

E. subfluvicola Steffen, Irwin, Blair, and Bonett 2014 – Ouachita Streambed Salamander

E. tonkawae Chippindale, Price, Wiens, and Hillis 2000 – Jollyville Plateau Salamander

E. tridentifera Mitchell and Reddell 1965 – Cormal Blind Salamander

E. troglodytes Baker 1957 – Valdina Farms Salamander

E. tynerensis Moore and Hughes 1939 – Oklahoma Salamander

E. wallacei (Carr 1939) – Georgia Blind Salamander

This taxon was originally placed in the monotypic genus *Haideotriton*. It was considered a junior synonym of *Eurycea* by Dubois (2005, *Alytes* 23: 20) and shown to nest phylogenetically within *Eurycea* by Pyron and Wiens (2011, *Mol. Phylogenet. Evol.* 61: 543–583), and Bonnett, et al. (2013 [2014], *Evolution* 68: 466–482).

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E. waterlooensis Hillis, Chamberlain, Wilcox, and Chippindale 2001 – Austin Blind Salamander

E. wilderae Dunn 1920 – Blue Ridge Two-lined Salamander

Gyrinophilus Cope 1869

G. gulolineatus Brandon 1965 – Berry Cave Salamander

Niemiller, et al. (2008, *Molec. Ecol.* 17: 2258–2275) provide molecular evidence indicating that this form has diverged very recently from *G. porphyriticus* and is phylogenetically nested within populations referred to that species. Niemiller and Miller (2010, *Cat. of American Amph. and Rept.* 862: 1–4), Miller and Niemiller (2012, *Cat. of American Amph. and Rept.* 884: 1–7), and Raffaëlli (2013, *Les Urodèles du Monde*, 2e edition, Penclen Édition, France – no city given) treat the taxon as a full species, while Fouquette and Dubois (2014, *A Checklist of North American Amphibians and Reptiles, The United States and Canada, Seventh Edition, Vol. 1 – Amphibians*, Xlibris, San Bernardino, CA, 613 p.) treat it as a subspecies of *G. "porphoriticus"*. Bonnet, et al. (2013 [2014], *Evolution* 68: 466–482) treat it as a subspecies of *G. palleucus* in their trees but refer to it as a full species in their text. While closely related to *G. palleucus*, the taxon is distinguished from it in body proportions, osteology, colorations and some genetical aspects (Niemiller and Miller, 2010).

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G. palleucus Mccrady 1954 – Tennessee Cave Salamander

Fouquette and Dubois (2014, *A Checklist of North American Amphibians and Reptiles, The United States and Canada, Seventh Edition, Vol. 1 – Amphibians*, Xlibris, San Bernardino, CA, 613 p.) treat this taxon and its subspecies as subspecies of *G. porphyriticus*, citing a close relationship to a population of that species suggested in trees in Bonnet, et al. (2013 [2014], *Evolution* 68: 466–482). That relationship lacks strong statistical support and the latter authors drew no taxonomic conclusions.

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G. palleucus necturoides Lazell and Brandon 1962 – Big Mouth Cave Salamander

G. palleucus palleucus Mccrady 1954 – Pale Salamander

G. porphyriticus (Green 1827) – Spring Salamander

G. porphyriticus danielsi (Blatchley 1901) – Blue Ridge Spring Salamander

G. porphyriticus dunnii Mittleman and Jopson 1941 – Carolina Spring Salamander

G. porphyriticus duryi (Weller 1930) – Kentucky Spring Salamander

G. porphyriticus porphyriticus (Green 1827) – Northern Spring Salamander

G. subterraneus Besharse and Holsinger 1977 – West Virginia Salamander

Hemidactylium Tschudi 1838

H. scutatum (Temminck and Schlegel in Von Siebold 1838) – Four-Toed Salamander

Hydromantes Gistel 1848

H. brunus Gorman 1954 – Limestone Salamander

H. platycephalus (Camp 1916) – Mount Lyell Salamander

H. shastae Gorman and Camp 1953 – Shasta Salamander

Necturus Rafinesque 1819

N. alabamensis Viosca 1937 – Black Warrior River Waterdog

Raffaëlli (2013, *Les Urodèles du Monde*, 2e edition, Penclen Édition, France – no city given) and Fouquette and Dubois (2014, *A Checklist of North American Amphibians and Reptiles, The United States and Canada, Seventh Edition, Vol. 1 – Amphibians*, Xlibris, San Bernardino, CA, 613 p.) recognize *N. lodingi*, which we treat as a synonym of this form.

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N. beyeri Viosca 1937 – Gulf Coast Waterdog

According to Bart et al. (1997, *J. Herpetol.* 31: 192–201) this taxon may consist of more than one species.

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N. lewisi Brimley 1924 – Neuse River Waterdog

N. lodingi Viosca 1937 – Mobile Waterdog

Raffaëlli (2013, *Les Urodèles du Monde*, 2e edition, Penclen Édition, France – no city given) and Fouquette and Dubois (2014, *A Checklist of North American Amphibians and Reptiles, The United States and Canada, Seventh Edition, Vol. 1 – Amphibians*, Xlibris, San Bernardino, CA, 613 p.) recognize *N. lodingi* as a full species.

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N. louisianensis Viosca 1938 – Red River Waterdog

Collins (1991, *Herpet. Rev.* 22: 42–43), Raffaëlli (2013, *Les Urodèles du Monde*, 2e edition, Penclen Édition, France – no city given) and Fouquette and Dubois (2014, *A Checklist of North American Amphibians and Reptiles, The United States and Canada, Seventh Edition, Vol. 1 – Amphibians*, Xlibris, San Bernardino, CA, 613 p.) recognize *N. louisianensis* as a full species.

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N. maculosus (Rafinesque 1818) – Mudpuppy

N. punctatus (Gibbes 1850) – Dwarf Waterdog

Notophthalmus Rafinesque 1820

N. meridionalis (Cope 1880) – Black-Spotted Newt

N. meridionalis meridionalis Cope 1880 – Texas Black-Spotted Newt

N. perstriatus (Bishop 1941) – Striped Newt

N. viridescens (Rafinesque 1820) – Eastern Newt

N. viridescens dorsalis (Harlan 1828) – Broken-Striped Newt

N. viridescens louisianensis (Woltertorff 1914) – Central Newt

N. viridescens piaropicola (Schwartz and Duellman 1952) – Peninsula Newt

N. viridescens viridescens (Rafinesque 1820) – Red-Spotted Newt

Phaeognathus Highton 1961

P. hubrichti Highton 1961 – Red Hills Salamanders

Plethodon Tschudi 1838

P. ainsworthi Lazell 1998 – Bay Springs Salamander

This taxon is based on two poorly preserved specimens, one subsequently destroyed, from a single locality in south-central Mississippi. Himes and Beckett (2014, *Southeastern Naturalist* 12: 851–856) suggest that the taxon be treated as a synonym of *Plethodon mississippi*, based on their study of the holotype and their inability to find any *Plethodon* other than *P. mississippi* at the type locality.

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P. albagula Grobman 1944 – Western Slimy Salamander

There is molecular and morphological evidence for distinct evolutionary lineages within this taxon (Baird et al., 2006, *Copeia* 2006: 760–768; Davis and Pauly, 2011, *Copeia* 2011: 103–112).

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P. amplus Highton and Peabody 2000 – Blue Ridge Gray-checked Salamander

P. angusticlavius Grobman 1944 – Ozark Zigzag Salamander

P. asupak Mead, Clayton, Nauman, Olson and Pfrender 2005 – Scott Bar Salamander

P. aureolus Highton 1984 – Tellico Salamander

P. caddoensis Pope and Pope 1951 – Caddo Mountain Salamander

P. chatahoochee Highton 1989 – Chattahoochee Slimy Salamander

P. cheoah Highton and Peabody 2000 – Cheoah Bald Salamander

P. chlorobryonis Mittleman 1951 – Atlantic Coast Slimy Salamander

P. cinereus (Green 1818) – Eastern Red-Backed Salamander

P. cylindraceus (Harlan 1825) – White-spotted Slimy Salamander
P. dorsalis Cope 1889 – Northern Zigzag Salamander
P. dunni Allen and Neil 1949 – Dunn's Salamander
P. electromorphus Highton 1999 – Northern Ravine Salamander
P. elongatus Van Denburgh 1916 – Del Norte Salamander
P. fourchensis Duncan and Highton 1979 – Fourche Mountain Salamander
P. glutinosus (Green 1818) – Northern Slimy Salamander
P. grobmani Allen and Neil 1949 – Southeastern Slimy Salamander
P. hoffmani Highton 1972 – Valley & Ridge Salamander
P. hubrichti Thurow 1957 – Peaks of Otter Salamander
P. idahoensis Slater and Slipp 1940 – Coeur D' Alene Salamander
P. jordani Blatchey 1901 – Red-Checked Salamander
P. kentucki Mittleman 1951 – Cumberland Plateau Salamander
P. kiamichi Highton 1989 – Kiamichi Slimy Salamander
P. kisatchie Highton 1989 – Louisiana Slimy Salamander
P. larselli Burns 1954 – Larch Mountain Salamander
P. meridianus Highton and Peabody 2000 – South Mountain Gray-cheeked Salamander
P. metcalfi Brimley 1912 – Southern Gray-Cheeked Salamander
P. mississippi Highton 1989 – Mississippi Slimy Salamander
P. montanus Highton and Peabody 2000 – Northern Gray-Cheeked Salamander
P. neomexicanus Stebbins and Riemer 1950 – Jemez Mountains Salamander
P. nettingi Green 1938 – Cheat Mountain Salamander
P. ocmulgee Highton 1989 – Ocmulgee Slimy Salamander
P. ouachitae Dunn and Heinze 1933 – Rich Mountain Salamander
P. petraeus Wynn, Highton and Jacobs 1988 – Pigeon Mountain Salamander
P. punctatus Highton 1989 – Cow Knob Salamander
P. richmondi Netting and Mittleman 1938 – Southern Ravine Salamander
P. savannah Highton 1989 – Savannah Slimy Salamander
P. sequoyah Highton 1989 – Sequoyah Slimy Salamander
P. serratus Grobman 1944 – Southern Red-Backed Salamander
P. shenandoah Highton and Worthington 1967 – Shenandoah Salamander
P. sherando Highton 2004 – Big Levels Salamander

- P. shermani* Stejneger 1906 – Red-Legged Salamander
P. stormi Highton and Brame 1965 – Siskiyou Mountains Salamander
P. tayahalee Hairston 1950 – Southern Appalachian Salamander
P. vandykei Van Denburgh 1906 – Van Dyke's Salamander
P. variolatus (Gilliams 1818) – South Carolina Slimy Salamander
P. vehiculum (Cooper 1860) – Western Red-Backed Salamander
P. ventralis Highton 1997 – Southern Zigzag Salamander
P. virginia Highton 1999 – Shenandoah Mountain Salamander
P. websteri Highton 1979 – Webster's Salamander
P. wehrlei Fowler and Dunn 1917 – Wehrle's Salamander
P. welleri Walker 1931 – Weller's Salamander
P. yonahlossee Dunn 1917 – Yonahlossee Salamander

Pseudobranchus Gray 1825

- P. axanthus* Netting and Goin 1942 – Southern Dwarf Siren
P. axanthus axanthus Netting and Goind 1942 – Narrow-striped Dwarf Siren
P. axanthus belli Schwarts 1952 – Everglades Dwarf Siren
P. striatus (Leconte 1824) – Nothern Dwarf Siren
P. striatus lustricolus Neill 1951 – Gulf Hammock Dwarf Siren
P. striatus spheniscus Goin and Crenshaw 1949 – Slender Dwarf Siren
P. striatus striatus (Leconte 1824) – Broad-striped Dwarf Siren

Pseudotriton Tschudi 1838

P. montanus Baird 1850 – Mud Salamander

Fouquette and Dubois (2014, A Checklist of North American Amphibians and Reptiles, The United States and Canada, Seventh Edition, Vol. 1 – Amphibians, Xlibris, San Bernardino, CA, 613 p.) transfer this species to the genus *Gyrinophilus*, citing the cladogram published by Bonnet, et al. (Bonett, et al. (2013 [2014], Evolution 68: 466–482). Those authors, however, refrained from recommending this treatment on the basis of their phylogeny and relationships among forms of *Pseudotriton* and *Gyrinophilus* lack strong statistical support in their analysis.

P. montanus diastictus Bishop 1941 – Midland Mud Salamander

This taxon was elevated to a full species by Collins (1991, Herpet. Rev. 22: 42–43). This treatment has been followed by Dubois and Raffaëlli (2012, Alytes 28: 77–161) and Raffaëlli (2013, Les Urodèles du Monde, 2e édition, Penclen Édition, France – no city given). Fouquette and Dubois (2014, A Checklist of North American Amphibians and Reptiles, The United States and Canada, Seventh Edition, Vol. 1 – Amphibians, Xlibris, San Bernardino, CA, 613 p.) also treat it as a subspecies of *P. montanus*, which they transfer to *Gyrinophilus*. The phylogeny presented by Bonett, et al. (2013 [2014], Evolution 68: 466–482) indicates a sister relationship between this taxon and *P. montanus*. In the absence of data on levels of genetic differentiation, we retain the original taxonomic status of this form (Bishop, 1941, Occ. Pap. Mus. Zool. Univ. Mich., 451: 1–27).

Stephen G. Tilley (Chair), Richard Highton, David B. Wake, 2014-07-10

P. montanus flavissimus Hallowell 1856 – Gulf Coast Mud Salamander

Dubois and Raffaëlli

Stephen G. Tilley (Chair), Richard Highton, David B. Wake, 2014-07-10

P. montanus floridanus Netting and Goin 1942 – Rusty Mud Salamander

P. montanus montanus Baird 1850 – Eastern Mud Salamander

P. ruber Sonnini De Mancourt and Latreille 1801 – Red Salamander

P. ruber nitidus Dunn 1920 – Blue Ridge Red Salamander

P. ruber ruber Latreille 1801 – Northern Red Salamander

P. ruber schencki Brimley 1912 – Black-chinned Red Salamander

P. ruber vioscai Bishop 1928 – Southern Red Salamander

Rhyacotriton Dunn 1920

R. cascadae Good and Wake 1992 – Cascade Torrent Salamander

R. kezeri Good and Wake 1992 – Columbia Torrent Salamander

R. olympicus (Gaige 1917) – Olympic Torrent Salamander

R. variegatus Stebbins and Lowe 1951 – Southern Torrent Salamander

Siren Osterdam 1766

S. intermedia Barnes 1826 – Lesser Siren

S. i. texana was synonymized with *S. intermedia nettingi* by Flores-Villela and Brandon (1992, Ann. Carnegie Mus. 61: 289–291) but Dubois and Raffaëlli (2012, Alytes 28: 77–161) and Fouquette and Dubois (2014, A Checklist of North American Amphibians and Reptiles, The United States and Canada, Seventh Edition, Vol. 1 – Amphibians, Xlibris, San Bernardino, CA, 613 p.) considered that subspecies to be valid. The taxonomic statuses of this and the remaining subspecies remain unclear and deserve careful evaluation.

Stephen G. Tilley (Chair), Richard Highton, David B. Wake, 2014-07-10

S. intermedia intermedia Barnes 1826 – Eastern Lesser Siren

S. intermedia nettingi Goin 1942 – Western Lesser Siren

S. lacertina Osterdam 1766 – Greater Siren

The status of the two distantly allopatric populations (see Flores-Villela and Brandon, 1992, Ann. Carnegie Mus. 61: 289–291) in (1) south Texas and adjacent Mexico and (2) peninsular Florida is unclear and deserves evaluation.

Stephen G. Tilley (Chair), Richard Highton, David B. Wake, 2014-07-10

Stereochilus Cope 1869

S. marginatus (Hallowell 1856) – Many-Lined Salamander

Taricha Gray 1850

T. granulosa (Skilton 1849) – Rough Skinned Newt

T. rivularis (Twitty 1935) – Red-Bellied Newt

T. sierrae (Twitty 1942) – Sierra Newt

Formerly considered a subspecies of *T. torosa*, elevated to species status by Kuchta (2007, Herpetologica 63: 332–350).

Stephen G. Tilley (Chair), Richard Highton, David B. Wake, 2014-07-10

T. torosa (Rathke, in Eschscholtz 1833) – California Newt

Urspelepes Camp, Peterman, Milanovich, Lamb, Maerz, and Wake 2009

U. brucei Camp, Peterman, Milanovich, Lamb, Maerz, and Wake 2009 – Patch-Nosed Salamander

Crocodylia – Crocodylians

Alligator Cuvier 1807

A. mississippiensis (Daudin 1802 "1801") – American Alligator

Recent questions concerning the spelling of *mississippiensis* with "p" or "pp" have led to the inclusion of this annotation with the hope of clearing up the confusion, partly caused by earlier versions of this list. Daudin (1802) spelled it with p and from looking at that volume he probably did it because in French he spelled the river, area, etc., with one p. In 1842 Holbrook (1842, North American Herpetology, or, a Description of the Reptiles inhabiting the United States, 2nd Ed, J. Dobson, Philadelphia) emended the spelling to pp and in 1958 (Hemming 1958, ICZN 1F(F.8):87-126) the ICZN declared the emendation valid. In the meantime, Yarrow (1882, Checklist of North American Batrachia and Reptilia. Bull. U. S. Natl. Mus.) and Cope (1875, Checklist of North American Batrachia and Reptilia. Bull. U. S. Natl. Mus) spelled it pp but Stejneger and Barbour (1917, 1923, 1933, Editions 1-3, A check list of North American amphibians and reptiles. Harvard University Press, Cambridge, Massachusetts), Schmidt (1953, A check list of North American amphibians and reptiles. Sixth Edition. ASIH, Chicago) and Conant et al. (1956, Copeia 1956: 172-185) spelled it with one p. The Collins' lists (1978, 1982, 1990, 1997, Editions 1-4, Standard common and current scientific names for North American amphibians and reptiles. SSAR Herpetological Circular) spelled it with pp but the 5th and 6th editions (Crother et al., 2000, 2008, Scientific and standard English names of amphibians and reptiles of North America north of Mexico, with comments regarding confidence in our understanding. SSAR Herpetological Circular 29, 37) went back to p (in error). The spelling was corrected to pp in the most recent (7th) edition (Crother et al., 2012, Scientific and standard English names of amphibians and reptiles of North America north of Mexico, with comments regarding confidence in our understanding. SSAR Herpetological Circular 39).

Brian I. Crother, 12-12-14

Caiman Spix 1825

C. crocodilus (Linnaeus 1758) – Spectacled Caiman

Alien Species:

The Spectacled Caiman is native to South America, has been reported from seven states, and is established in Florida.

Fred Kraus, 2015-01-19

Crocodylus Laurenti 1768

C. acutus Cuvier 1807 – American Crocodile

Serpentes – Snake

Acrochordus Hornstedt 1787

A. javanicus Hornstedt 1787 – Javanese File Snake

Alien Species:

The Javanese File Snake is native to Southeast Asia and is established in Florida.

Fred Kraus, 2015-01-19

Agkistrodon Palisot De Beauvois 1799

A. contortrix (Linnaeus 1766) – Copperhead

Recent unpublished multi-locus nuclear data (Guiher 2011; PhD Dissertation, CUNY, 179 pp.) confirmed previous mitochondrial hypotheses (Guiher and Burbrink 2008, Mol. Phylogenet. Evol. 48: 112–125) that the two North American species (*A. contortrix* and *A. piscivorus*) consist of multiple species-level taxa. We await publication before changing the taxonomy.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

A. contortrix contortrix (Linnaeus 1766) – Southern Copperhead

Recent unpublished multi-locus nuclear data (Guiher 2011; PhD Dissertation, CUNY, 179 pp.) confirmed previous mitochondrial hypotheses (Guiher and Burbrink 2008, Mol. Phylogenet. Evol. 48: 112–125) that the two North American species (*A. contortrix* and *A. piscivorus*) consist of multiple species-level taxa. We await publication before changing the taxonomy.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

A. contortrix laticinctus Gloyd and Conant 1934 – Broad-Banded Copperhead

Recent unpublished multi-locus nuclear data (Guiher 2011; PhD Dissertation, CUNY, 179 pp.) confirmed previous mitochondrial hypotheses (Guiher and Burbrink 2008, Mol. Phylogenet. Evol. 48: 112–125) that the two North American species (*A. contortrix* and *A. piscivorus*) consist of multiple species-level taxa. We await publication before changing the taxonomy.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

A. contortrix mokasen Palisot De Beauvois 1799 – Northern Copperhead

Recent unpublished multi-locus nuclear data (Guiher 2011; PhD Dissertation, CUNY, 179 pp.) confirmed previous mitochondrial hypotheses (Guiher and Burbrink 2008, Mol. Phylogenet. Evol. 48: 112–125) that the two North American species (*A. contortrix* and *A. piscivorus*) consist of multiple species-level taxa. We await publication before changing the taxonomy.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

A. contortrix phaeogaster Gloyd 1969 – Osage Copperhead

Recent unpublished multi-locus nuclear data (Guiher 2011; PhD Dissertation, CUNY, 179 pp.) confirmed previous mitochondrial hypotheses (Guiher and Burbrink 2008, Mol. Phylogenet. Evol. 48: 112–125) that the two North American species (*A. contortrix* and *A. piscivorus*) consist of multiple species-level taxa. We await publication before changing the taxonomy.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

A. contortrix pictigaster Gloyd and Conant 1934 – Trans-Pecos Copperhead

Recent unpublished multi-locus nuclear data (Guiher 2011; PhD Dissertation, CUNY, 179 pp.) confirmed previous mitochondrial hypotheses (Guiher and Burbrink 2008, Mol. Phylogenet. Evol. 48: 112–125) that the two North American species (*A. contortrix* and *A. piscivorus*) consist of multiple species-level taxa. We await publication before changing the taxonomy.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

A. piscivorus Lacépède 1789 – Cottonmouth

Recent unpublished multi-locus nuclear data (Guiher 2011; PhD Dissertation, CUNY, 179 pp.) confirmed previous mitochondrial hypotheses (Guiher and Burbrink 2008, Mol. Phylogenet. Evol. 48: 112–125) that the two North American species (*A. contortrix* and *A. piscivorus*) consist of multiple species-level taxa. We await publication before changing the taxonomy.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

A. piscivorus conanti Gloyd 1969 – Florida Cottonmouth

Recent unpublished multi-locus nuclear data (Guiher 2011; PhD Dissertation, CUNY, 179 pp.) confirmed previous mitochondrial hypotheses (Guiher and Burbrink 2008, Mol. Phylogenet. Evol. 48: 112–125) that the two North American species (*A. contortrix* and *A. piscivorus*) consist of multiple species-level taxa. We await publication before changing the taxonomy.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

A. piscivorus leucostoma (Troost 1836) – Western Cottonmouth

Recent unpublished multi-locus nuclear data (Guiher 2011; PhD Dissertation, CUNY, 179 pp.) confirmed previous mitochondrial hypotheses (Guiher and Burbrink 2008, Mol. Phylogenet. Evol. 48: 112–125) that the two North American species (*A. contortrix* and *A. piscivorus*) consist of multiple species-level taxa. We await publication before changing the taxonomy.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

A. piscivorus piscivorus (Lacépède 1789) – Eastern Cottonmouth

Recent unpublished multi-locus nuclear data (Guiher 2011; PhD Dissertation, CUNY, 179 pp.) confirmed previous mitochondrial hypotheses (Guiher and Burbrink 2008, Mol. Phylogenet. Evol. 48: 112–125) that the two North American species (*A. contortrix* and *A. piscivorus*) consist of multiple species-level taxa. We await publication before changing the taxonomy.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

Arizona Kennicott, in Baird 1859

A. elegans Kennicott, in Baird 1859 – Glossy Snake

Collins (1991, Herpetol. Rev. 22: 42–43) elevated *A. e. occidentalis* to specific status to include all populations in the Sonoran and Mohave Desert regions, the first use of this binomial. Liner (1994, SSAR Herpetol. Circ. 23: 1–113) and Collins (1997, SSAR Herpetol. Circ. 25: 1–40) followed this arrangement. Because no discussion of the taxonomic diagnosis was presented (although Dixon [1959, Southwest. Nat. 4: 20–29] found tail length differences between eastern and western groups), we retain *occidentalis* as a nominal subspecies.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

A. elegans arenicola Dixon 1960 – Texas Glossy Snake

A. elegans candida Klauber 1946 – Mohave Glossy Snake

A. elegans eburnata Klauber 1946 – Desert Glossy Snake

A. elegans elegans Kennicott, in Baird 1859 – Kansas Glossy Snake

A. elegans noctivaga Klauber 1946 – Arizona Glossy Snake

A. elegans occidentalis Blanchard 1924 – California Glossy Snake

Collins (1991, Herpetol. Rev. 22: 42–43) elevated *A. e. occidentalis* to specific status to include all populations in the Sonoran and Mohave Desert regions, the first use of this binomial. Liner (1994, SSAR Herpetol. Circ. 23: 1–113) and Collins (1997, SSAR Herpetol. Circ. 25: 1–40) followed this arrangement. Because no discussion of the taxonomic diagnosis was presented (although Dixon [1959, Southwest. Nat. 4: 20–29] found tail length differences between eastern and western groups), we retain *occidentalis* as a nominal subspecies.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

A. elegans philipi Klauber 1946 – Painted Desert Glossy Snake

Boa Linnaeus 1758

B. constrictor Linnaeus 1758 – Boa Constrictor

Alien Species:

The Boa Constrictor is native to Central and South America, has been reported from 11 states and Manitoba, Canada (Crother et al., 2009, Contemp. Herpetol. 2009:1-4), and is established in Florida.

Fred Kraus, 2015-01-19

Bogertophis Dowling and Price 1988

B. rosaliae (Mocquard 1899) – Baja California Ratsnake

Recognition of *Bogertophis* as distinct from *Elaphe* has been corroborated by multiple studies using nuclear and mitochondrial data (Utiger et al., 2002, Russian J. Herpetol. 9: 105–124; Burbrink and Lawson, 2007, Mol. Phylogenet. Evolution 43: 173–189; Pyron and Burbrink, 2009, 52: 524–529).

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

B. subocularis (Brown 1901) – Trans-Pecos Ratsnake

Recognition of *Bogertophis* as distinct from *Elaphe* has been corroborated by multiple studies using nuclear and mitochondrial data (Utiger et al., 2002, Russian J. Herpetol. 9: 105–124; Burbrink and Lawson, 2007, Mol. Phylogenet. Evolution 43: 173–189; Pyron and Burbrink, 2009, 52: 524–529).

(Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

B. subocularis subocularis (Brown 1901) – Northern Trans-Pecos Ratsnake

Recognition of *Bogertophis* as distinct from *Elaphe* has been corroborated by multiple studies using nuclear and mitochondrial data (Utiger et al., 2002, Russian J. Herpetol. 9: 105–124; Burbrink and Lawson, 2007, Mol. Phylogenet. Evolution 43: 173–189; Pyron and Burbrink, 2009, 52: 524–529).

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

Carphophis Gervais 1843

C. amoenus (Say 1825) – Common Wormsnake

C. amoenus amoenus (Say 1825) – Eastern Wormsnake

C. amoenus helenae (Kennicott 1859) – Midwestern Wormsnake

C. vermisp (Kennicott 1859) – Western Wormsnake

Clark (1968, Herpetologica 24: 104–112) recommended elevating *C. (a.) vermisp* to species status on the basis of allopatry and morphological differences, but Rossman (1973, J. Herpetol. 7: 140–141) presented evidence for the conspecificity of *amoenus* and *vermisp* in the form of intergrade populations. Collins (1991, Herpetol. Rev. 22: 42–43) considered *C. vermisp* to be distinct from *C. amoenus*, implying that the populations discussed by Rossman were either/part of *C. vermisp*, or an unnamed taxon. We follow Clark (1968) but anticipate results from molecular studies to better understand population structure and gene flow among allopatric lineages.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

Cemophora Cope 1860

C. coccinea (Blumenbach 1788) – Scarletsnake

Last reviewed by Williams and Wilson, 1967, Tulane Studies in Zoology 13: 103–124.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

C. coccinea coccinea (Blumenbach 1788) – Florida Scarletsnake

Last reviewed by Williams and Wilson 1967, Tulane Studies in Zoology 13: 103–124

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

C. coccinea copei Jan 1863 – Northern Scarletsnake

Last reviewed by Williams and Wilson 1967, Tulane Studies in Zoology 13: 103–124.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

C. coccinea lineri Williams, Brown, and Wilson 1966 – Texas Scarletsnake

Last reviewed by Williams and Wilson 1967, *Tulane Studies in Zoology* 13: 103–124.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

Charina (Gray 1849)

C. bottae (Blainville 1835) – Northern Rubber Boa

Kluge (1993, *Zool. J. Linn. Soc.* 107: 293–351) placed *Lichanura* in the synonymy of *Charina* because they formed sister taxa. Burbrink (2005, *Mol. Phylogenet. Evo.* 34: 167–180) corroborated the relationship found by Kluge. Rodríguez-Robles et al. (2001, *Mol. Phylogenet. Evol.* 18: 227–237) found *C. b. umbratica* to be morphologically and geographically distinct and were elevated to species status based in part on lineages using mtDNA evidence along with allozyme data from a previous study (Weisman, 1988, MS Thesis, CSU Polytechnic Pomona). With the recognition of *C. umbratica* and fossil species referred to both *Charina* and *Lichanura* (Holman, 2000, *Fossil Snakes of North America*, Indiana Univ. Press), neither genus is monotypic, and they are treated here as separate genera.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

C. umbratica Klauber 1943 – Southern Rubber Boa

Kluge (1993, *Zool. J. Linn. Soc.* 107: 293–351) placed *Lichanura* in the synonymy of *Charina* because they formed sister taxa. Burbrink (2005, *Mol. Phylogenet. Evo.* 34: 167–180) corroborated the relationship found by Kluge. Rodríguez-Robles et al. (2001, *Mol. Phylogenet. Evol.* 18: 227–237) found *C. b. umbratica* to be morphologically and geographically distinct and were elevated to species status based in part on lineages using mtDNA evidence along with allozyme data from a previous study (Weisman, 1988, MS Thesis, CSU Polytechnic Pomona). With the recognition of *C. umbratica* and fossil species referred to both *Charina* and *Lichanura* (Holman, 2000, *Fossil Snakes of North America*, Indiana Univ. Press), neither genus is monotypic, and they are treated here as separate genera.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

Chilomeniscus Cope 1860

C. stramineus Cope 1860 – Variable Sandsnake

Grismer et al. (2002, *Herpetologica* 58: 18–31) found the previously recognized species *C. cinctus*, *C. punctatissimus*, and *C. stramineus* to represent morphotypes of a single species.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

Chionactis Cope 1860

C. occipitalis (Hallowell 1854) – Western Shovel-Nosed Snake

C. occipitalis annulata (Baird 1859) – Colorado Desert Shovel-nosed Snake

There is some question as to the validity of the name *C. saxatilis* (Funk, 1967, Southwest Nat. 12: 180), the Gila Mountains Shovel-nosed Snake, which is generally considered to be a synonym of *C. o. annulata* (see Cross, 1978, Ph.D. dissertation, Univ. Arizona). Mahrtdt et al. (2001, Cat. Am. Amph. Rept. 730) considered *C. saxatilis* a synonym of *C. o. annulata*. Wood et al. (2008, Cons. Gen. 9: 1489–1507) demonstrated, using mtDNA and morphological data, that population structure was not concordant with the traditional subspecific taxonomy. They also revealed two potentially, independent evolutionary lineages. Year for Baird is possibly 1858.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

C. occipitalis klauberi (Stickel 1941) – Tucson Shovel-Nosed Snake

C. occipitalis occipitalis (Hallowell 1854) – Mohave Shovel-Nosed Snake

C. occipitalis talpina Klauber 1951 – Nevada Shovel-Nosed Snake

C. palarostris (Klauber 1937) – Sonoran Shovel-Nosed Snake

C. palarostris organica Klauber 1951 – Organ Pipe Shovel-nosed Snake

Clonophis Cope 1889

C. kirtlandii (Kennicott 1856) – Kirtland's Snake

Coluber Linnaeus 1758

C. bilineatus (Jan 1863) – Sonoran Whipsnake

Contrary to Collins (1997, SSAR Herpetol. Circ. 25: 1–40), Camper and Dixon (1994, Ann. Carnegie Mus. Nat. Hist. 63: 1–48) did not recognize any subspecies for *bilineatus*. Nagy et al. (2004, J. Zool. Syst. Evol. Res. 42: 223–233) restricted the genus *Coluber* to the new World and suggested that *Masticophis* might be paraphyletic with respect *Coluber*. Utiger et al. (2005, Russian J. Herpetol. 12: 39–60) corroborated Nagy et al., finding *Masticophis* to be paraphyletic with respect to *Coluber* and synonymizing *Masticophis* with *Coluber* (the oldest available name). This arrangement was also recovered in a recent phylogeny of Squamata (Pyron et al., 2013 BMC Evol. Biol. 13:93), albeit based on much of the same data.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

C. constrictor Linnaeus 1758 – North American Racer

Nagy et al. (2004, J. Zool. Syst. Evol. Res. 42: 223–233) restricted the genus *Coluber* to the new World and suggested that *Masticophis* might be paraphyletic with respect *Coluber*. Utiger et al. (2005, Russian J. Herpetol. 12: 39–60) corroborated Nagy et al., finding *Masticophis* to be paraphyletic with respect to *Coluber* and synonymizing *Masticophis* with *Coluber* (the oldest available name). This arrangement was also recovered in a recent phylogeny of Squamata (Pyron et al., 2013 BMC Evol. Biol. 13:93), albeit based on much of the same data. Fitch et al. (1981, Trans, Kansas Acad. Sci. 84: 196–203) argued for the elevation of *C. c. mormon*. This recommendation was rejected by Greene (1983, J. Herpetol. 18: 210–211), and was supported by Corn and Bury (1986, Herpetologica 42: 258–264), who showed a broad zone of intergradation across Colorado and Utah. Collins (1991, Herpetol. Rev. 22: 42–43) re-elevated *mormon* to specific status, although allopatry was not suitably demonstrated. Anderson (1996, MS thesis, Southeastern Louisiana Univ.) argued that based on allozyme data *C. c. mormon* cannot be differentiated but that *C. c. paludicola* and *C. c. oaxaca* were diagnosable and should be elevated to species status. We retain *C. c. mormon* and await action on *oaxaca* and *paludicola* until the data are published. Burbrink et al. (2008, Mol. Phylogen. Evol 47: 274–288) have demonstrated using mtDNA that *C. constrictor* may be composed of six independently evolving lineages not concordant with most recognized subspecies. In particular, neither *C. c. mormon* or *C. paludicola* represents an evolutionarily distinct lineage. No samples of *C. c. oaxaca* were included.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

C. constrictor anthicus (Cope 1862) – Buttermilk Racer

C. constrictor constrictor Linnaeus 1758 – Northern Black Racer

C. constrictor etheridgei Wilson 1970 – Tan Racer

C. constrictor flaviventris Say 1823 – Eastern Yellow-Bellied Racer

C. constrictor foxii (Baird and Girard 1853) – Blue Racer

C. constrictor helvigularis Auffenberg 1955 – Brown-Chinned Racer

C. constrictor latrunculus Wilson 1970 – Black-Masked Racer

C. constrictor mormon Baird and Girard 1852 – Western Yellow-Bellied Racer

Fitch et al. (1981, Trans, Kansas Acad. Sci. 84: 196–203) argued for the elevation of *C. c. mormon*. This recommendation was rejected by Greene (1983, J. Herpetol. 18: 210–211), and was supported by Corn and Bury (1986, Herpetologica 42: 258–264), who showed a broad zone of intergradation across Colorado and Utah. Collins (1991, Herpetol. Rev. 22: 42–43) re-elevated *mormon* to specific status, although allopatry was not suitably demonstrated. Anderson (1996, MS thesis, Southeastern Louisiana Univ.) argued that based on allozyme data *C. c. mormon* cannot be differentiated but that *C. c. paludicola* and *C. c. oaxaca* were diagnosable and should be elevated to species status. We retain *C. c. mormon* and await action on *oaxaca* and *paludicola* until the data are published. Burbrink et al. (2008, Mol. Phylogen. Evol 47: 274–288) have demonstrated using mtDNA that *C. constrictor* may be composed of six independently evolving lineages not concordant with most recognized subspecies. In particular, neither *C. c. mormon* or *C. paludicola* represents an evolutionarily distinct lineage. No samples of *C. c. oaxaca* were included.

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C. constrictor oaxaca (Jan 1863) – Mexican Racer

Fitch et al. (1981, Trans, Kansas Acad. Sci. 84: 196–203) argued for the elevation of *C. c. mormon*. This recommendation was rejected by Greene (1983, J. Herpetol. 18: 210–211), and was supported by Corn and Bury (1986, Herpetologica 42: 258–264), who showed a broad zone of intergradation across Colorado and Utah. Collins (1991, Herpetol. Rev. 22: 42–43) re-elevated *mormon* to specific status, although allopatry was not suitably demonstrated. Anderson (1996, MS thesis, Southeastern Louisiana Univ.) argued that based on allozyme data *C. c. mormon* cannot be differentiated but that *C. c. paludicola* and *C. c. oaxaca* were diagnosable and should be elevated to species status. We retain *C. c. mormon* and await action on *oaxaca* and *paludicola* until the data are published. Burbrink et al. (2008, Mol. Phylogen. Evol 47: 274–288) have demonstrated using mtDNA that *C. constrictor* may be composed of six independently evolving lineages not concordant with most recognized subspecies. In particular, neither *C. c. mormon* or *C. paludicola* represents an evolutionarily distinct lineage. No samples of *C. c. oaxaca* were included.

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C. constrictor paludicola Auffenberg and Babbitt 1953 – Everglades Racer

Fitch et al. (1981, Trans, Kansas Acad. Sci. 84: 196–203) argued for the elevation of *C. c. mormon*. This recommendation was rejected by Greene (1983, J. Herpetol. 18: 210–211), and was supported by Corn and Bury (1986, Herpetologica 42: 258–264), who showed a broad zone of intergradation across Colorado and Utah. Collins (1991, Herpetol. Rev. 22: 42–43) re-elevated *mormon* to specific status, although allopatry was not suitably demonstrated. Anderson (1996, MS thesis, Southeastern Louisiana Univ.) argued that based on allozyme data *C. c. mormon* cannot be differentiated but that *C. c. paludicola* and *C. c. oaxaca* were diagnosable and should be elevated to species status. We retain *C. c. mormon* and await action on *oaxaca* and *paludicola* until the data are published. Burbrink et al. (2008, Mol. Phylogen. Evol 47: 274–288) have demonstrated using mtDNA that *C. constrictor* may be composed of six independently evolving lineages not concordant with most recognized subspecies. In particular, neither *C. c. mormon* or *C. paludicola* represents an evolutionarily distinct lineage. No samples of *C. c. oaxaca* were included.

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C. constrictor priapus Dunn and Wood 1939 – Southern Black Racer

C. flagellum Shaw 1802 – Coachwhip

Nagy et al. (2004, J. Zool. Syst. Evol. Res. 42: 223–233) restricted the genus *Coluber* to the new World and suggested that *Masticophis* might be paraphyletic with respect *Coluber*. Utiger et al. (2005, Russian J. Herpetol. 12: 39–60) corroborated Nagy et al., finding *Masticophis* to be paraphyletic with respect to *Coluber* and synonymizing *Masticophis* with *Coluber* (the oldest available name). This arrangement was also recovered in a recent phylogeny of Squamata (Pyron et al., 2013 BMC Evol. Biol. 13:93), albeit based on much of the same data.

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C. flagellum cingulum (Lowe and Woodin 1954) – Sonoran Coachwhip

C. flagellum flagellum Shaw 1802 – Eastern Coachwhip

C. flagellum lineatulus (Smith 1941) – Lined Coachwhip

C. flagellum piceus Cope 1892 – Red Racer

C. flagellum ruddocki (Brattstrom and Warren 1953) – San Joaquin Coachwhip

C. flagellum testaceus Say, in James 1823 – Western Coachwhip

C. fuliginosus (Cope 1895) – Baja California Coachwhip

On the basis of a sympatric occurrence with *C. flagellum*, Grismer (1994, Herpetol. Nat. Hist. 2: 51; 2002, Amphibians and Reptiles of Baja California, Including Its Pacific Islands and the Islands in the Sea of Cortés, Univ. California Press) elevated *C. f. fuliginosus* to species status. Nagy et al. (2004, J. Zool. Syst. Evol. Res. 42: 223–233) restricted the genus *Coluber* to the new World and suggested that *Masticophis* might be paraphyletic with respect to *Coluber*. Utiger et al. (2005, Russian J. Herpetol. 12: 39–60) corroborated Nagy et al., finding *Masticophis* to be paraphyletic with respect to *Coluber* and synonymizing *Masticophis* with *Coluber* (the oldest available name). This arrangement was also recovered in a recent phylogeny of Squamata (Pyron et al., 2013 BMC Evol. Biol. 13:93), albeit based on much of the same data.

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C. lateralis (Hallowell 1853) – Striped Racer

Nagy et al. (2004, J. Zool. Syst. Evol. Res. 42: 223–233) restricted the genus *Coluber* to the new World and suggested that *Masticophis* might be paraphyletic with respect to *Coluber*. Utiger et al. (2005, Russian J. Herpetol. 12: 39–60) corroborated Nagy et al., finding *Masticophis* to be paraphyletic with respect to *Coluber* and synonymizing *Masticophis* with *Coluber* (the oldest available name). This arrangement was also recovered in a recent phylogeny of Squamata (Pyron et al., 2013 BMC Evol. Biol. 13:93), albeit based on much of the same data.

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C. lateralis euryxanthus (Riemer 1954) – Alameda Striped Racer

C. lateralis lateralis (Hallowell 1853) – California Striped Racer

C. schotti (Baird and Girard 1853) – Schott's Whipsnake

Nagy et al. (2004, J. Zool. Syst. Evol. Res. 42: 223–233) restricted the genus *Coluber* to the new World and suggested that *Masticophis* might be paraphyletic with respect to *Coluber*. Utiger et al. (2005, Russian J. Herpetol. 12: 39–60) corroborated Nagy et al., finding *Masticophis* to be paraphyletic with respect to *Coluber* and synonymizing *Masticophis* with *Coluber* (the oldest available name). This arrangement was also recovered in a recent phylogeny of Squamata (Pyron et al., 2013 BMC Evol. Biol. 13:93), albeit based on much of the same data. Camper and Dixon (1994, Ann. Carnegie Mus. Nat. Hist. 63: 1–48) elevated *C. schotti* from *C. taeniatus* with *ruthveni* retained as a subspecies.

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C. schotti ruthveni (Ortenburger 1923) – Ruthven's Whipsnake

Camper and Dixon (1994, Ann. Carnegie Mus. Nat. Hist. 63: 1–48) elevated *C. schotti* from *C. taeniatus* with *ruthveni* retained as a subspecies.

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C. schotti schotti (Baird and Girard 1853) – Schott's Striped Whipsnake

C. taeniatus (Hallowell 1852) – Striped Whipsnake

Nagy et al. (2004, J. Zool. Syst. Evol. Res. 42: 223–233) restricted the genus *Coluber* to the new World and suggested that *Masticophis* might be paraphyletic with respect *Coluber*. Utiger et al. (2005, Russian J. Herpetol. 12: 39–60) corroborated Nagy et al., finding *Masticophis* to be paraphyletic with respect to *Coluber* and synonymizing *Masticophis* with *Coluber* (the oldest available name). This arrangement was also recovered in a recent phylogeny of Squamata (Pyron et al., 2013 BMC Evol. Biol. 13:93), albeit based on much of the same data. Camper and Dixon (1994, Ann. Carnegie Mus. Nat. Hist. 63: 1–48) elevated *C. schotti* from *C. taeniatus* with *ruthveni* retained as a subspecies.

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C. taeniatus girardi (Stejneger and Barbour 1917) – Central Texas Whipsnake

C. taeniatus taeniatus (Hallowell 1852) – Desert Striped Whipsnake

Coniophanes Hallowell 1860

C. imperialis (Baird and Girard 1859) – Regal Black-Striped Snake

C. imperialis imperialis (Baird and Girard 1859) – Tamaulipan Black-Striped Snake

Contia Baird and Girard 1853

C. longicauda Feldman and Hoyer 2010 – Forest Sharp-Tailed Snake

This species was originally named *Contia longicaudae* by Feldman and Hoyer (2010, Copeia, 2010: 254–267); however, because they explicitly treated the second part of the binomen as an adjective, it must agree with the name *Contia* in gender and number so that the correct spelling is *Contia longicauda*.

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C. tenuis (Baird and Girard 1852) – Common Sharp-Tailed Snake

Crotalus Linnaeus 1758

C. adamanteus Palisot De Beauvois 1799 – Eastern Diamond-Backed Rattlesnake

Notes on the Genus: The traditional view of rattlesnake taxonomy that recognizes the two monophyletic sister genera *Crotalus* and *Sistrurus* (e.g, Brattstrom, 1964, San Diego Soc. Nat. Hist. 13: 185–268) has recently been challenged. Stille (1987, Herpetologica 43: 98–104) and McCranie (1989, Herpetologica 44: 123–126) presented data that suggested *Sistrurus* is not monophyletic and rendered *Crotalus* paraphyletic. Parkinson (1999, Copeia 1999: 576–586) found *Sistrurus* monophyletic but its position rendered *Crotalus* paraphyletic. Knight et al. (1993, Syst. Biol. 42: 356–367) used mtDNA to defend the traditional generic taxonomy, but in order to do so ignored the most parsimonious tree. The genus *Crotalus* is monophyletic when including the Mexican *C. ravus* (Murphy et al. 2002, in Schuett et al., [eds.] Biology of the Vipers, Eagle Mountain Publishing, Pp. 69–92), and is supported as such in most recent phylogenies, as well as being the sister taxon to a monophyletic *Sistrurus* (e.g., Pyron et al., 2013; BMC Evol. Biol. 13: 93).

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C. atrox Baird and Girard 1853 – Western Diamond-Backed Rattlesnake

Notes on the Genus: The traditional view of rattlesnake taxonomy that recognizes the two monophyletic sister genera *Crotalus* and *Sistrurus* (e.g, Brattstrom, 1964, San Diego Soc. Nat. Hist. 13: 185–268) has recently been challenged. Stille (1987, Herpetologica 43: 98–104) and McCranie (1989, Herpetologica 44: 123–126) presented data that suggested *Sistrurus* is not monophyletic and rendered *Crotalus* paraphyletic. Parkinson (1999, Copeia 1999: 576–586) found *Sistrurus* monophyletic but its position rendered *Crotalus* paraphyletic. Knight et al. (1993, Syst. Biol. 42: 356–367) used mtDNA to defend the traditional generic taxonomy, but in order to do so ignored the most parsimonious tree. The genus *Crotalus* is monophyletic when including the Mexican *C. ravus* (Murphy et al. 2002, in Schuett et al., [eds.] Biology of the Vipers, Eagle Mountain Publishing, Pp. 69–92), and is supported as such in most recent phylogenies, as well as being the sister taxon to a monophyletic *Sistrurus* (e.g., Pyron et al., 2013; BMC Evol. Biol. 13: 93).

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C. cerastes Hallowell 1854 – Sidewinder

Douglas et al. (2006, Mol. Ecol. 15: 3353–3374), using mtDNA, found several geographically distinct lineages within *C. cerastes*. Only one of these lineages corresponded to a recognized subspecies. (*C. c. laterorepens*). Notes on the Genus: The traditional view of rattlesnake taxonomy that recognizes the two monophyletic sister genera *Crotalus* and *Sistrurus* (e.g, Brattstrom, 1964, San Diego Soc. Nat. Hist. 13: 185–268) has recently been challenged. Stille (1987, Herpetologica 43: 98–104) and McCranie (1989, Herpetologica 44: 123–126) presented data that suggested *Sistrurus* is not monophyletic and rendered *Crotalus* paraphyletic. Parkinson (1999, Copeia 1999: 576–586) found *Sistrurus* monophyletic but its position rendered *Crotalus* paraphyletic. Knight et al. (1993, Syst. Biol. 42: 356–367) used mtDNA to defend the traditional generic taxonomy, but in order to do so ignored the most parsimonious tree. The genus *Crotalus* is monophyletic when including the Mexican *C. ravus* (Murphy et al. 2002, in Schuett et al., [eds.] Biology of the Vipers, Eagle Mountain Publishing, Pp. 69–92), and is supported as such in most recent phylogenies, as well as being the sister taxon to a monophyletic *Sistrurus* (e.g., Pyron et al., 2013; BMC Evol. Biol. 13: 93).

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C. cerastes cerastes Hallowell 1854 – Mohave Desert Sidewinder

C. cerastes cercobombus Savage and Cliff 1953 – Sonoran Sidewinder

C. cerastes laterorepens Klauber 1944 – Colorado Desert Sidewinder

Douglas et al. (2006, Mol. Ecol. 15: 3353–3374), using mtDNA, found several geographically distinct lineages within *C. cerastes*. Only one of these lineages corresponded to a recognized subspecies. (*C. c. laterorepens*).

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C. cerberus (Coues 1875) – Arizona Black Rattlesnake

See annotation under *C. oreganus*.

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C. horridus Linnaeus 1758 – Timber Rattlesnake

Pisani et al. (1972, Trans. Kansas Acad. Sci. 75: 255–263) conducted a multivariate analysis of variation in *C. horridus* and concluded that characters tended to be clinal and recommended against recognition of the two subspecies. Brown and Ernst (1986, Brimleyana 12: 57–74) countered that morphology in the eastern part of the range supported recognition of coastal plain and montane subspecies. Clark et al. (2003, J. Herpetol. 37: 145–154) identified three mitochondrial DNA lineages separated by the Appalachian and Allegheny Mountain ranges that did not correspond with the classic arrangement of subspecies within *C. horridus*.

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C. lepidus (Kennicott 1861) – Rock Rattlesnake

C. lepidus klauberi Gloyd 1936 – Banded Rock Rattlesnake

C. lepidus lepidus (Kennicott 1861) – Mottled Rock Rattlesnake

C. mitchellii (Cope 1861) – Speckled Rattlesnake

C. mitchellii pyrrhus (Cope 1867 "1866") – Southwestern Speckled Rattlesnake

C. molossus Baird and Girard 1853 – Western Black-Tailed Rattlesnake

The northern populations of this species were examined in detail using a multi-locus nuclear dataset (Anderson and Greenbaum, 2013; Herp. Monogr. 26: 19–57), supporting recognition of *C. molossus* for populations west of the Cochise Filter Barrier (from the Sonoran Desert west), and *C. ornatus* for eastern populations (from Chihuahuan Desert east), with a narrow contact zone.

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C. oreganus Holbrook 1840 – Western Rattlesnake

Pook et al. (2000, Mol. Phylogenet. Evol. 15: 269–282), Ashton and de Queiroz (2001, Mol. Phylogenet. Evol. 21: 176–189), and Douglas et al. (2002, Biology of the Vipers, Schuett, Hoggren, Douglas, Greene [eds.] Eagle Mountain Press) analyzed mtDNA sequence data and concluded that *Crotalus viridis* comprised at least two clades, *C. viridis* and *C. oreganus*, with *C. cerberus* being the sister taxon to populations of *C. oreganus*. The former two studies did not formally recognize *C. cerberus* as a species, although both suggested that it was distinct based on sequence differences and allopatry. The latter study did recognize *C. cerberus* as well as four other taxa. Although the studies relied on the same locus, we conservatively conclude that the congruence among all three studies might suggest the recognition of *C. viridis*, *C. oreganus* and *C. cerberus*. A recent unpublished study (Goldenberg, 2013; MS Dissertation, SDSU, 90 pp.) suggests a unique lineage, that has not yet been named, occurs in the southern part of the nominate species' range, and that the subspecies as currently recognized do not correspond with the actual species-level divergences in the group.

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C. oreganus abyssus Klauber 1930 – Grand Canyon Rattlesnake

C. oreganus concolor Woodbury 1929 – Midget Faded Rattlesnake

C. oreganus helleri Meek 1906 "1905" – Southern Pacific Rattlesnake

C. oreganus lutosus Klauber 1930 – Great Basin Rattlesnake

C. oreganus oreganus Holbrook 1840 – Northern Pacific Rattlesnake

C. ornatus Hallowell 1854 – Eastern Black-Tailed Rattlesnake

The northern populations of this species were examined in detail using a multi-locus nuclear dataset (Anderson and Greenbaum, 2013; Herp. Monogr. 26: 19–57), supporting recognition of *C. molossus* for populations west of the Cochise Filter Barrier (from the Sonoran Desert west), and *C. ornatus* for eastern populations (from Chihuahuan Desert east), with a narrow contact zone.

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C. pricei Van Denburgh 1895 – Twin-Spotted Rattlesnake

C. pricei pricei Van Denburgh 1895 – Western Twin-Spotted Rattlesnake

C. ruber Cope 1892 – Red Diamondback Rattlesnake

The International Commission on Zoological Nomenclature (2000, Bull. Zool. Nomencl. 57: 189–190. Opinion 1960) has ruled that the name *Crotalus ruber* Cope 1892 take precedence over *C. exsul* Garman 1884 when used as a specific epithet.

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C. scutulatus (Kennicott 1861) – Mohave Rattlesnake

The spelling of the word "Mojave" or "Mohave" has been a subject of debate. Lowe in the preface to his "Venomous Reptiles of Arizona" (1986) argued for "Mohave" as did Campbell and Lamar (2004, The Venomous Reptiles of the Western Hemisphere, Comstock Publishing). According to linguistic experts on Native American languages, either spelling is correct, but using either the "j" or "h" is based on whether the word is used in a Spanish or English context. Given that this is an English names list, we use the "h" spelling (P. Munro, Linguistics, UCLA, pers. comm.).

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C. scutulatus scutulatus (Kennicott 1861) – Northern Mohave Rattlesnake

The English name of the nominal subspecies has been changed to reflect the distribution rather than describe rattlesnakes from a small portion of its distribution (D. Hardy and H. Greene, *pers. comm.*)

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C. stephensi Klauber 1930 – Panamint Rattlesnake

Elevated to species by Douglas et al. (2007, *Copeia* 2007 (4): 920–932).

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C. tigris Kennicott in Baird 1859 – Tiger Rattlesnake

C. viridis (Rafinesque 1818) – Prairie Rattlesnake

See comments under *C. oreganus* Douglas et al. (2002, *Biology of the Vipers*, Schuett, Hoggren, Douglas, Greene [eds.] Eagle Mountain Press) synonymized *C. v. nuntius* with *C. v. viridis*

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C. willardi Meek 1906 "1905" – Ridge-Nosed Rattlesnake

C. willardi obscurus Harris and Simmons 1976 – New Mexico Ridge-nosed Rattlesnake

C. willardi willardi Meek 1905 – Arizona Ridge-Nosed Rattlesnake

Diadophis Baird and Girard 1853

D. punctatus (Linnaeus 1766) – Ring-Necked Snake

Numerous data suggest that more than one lineage exists (Blanchard, 1942, *Bull. Chicago Acad. Sci.* 7: 1–144; Gelbach, 1974, *Herpetologica* 30: 140–148; Pinou et al., 1995, *J. Herpetol.* 29: 105–110; Feldman and Spicer, 2006, *Mol. Ecol.* 15: 2201–2222). Using mitochondrial data sampled from specimens across their range, Fontanella et al. (2008, *Mol. Phylogenet. Evol.* 46: 1049–1070) found at least 14 lineages that do not follow the geographic range of the subspecies, and may be independently evolving taxa. While *D. punctatus* may be divided into several species in the near future, we refrain from making any changes at present. Evidence to synonymize the various races into a single species has been poorly presented, and our arrangement follows the traditional subspecies groupings.

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D. punctatus acricus Paulson 1968 – Key Ring-Necked Snake

D. punctatus amabilis Baird and Girard 1853 – Pacific Ring-Necked Snake

D. punctatus arnyi Kennicott 1859 – Prairie Ring-Necked Snake

D. punctatus edwardsii (Merrem 1820) – Northern Ring-Necked Snake

D. punctatus modestus Bocourt 1886 – San Bernardino Ring-necked Snake

D. punctatus pulchellus Baird and Girard 1853 – Coral-bellied Ring-necked Snake

D. punctatus punctatus (Linnaeus 1766) – Southern Ring-Necked Snake

D. punctatus regalis Baird and Girard 1853 – Regal Ring-Necked Snake

D. punctatus similis Blanchard 1923 – San Diego Ring-necked Snake

D. punctatus stictogenys Cope 1860 – Mississippi Ring-Necked Snake

D. punctatus vandenburghii Blanchard 1923 – Monterey Ring-Necked Snake

Drymarchon Fitzinger 1843

D. couperi (Holbrook 1842) – Eastern Indigo Snake

Wüster et al. (2001, Herpetol. J. 11: 157–165) demonstrated that *couperi* is a distinct species using morphological evidence.

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D. melanurus (Duméril, Bibron, and Duméril 1854) – Central American Indigo Snake

Wüster et al. (2001, Herpetol. J. 11: 157–165) showed that the South American *D. corais* is distinct from the Central/North American (*D. melanurus*) taxon.

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D. melanurus erebennus (Cope 1860) – Texas Indigo Snake

Drymobius Fitzinger 1843

D. margaritiferus (Schlegel 1837) – Speckled Racer

D. margaritiferus margaritiferus (Schlegel 1837) – Northern Speckled Racer

Farancia Gray 1842

F. abacura (Holbrook 1836) – Red-Bellied Mudsnake

Cundall and Rossman (1984, Herpetologica 40: 388–405) analyzed skull morphology and showed substantial divergence between *F. a. abacura* and *F. a. reinwardtii*.

F. abacura abacura Holbrook 1836 – Eastern Mudsnake

F. abacura reinwardtii Schlegel 1837 – Western Mudsnake

Cundall and Rossman (1984, Herpetologica 40: 388–405) analyzed skull morphology and showed substantial divergence between *F. a. abacura* and *F. a. reinwardtii*.

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F. erytrogramma (Palisot De Beauvois in Sonnini and Latreille 1801) – Rainbow Snake

F. erytrogramma erytrogramma (Palisot De Beauvois in Sonnini and Latreille 1801) – Common Rainbow Snake

F. erytrogramma seminola Neill 1964 – Southern Florida Rainbow Snake

Ficimia Gray 1849

F. streckeri Taylor 1931 – Tamaulipan Hook-Nosed Snake

The previous Standard English names of *Ficimia* and *Gyalopion* were misleading relative to their geographic ranges. All are distributed in Mexico, but *Ficimia* had the moniker “Mexican,” whereas *Gyalopion* had the name “Plateau,” yet is clearly not confined to any plateau. Given that *Ficimia* has the easternmost distribution, we call it “Eastern” and call *Gyalopion* “Western.”

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Gyalopion Cope 1861

G. canum Cope 1861 "1860" – Chihuahuan Hook-Nosed Snake

The previous Standard English names of *Ficimia* and *Gyalopion* were misleading relative to their geographic ranges. All are distributed in Mexico, but *Ficimia* had the moniker “Mexican,” whereas *Gyalopion* had the name “Plateau,” yet is clearly not confined to any plateau. Given that *Ficimia* has the easternmost distribution, we call it “Eastern” and call *Gyalopion* “Western.”

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G. quadrangulare (Günther in Salvin and Godman, 1885-1902 1893) – Thornscrub Hook-Nosed Snake

The previous Standard English names of *Ficimia* and *Gyalopion* were misleading relative to their geographic ranges. All are distributed in Mexico, but *Ficimia* had the moniker “Mexican,” whereas *Gyalopion* had the name “Plateau,” yet is clearly not confined to any plateau. Given that *Ficimia* has the easternmost distribution, we call it “Eastern” and call *Gyalopion* “Western.”

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Haldea Baird and Girard 1853

H. striatula (Linnaeus 1766) – Rough Earthsnake

McVay and Carstens (2013, Mol. Phylogenet. Evol. 68: 425–431) found that *Virginia* is polyphyletic based on a multi-locus nuclear dataset, and resurrected *Haldea* for *V. striatula*.

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Heterodon Latreille 1801

H. gloydi Edgren 1952 – Dusty Hog-Nosed Snake

Werler and Dixon (2000, Texas Snakes, University of Texas Press, Austin) regarded *H. n. gloydi* to be an allopatric, diagnosable taxon restricted to the low plains - eastern forest ecotone of eastern Texas. Smith et al. (2003, J. Kansas Herpetol. 5: 17–20) countered that it was not diagnosable.

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H. kennerlyi Kennicott 1860 – Mexican Hog-Nosed Snake

Smith et al. (2003, J. Kansas Herpetol. 5: 17–20), based on two scale characters, separated *H. n. kennerlyi* from *H. n. nasicus* and elevated the former to species.

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H. nasicus Baird and Girard 1852 – Plains Hog-Nosed Snake

Because the three subspecies of *H. nasicus* have been elevated to species, their respective standard English names remain associated with each. Hence, there is no longer a “Western Hog-nosed Snake.”

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H. platirhinos Latreille 1801 – Eastern Hog-Nosed Snake

H. simus (Linnaeus 1766) – Southern Hog-Nosed Snake

Hydrophis Latreille *Ex* Sonnini and Latreille 1801

H. platurus (Linnaeus 1766) – Yellow-Bellied Snake

A recent study (Sanders et al., 2013, Mol. Phylogenet. Evol. 66: 575–591) corrected the long-noted non-monophyly of most sea snake genera (including *Pelamis*) by recognizing a single large genus *Hydrophis*, including *H. platurus*.

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Hypsiglena Cope 1860

H. chlorophaea Cope 1860 – Desert Nightsnake

Taxonomy of *Hypsiglena* has received some critical review since Tanner's revision of the genus (1944, Great Basin Nat. 5: 25–92). Dixon (1965, Southwest. Nat. 10: 125–131) and Dixon and Dean (1986, Southwest. Nat. 31: 307–318) studied a morphological contact zone between northern and southern taxa at the Sonora–Sinaloa border in Mexico, finding that it comprised a narrow zone of hybridization with some taxa existing in sympatry. Hardy and McDiarmid (1969, Univ. Kansas Pub. Mus. Nat. Hist. 18: 39–252) examined specimens across the range of this presumptive contact and elsewhere in western Mexico and concluded that no morphological characters existed to separate *torquata* and *ochrorhyncha*, except maybe nuchal patterns, which they decided (p. 170) was "a case of pattern dimorphism in a single, otherwise uniform, species." Grismer et al. (1994, Bull. So. California Acad. Sci. 93: 45–80) dismissed the recognition of subspecies in Baja California, stating, without evidence, that the subspecies intergrade widely. Mulcahy (2008, Mol. Phylogenet. Evol. 46: 1095–1115) conducted a comprehensive phylogeographic study of *Hypsiglena* based on an mtDNA analysis of >150 individuals. Mulcahy (2008) recognized six species in what was considered *H. torquata*, five of which are consistent with previously described lineages (e.g., subspecies), while one represents a unique lineage that remains to be described. Mulcahy (2008) also recommended maintaining the subspecies designations for several of the widespread, polymorphic species, which may represent incipient species. The nominal species *H. torquata* is now restricted to Mexico, three described forms occur in the USA, and the undescribed form is endemic to the Cochise Filter Barrier area of southeastern Arizona and associated New Mexico.

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H. chlorophaea chlorophaea Cope 1860 – Sonoran Nightsnake

H. chlorophaea deserticola (Tanner 1944) – Northern Desert Nightsnake

H. chlorophaea loreala (Tanner 1944) – Mesa Verde Nightsnake

H. jani (Duges 1866) – Chihuahuan Nightsnake

Taxonomy of *Hypsiglena* has received some critical review since Tanner's revision of the genus (1944, Great Basin Nat. 5: 25–92). Dixon (1965, Southwest. Nat. 10: 125–131) and Dixon and Dean (1986, Southwest. Nat. 31: 307–318) studied a morphological contact zone between northern and southern taxa at the Sonora--Sinaloa border in Mexico, finding that it comprised a narrow zone of hybridization with some taxa existing in sympatry. Hardy and McDiarmid (1969, Univ. Kansas Pub. Mus. Nat. Hist. 18: 39–252) examined specimens across the range of this presumptive contact and elsewhere in western Mexico and concluded that no morphological characters existed to separate *torquata* and *ochrorhyncha*, except maybe nuchal patterns, which they decided (p. 170) was "a case of pattern dimorphism in a single, otherwise uniform, species." Grismer et al. (1994, Bull. So. California Acad. Sci. 93: 45–80) dismissed the recognition of subspecies in Baja California, stating, without evidence, that the subspecies intergrade widely. Mulcahy (2008, Mol. Phylogenet. Evol. 46: 1095–1115) conducted a comprehensive phylogeographic study of *Hypsiglena* based on an mtDNA analysis of >150 individuals. Mulcahy (2008) recognized six species in what was considered *H. torquata*, five of which are consistent with previously described lineages (e.g., subspecies), while one represents a unique lineage that remains to be described. Mulcahy (2008) also recommended maintaining the subspecies designations for several of the widespread, polymorphic species, which may represent incipient species. The nominal species *H. torquata* is now restricted to Mexico, three described forms occur in the USA, and the undescribed form is endemic to the Cochise Filter Barrier area of southeastern Arizona and associated New Mexico.

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H. jani texana (Stejneger 1893) – Texas Nightsnake

H. ochrorhyncha Cope 1860 – Coast Nightsnake

Taxonomy of *Hypsiglena* has received some critical review since Tanner's revision of the genus (1944, Great Basin Nat. 5: 25–92). Dixon (1965, Southwest. Nat. 10: 125–131) and Dixon and Dean (1986, Southwest. Nat. 31: 307–318) studied a morphological contact zone between northern and southern taxa at the Sonora--Sinaloa border in Mexico, finding that it comprised a narrow zone of hybridization with some taxa existing in sympatry. Hardy and McDiarmid (1969, Univ. Kansas Pub. Mus. Nat. Hist. 18: 39–252) examined specimens across the range of this presumptive contact and elsewhere in western Mexico and concluded that no morphological characters existed to separate *torquata* and *ochrorhyncha*, except maybe nuchal patterns, which they decided (p. 170) was "a case of pattern dimorphism in a single, otherwise uniform, species." Grismer et al. (1994, Bull. So. California Acad. Sci. 93: 45–80) dismissed the recognition of subspecies in Baja California, stating, without evidence, that the subspecies intergrade widely. Mulcahy (2008, Mol. Phylogenet. Evol. 46: 1095–1115) conducted a comprehensive phylogeographic study of *Hypsiglena* based on an mtDNA analysis of >150 individuals. Mulcahy (2008) recognized six species in what was considered *H. torquata*, five of which are consistent with previously described lineages (e.g., subspecies), while one represents a unique lineage that remains to be described. Mulcahy (2008) also recommended maintaining the subspecies designations for several of the widespread, polymorphic species, which may represent incipient species. The nominal species *H. torquata* is now restricted to Mexico, three described forms occur in the USA, and the undescribed form is endemic to the Cochise Filter Barrier area of southeastern Arizona and associated New Mexico.

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H. ochrorhyncha klauberi (Tanner 1944) – San Diego Nightsnake

H. ochrorhyncha nuchalata Tanner 1943 – California Nightsnake

Lampropeltis Fitzinger 1843

L. alterna (Brown 1901) – Gray-Banded Kingsnake

The composition of this group was recently investigated by Ruane et al. (2014, Syst. Biol. 63: 231–250) and, the traditionally recognized species within this genus were found to represent a monophyletic group. However, the composition of various species has changed substantially.

Garstka (1982, Breviora 466: 1–35) and more recently Bryson et al. (2007, Mol. Phylogenet. Evol. 43: 674–684) reviewed the *mexicana* species group of *Lampropeltis*. Based on the more recent molecular work, it appears that the recognition of the traditional species of *alterna*, *mexicana* and *triangulum* may be incorrect. Until more data are available to resolve the taxonomy of these groups, we withhold making any changes. Given the apparent complexity of the situation and the widespread morphological variation of *L. alterna*, we do not recognize any subspecies, though Hilken and Schleppe (1998, Salamandra 34: 97–124) argued for recognition of *L. alterna alterna* and *L. a. blairi*. Recent work by Ruane et al. (2014, Syst. Biol. 63: 231–250) showed that this is an evolutionarily distinct lineage, and clearly represents a separate species. Previous work showing affinity with *L. triangulum* based on mitochondrial data was misled by an apparent genome capture.

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L. annulata Kennicott 1861 – Mexican Milksnake

This species comprises a primarily Mexican lineage of the former *L. triangulum*, and is of uncertain occurrence in the United States, possibly along the Rio Grande in southern Texas (Ruane et al. 2014, Syst. Biol. 63: 231–250).

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L. californiae (Blainville 1835) – California Kingsnake

Previously considered a subspecies of *L. getula*, Pyron and Burbrink (2009, Mol. Ecol. 18: 2443–3457 and 2009, Zootaxa 2241: 22–32), demonstrated that this is a distinct species.

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L. calligaster (Harlan 1827) – Yellow-Bellied Kingsnake

L. calligaster calligaster (Harlan 1827) – Prairie Kingsnake

L. calligaster occipitolineata Price 1987 – South Florida Mole Kingsnake

L. calligaster rhombomaculata (Holbrook 1840) – Northern Mole Kingsnake

L. elapsoides (Holbrook 1838) – Scarlet Kingsnake

Using multiple nuclear and mitochondrial genes, Pyron and Burbrink (2009, Mol. Phylogenet. Evol. 52: 524–529) found that *L. elapsoides* is distinct from *L. triangulum*. This was confirmed in larger multilocus study with many individuals sampled (Ruane et al. 2014, Syst. Biol. 63: 231–250).

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L. extenuata (Brown 1890) – Short-Tailed Kingsnake

Dowling and Maxson (1990, J. Zool. London 221: 77–85), using immunological distance data, found *Stilosoma* to fall within *Lampropeltis*. Keogh (1996, Herpetologica 52: 406–416), however, found *Stilosoma* to be part of the probable sister group to *Lampropeltis*. Rodriguez-Robles and de Jesus Escobar (1999, Biol. J. Linn. Soc. 68: 355–385) and Bryson et al. (2007, Mol. Phylogenet. Evol. 43: 674–684) corroborated Dowling and Maxson using mtDNA evidence, and demonstrated that recognition of *Stilosoma* as a genus renders *Lampropeltis* paraphyletic. This was confirmed and ameliorated in Pyron and Burbrink (2009, Mol. Phylogenet. Evol. 52: 524–529) and confirmed in Ruane et al. (2014, Syst. Biol. 63: 231–250).

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L. gentilis (Baird and Girard 1853) – Western Milksnake

This species comprises the formerly recognized subspecies *L. t. celaenops*, *L. t. multistriata*, *L. t. taylori*, *L. t. amaura* (part), *L. t. syspila* (part), and *L. t. annulata* (part) (Ruane et al. 2014, Syst. Biol. 63: 231–250).

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L. getula Linnaeus 1766 – Eastern Kingsnake

L. holbrooki Stejneger 1903 – Speckled Kingsnake

Formerly considered a subspecies of *L. getula*, Pyron and Burbrink (2009, Mol. Ecol. 18: 2443–3457 and 2009, Zootaxa 2241: 22–32), demonstrated that this is a distinct species. However, compared to the range of the former subspecies, this taxon occurs only west of the Mississippi River.

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L. knoblochi Taylor 1940 – Madrean Mountain Kingsnake

Formerly considered a subspecies of *L. pyromelana*, Burbrink et al. (2011, Mol. Phylogenet. Evol. 60: 445–454) demonstrated the existence of two species using coalescent species delimitation methods and ecological niche modeling. The complex comprises a northern species on the Colorado Plateau (*L. pyromelana*) and a southern species (*L. knoblochi*) found primarily on the Sierra Madre Occidental and associated Madrean Sky Islands.

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L. multifasciata (Bocourt 1886) – Coast Mountain Kingsnake

See entry under *L. zonata*. This species comprises the formerly recognized subspecies *L. z. multifasciata*, and includes populations from the Transverse and Coastal ranges south.

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L. nigra (Yarrow 1882) – Eastern Black Kingsnake

Formerly considered a subspecies of *L. getula*, Pyron and Burbrink (2009, Mol. Ecol. 18: 2443–3457 and 2009, Zootaxa 2241:22–32), demonstrated that this is a distinct species.

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L. pyromelana (Cope 1867 "1866") – Arizona Mountain Kingsnake

Burbrink et al. (2011, Mol. Phylogenet. Evol. 60: 445–454) demonstrated that this species is distinct from *L. knoblochi*.

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L. splendida (Baird and Girard 1853) – Desert Kingsnake

Formerly considered a subspecies of *L. getula*, Pyron and Burbrink (2009, Mol. Ecol. 18: 2443–3457 and 2009, Zootaxa 2241: 22–32), demonstrated that this is a distinct species.

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L. triangulum (Lacépède 1789) – Eastern Milksnake

Ruane et al. (2014, Syst. Biol. 63: 231–250) used a multi-locus nuclear dataset to show that *L. triangulum* was polyphyletic as previously recognized, consisting of at least three unrelated species groups. As currently defined, *L. triangulum* primarily comprises populations of the former subspecies *L. t. triangulum*, *L. t. sypila* (part), and *L. t. amaura* (part).

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L. zonata (Lockington, Ex Blainville 1876) – California Mountain Kingsnake

This species was investigated using a multi-locus nuclear dataset (Myers et al., 2013, Mol. Ecol. 21: 5418–5429), finding multiple species-level taxa. This species comprises the formerly recognized subspecies *L. z. zonata*, *L. z. multicincta*, and *L. z. multifasciata* (part), including populations from the Sierra Nevada north.

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Leptodeira Fitzinger 1843

L. septentrionalis (Kennicott, in Baird 1859) – Northern Cat-Eyed Snake

The genus *Leptodeira* and the *L. septentrionalis/annulata* complex in particular, were investigated using a mitochondrial dataset with rangewide sampling (Daza et al. 2009, Mol. Phylogenet. Evol. 53: 653–657). Those authors found that the latter two species are polyphyletic, and that complex geographic structure exists which does not correspond with the current taxonomy. In particular populations sampled closest to Texas (the only U.S. population) belonged to *L. annulata cussirilis*, suggesting that the U.S. species is not *L. septentrionalis*.

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Lichanura Cope 1861

L. orcutti (Stejneger 1889) – Northern Three-Lined Boa

See annotation under *Charina*. Wood et al. (2008, Mol. Phylogenet. Evol. 46: 484–582), used mtDNA and found three main clades within *trivirgata* that do not correspond to currently recognized subspecies. They concluded that these clades corresponded to two species, *L. trivirgata* and *L. orcutti*.

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L. trivirgata (Cope 1861) – Rosy Boa

See annotation under *Charina*. Wood et al. (2008, Mol. Phylogenet. Evol. 46: 484–582), used mtDNA and found three main clades within *trivirgata* that do not correspond to currently recognized subspecies. They concluded that these clades corresponded to two species, *L. trivirgata* and *L. orcutti*.

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Liodytes Cope 1885

L. alleni (Garman 1874) – Striped Swampsnake

Using a multi-locus nuclear dataset, McVay and Carstens (2013, Mol. Phylogenet. Evol. 68: 425–431) found that *Regina rigida* and *R. alleni* formed a separate species group containing *Seminatrix* (which has been found previously), and resurrected *Liodytes* for these species.

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L. pygaea (Cope 1871) – Black Swampsnake

Using a multi-locus nuclear dataset, McVay and Carstens (2013, Mol. Phylogenet. Evol. 68: 425–431) found that *Regina rigida* and *R. alleni* formed a separate species group containing *Seminatrix* (which has been found previously), and resurrected *Liodytes* for these species.

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L. pygaea cyclas Dowling 1950 – Southern Florida Swampsnake

L. pygaea paludis Dowling 1950 – Carolina Swampsnake

L. pygaea pygaea (Cope 1871) – Northern Florida Swampsnake

L. rigida (Say 1825) – Glossy Swampsnake

Using a multi-locus nuclear dataset, McVay and Carstens (2013, Mol. Phylogenet. Evol. 68: 425–431) found that *Regina rigida* and *R. alleni* formed a separate species group containing *Seminatrix* (which has been found previously), and resurrected *Liodytes* for these species.

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L. rigida deltae (Huheey 1959) – Delta Swampsnake

L. rigida rigida (Say 1825) – Eastern Glossy Swampsnake

L. rigida sinicola (Huheey 1959) – Gulf Swampsnake

Micruroides Schmidt 1928

M. euryxanthus Kennicott 1860 – Sonoran Coralsnake

Slowinski (1995, J. Herpetol. 29: 325–338) presented morphological and biochemical data supporting separation of the genera *Micrurus* and *Micruroides*. Castoe et al. (2007, Zoo. J. Linn. Soc. 151:809–831) found that *Micruroides* was the sister taxon to the remainder of the sampled New World *Micrurus*.

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M. euryxanthus euryxanthus Kennicott 1860 – Arizona Coralsnake

Micrurus Wagler 1824

M. fulvius Linnaeus 1766 – Harlequin Coralsnake

See *M. tener*.

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M. tener Baird and Girard 1853 – Texas Coralsnake

Although Castoe et al. and J. Boundy (2006, Joint Meeting Ichthyologists Herpetologists abstracts) presented molecular and morphological evidence, respectively, that *M. fulvius* and *M. tener* are distinct species, these data have not been published. However, this species has been diagnosed by Campbell and Lamar (2004, in J. A. Campbell and W. W. Lamar [eds.], *Venomous Reptiles of the Western Hemisphere*, Comstock, Publ. Assoc., Ithaca, Pp. 195–197). Using over 1,097 microsatellites, Castoe et al. (2012, *Molec. Ecol. Resources* 12: 1105–1113) demonstrated that *M. fulvius* (east of the Mississippi River) is distinct (not sharing genes) with *M. tener*, which cannot be differentiated from Mexican populations of *M. bernardi* and *M. tamaulipensis*.

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M. tener tener Baird and Girard 1853 – Texas Gulf-Coast Coralsnake

Nerodia Baird and Girard 1853

N. clarkii (Baird and Girard 1853) – Saltmarsh Snake

Lawson et al. (1991, *Copeia* 1991: 638–659) presented allozyme data that supported the separation of *clarkii* and *fasciata*.

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N. clarkii clarkii Baird and Girard 1853 – Gulf Saltmarsh Watersnake

N. clarkii compressicauda Kennicott 1860 – Mangrove Saltmarsh Watersnake

N. clarkii taeniata (Cope 1895) – Atlantic Saltmarsh Watersnake

Dunson (1979, *Florida Scientist* 42: 102–112) synonymized *N. c. taeniata* with *N. c. compressicauda*, concluding that it was pattern variant of the latter. Lawson et al. (1991, *Copeia* 1991: 638–659) resurrected *N. c. taeniata* on the basis of allozyme data, although the genetic distances were minute.

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N. cyclopion (Dumeril, Bibron & Dumeril 1854) – Mississippi Green Watersnake

N. erythrogaster Forster 1771 – Plain-Bellied Watersnake

Makowsky et al. (2010, *Mol. Phylogenet. Evol.* 55: 985–995) demonstrated using mitochondrial data that this taxon represents a single widespread species with no concordance to any of the described subspecies. As such we do not recognize subspecies.

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N. fasciata (Linnaeus 1766) – Southern Watersnake

Allozyme data indicate that *N. fasciata* forms two clades, differentiated on the mid-Florida Panhandle (Lawson et al., 1991, *Copeia* 1991: 638–659). Also see note under *N. sipedon*.

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N. fasciata confluens (Blanchard 1923) – Broad-Banded Watersnake

N. fasciata fasciata (Linnaeus 1766) – Banded Watersnake

N. fasciata pictiventris Cope 1895 – Florida Watersnake

N. floridana (Goff 1936) – Florida Green Watersnake

Elevation of *N. floridana* from a race of *N. cyclopion* is supported by data from Pearson (1966, Bull. Serol. Mus. 36: 8), Lawson (1987, J. Herpetol. 21: 140–157), and Sanderson (1993, Brimleyana 19: 83–94). The disjunct populations of *floridana* were examined by Thompson and Crother (1998, Copeia 1998: 715–719) with allozyme data that revealed no evidence of differentiation.

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N. harteri (Trapido 1941) – Brazos River Watersnake

N. paucimaculata (Tinkle and Conant 1961) – Concho Watersnake

Suggested to be separated from *harteri* by Rose and Selcer (1989, J. Herpetol. 23: 261–266) and supported by molecular data in Densmore et al. (1992, Herpetologica 48: 60–68).

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N. rhombifer (Hallowell 1852) – Diamond-Backed Watersnake

Brandley et al. (2010, Mol. Phylogenet. Evol. 57: 552–560) found evidence for multiple lineages of *N. rhombifer*. Two lineages were found roughly east and west of the Mississippi River, with a third in Mexico, corresponding to *N. r. werleri*. Because the genetic lineages do not correspond with previously recognized subspecies in the U.S., we do not recognize any here.

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N. sipedon (Linnaeus 1758) – Common Watersnake

Numerous examples exist of hybridization between *sipedon* and *fasciata* (Conant, 1963, Am. Mus. Novit. 2122: 1–38; Blaney and Blaney, 1979, Herpetologica 35: 350–359; Schwaner et al., 1980, Isozyme Bull. 12: 102; Schwaner and Mount, 1976, Occas. Pap. Mus. Nat. Hist. Univ. Kansas 45: 1–44), and *sipedon* and *fasciata* are apparently sister taxa (Pyron et al. 2013, BMC Evol. Biol. 13: 93, doi:10.1186/1471-2148-13-93).

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N. sipedon insularum (Conant and Clay 1937) – Lake Erie Watersnake

N. sipedon pleuralis (Cope 1892) – Midland Watersnake

N. sipedon sipedon (Linnaeus 1758) – Northern Watersnake

N. sipedon williamengelsi (Conant and Clay 1937) – Carolina Watersnake

N. taxispilota (Holbrook 1838) – Brown Watersnake

Opheodrys Fitzinger 1843

O. aestivus Linnaeus 1766 – Rough Greensnake

Recognition of the Florida peninsular form described by Grobman (1984, Bull. Florida St. Mus. Biol. Sci. 29: 153–170) is supported by Plummer (1987, Copeia 1987: 483–485). Reviewed by Walley and Plummer (2000, Cat. Am. Amph. Rept. 718).

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O. aestivus aestivus (Linnaeus 1766) – Northern Rough Greensnake

O. aestivus carinatus (Grobman 1984) – Florida Rough Greensnake

O. vernalis (Harlan 1827) – Smooth Greensnake

Given that *Liochlorophis* (Oldham and Smith, 1991, Bull. Maryland Herpetol. Soc. 27: 201–215) is the monotypic sister genus to the monotypic genus *Opheodrys*, recognition of the former taxon is unnecessary, and reduces the amount of information conveyed by the names. As such, we retain *vernalis* in *Opheodrys*. The several subspecies described by Grobman (1941, Misc. Pub. Mus. Zool. Univ. Michigan 50: 1–38; 1992, J. Herpetol. 26: 176–186) are based on character clines and not widely recognized.

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Oxybelis Wagler 1830

O. aeneus (Wagler 1824) – Brown Vinesnake

Pantherophis Fitzinger 1843

P. alleghaniensis (Holbrook 1836) – Eastern Ratsnake

Based on the congruence of morphological (Burbrink, 2001, Herpetol. Monogr. 15: 1–53) and mitochondrial data (Burbrink et al., 2000, Evolution 54: 2107–2118), Burbrink divided *P. obsoletus* into three species (*P. alleghaniensis*, *P. obsoletus* and *P. spiloides*) with no subspecies.

Notes on the genus: Utiger et al. (2002, Russian J. Herpetol. 9: 105–124), using molecular data, divided *Elaphe* into eight genera. New World *Elaphe* are part of a clade distinct from Old World species, for which *Pantherophis* Fitzinger, 1843, was resurrected as the oldest available name. While further splitting of *Pantherophis* has been proposed (Collins and Taggart, 2008; J. Kansas Herp. 26: 16–18), the use of *Pantherophis* has helped stabilize the classification of New World ratsnakes for nearly a decade. Thus, we refrain from further division of the genus.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

P. bairdi (Yarrow, in Cope 1880) – Baird's Ratsnake

Notes on the genus: Utiger et al. (2002, Russian J. Herpetol. 9: 105–124), using molecular data, divided *Elaphe* into eight genera. New World *Elaphe* are part of a clade distinct from Old World species, for which *Pantherophis* Fitzinger, 1843, was resurrected as the oldest available name. While further splitting of *Pantherophis* has been proposed (Collins and Taggart, 2008; J. Kansas Herp. 26: 16–18), the use of *Pantherophis* has helped stabilize the classification of New World ratsnakes for nearly a decade. Thus, we refrain from further division of the genus.

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P. emoryi (Baird and Girard 1853) – Great Plains Ratsnake

Using mitochondrial data, Burbrink (2002, Mol. Phylogenet. Evol. 25: 465–476) found *P. guttatus* to comprise three distinct lineages, which were elevated to species level. The name *P. guttatus* was restricted to populations east of the Mississippi River. The populations in western Louisiana and eastern Texas were named *P. slowinskii*.

The subspecies *P. g. meahllmorum* was not found to be a distinct lineage, and was synonymized with *P. emoryi*.

Notes on the genus: Utiger et al. (2002, Russian J. Herpetol. 9: 105–124), using molecular data, divided *Elaphe* into eight genera. New World *Elaphe* are part of a clade distinct from Old World species, for which *Pantherophis* Fitzinger, 1843, was resurrected as the oldest available name. While further splitting of *Pantherophis* has been proposed (Collins and Taggart, 2008; J. Kansas Herp. 26: 16–18), the use of *Pantherophis* has helped stabilize the classification of New World ratsnakes for nearly a decade. Thus, we refrain from further division of the genus.

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P. guttatus (Linnaeus 1766) – Red Cornsnake

Using mitochondrial data, Burbrink (2002, Mol. Phylogenet. Evol. 25: 465–476) found *P. guttatus* to comprise three distinct lineages, which were elevated to species level. The name *P. guttatus* was restricted to populations east of the Mississippi River. The populations in western Louisiana and eastern Texas were named *P. slowinskii*.

The subspecies *P. g. meahllmorum* was not found to be a distinct lineage, and was synonymized with *P. emoryi*.

Notes on the genus: Utiger et al. (2002, Russian J. Herpetol. 9: 105–124), using molecular data, divided *Elaphe* into eight genera. New World *Elaphe* are part of a clade distinct from Old World species, for which *Pantherophis* Fitzinger, 1843, was resurrected as the oldest available name. While further splitting of *Pantherophis* has been proposed (Collins and Taggart, 2008; J. Kansas Herp. 26: 16–18), the use of *Pantherophis* has helped stabilize the classification of New World ratsnakes for nearly a decade. Thus, we refrain from further division of the genus.

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P. obsoletus (Say 1823) – Western Ratsnake

Based on the congruence of morphological (Burbrink, 2001, Herpetol. Monogr. 15: 1–53) and mitochondrial data (Burbrink et al., 2000, Evolution 54: 2107–2118), Burbrink divided *P. obsoletus* into three species (*P. alleghaniensis*, *P. obsoletus* and *P. spiloides*) with no subspecies.

Notes on the genus: Utiger et al. (2002, Russian J. Herpetol. 9: 105–124), using molecular data, divided *Elaphe* into eight genera. New World *Elaphe* are part of a clade distinct from Old World species, for which *Pantherophis* Fitzinger, 1843, was resurrected as the oldest available name. While further splitting of *Pantherophis* has been proposed (Collins and Taggart, 2008; J. Kansas Herp. 26: 16–18), the use of *Pantherophis* has helped stabilize the classification of New World ratsnakes for nearly a decade. Thus, we refrain from further division of the genus.

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P. ramspotti Crother, White, Savage, Eckstut, Graham, and Gardner 2011 – Western Foxsnake

Conant (1940, *Herpetologica* 2: 2) recognized two forms of foxsnakes, one on each side of a geographic disjunction (basically all of Michigan and parts of Indiana and Ohio) with the western form as *Pantherophis vulpinus vulpinus* and the eastern form as *P. v. gloydi* Collins (1991, *Herpetol. Rev.* 22: 42–43) elevated *gloydi* to specific status because of its geographic disjunction from *vulpinus* and the characters noted by Conant (1940, *Herpetologica* 2: 2). Crother et al. (2011, *ISRN Zoology*, doi:10.5402/2011/436049) supported the concept of two species, but discovered that the species boundary was the Mississippi River and not the disjunction. The type locality of *P. vulpinus* is east of the Mississippi River and thus the appropriate available name for the eastern form, leaving the western form unnamed. An interesting side note is that faster evolving microsatellite data reveal a population level separation associated with the geographic hiatus (Row et al., 2011, *J Evol. Biol.* 24: 2364–2377).

Notes on the genus: Utiger et al. (2002, *Russian J. Herpetol.* 9: 105–124), using molecular data, divided *Elaphe* into eight genera. New World *Elaphe* are part of a clade distinct from Old World species, for which *Pantherophis* Fitzinger, 1843, was resurrected as the oldest available name. While further splitting of *Pantherophis* has been proposed (Collins and Taggart, 2008; *J. Kansas Herp.* 26: 16–18), the use of *Pantherophis* has helped stabilize the classification of New World ratsnakes for nearly a decade. Thus, we refrain from further division of the genus.

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P. slowinskii (Burbrink 2002) – Slowinski's Cornsnake

Using mitochondrial data, Burbrink (2002, *Mol. Phylogenet. Evol.* 25: 465–476) found *P. guttatus* to comprise three distinct lineages, which were elevated to species level. The name *P. guttatus* was restricted to populations east of the Mississippi River. The populations in western Louisiana and eastern Texas were named *P. slowinskii*.

The subspecies *P. g. meahllmorum* was not found to be a distinct lineage, and was synonymized with *P. emoryi*.

Notes on the genus: Utiger et al. (2002, *Russian J. Herpetol.* 9: 105–124), using molecular data, divided *Elaphe* into eight genera. New World *Elaphe* are part of a clade distinct from Old World species, for which *Pantherophis* Fitzinger, 1843, was resurrected as the oldest available name. While further splitting of *Pantherophis* has been proposed (Collins and Taggart, 2008; *J. Kansas Herp.* 26: 16–18), the use of *Pantherophis* has helped stabilize the classification of New World ratsnakes for nearly a decade. Thus, we refrain from further division of the genus.

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

P. spiloides (Duméril, Bibron and Duméril 1854) – Gray Ratsnake

Based on the congruence of morphological (Burbrink, 2001, *Herpetol. Monogr.* 15: 1–53) and mitochondrial data (Burbrink et al., 2000, *Evolution* 54: 2107–2118), Burbrink divided *P. obsoletus* into three species (*P. alleghaniensis*, *P. obsoletus* and *P. spiloides*) with no subspecies.

Notes on the genus: Utiger et al. (2002, *Russian J. Herpetol.* 9: 105–124), using molecular data, divided *Elaphe* into eight genera. New World *Elaphe* are part of a clade distinct from Old World species, for which *Pantherophis* Fitzinger, 1843, was resurrected as the oldest available name. While further splitting of *Pantherophis* has been proposed (Collins and Taggart, 2008; *J. Kansas Herp.* 26: 16–18), the use of *Pantherophis* has helped stabilize the classification of New World ratsnakes for nearly a decade. Thus, we refrain from further division of the genus.

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P. vulpinus (Baird and Girard 1853) – Eastern Foxsnake

Conant (1940, *Herpetologica* 2: 2) recognized two forms of foxsnakes, one on each side of a geographic disjunction (basically all of Michigan and parts of Indiana and Ohio) with the western form as *Pantherophis vulpinus vulpinus* and the eastern form as *P. v. gloydi* Collins (1991, *Herpetol. Rev.* 22: 42–43) elevated *gloydi* to specific status because of its geographic disjunction from *vulpinus* and the characters noted by Conant (1940, *Herpetologica* 2: 2). Crother et al. (2011, *ISRN Zoology*, doi:10.5402/2011/436049) supported the concept of two species, but discovered that the species boundary was the Mississippi River and not the disjunction. The type locality of *P. vulpinus* is east of the Mississippi River and thus the appropriate available name for the eastern form, leaving the western form unnamed. An interesting side note is that faster evolving microsatellite data reveal a population level separation associated with the geographic hiatus (Row et al., 2011, *J Evol. Biol.* 24: 2364–2377).

Notes on the genus: Utiger et al. (2002, *Russian J. Herpetol.* 9: 105–124), using molecular data, divided *Elaphe* into eight genera. New World *Elaphe* are part of a clade distinct from Old World species, for which *Pantherophis* Fitzinger, 1843, was resurrected as the oldest available name. While further splitting of *Pantherophis* has been proposed (Collins and Taggart, 2008; *J. Kansas Herp.* 26: 16–18), the use of *Pantherophis* has helped stabilize the classification of New World ratsnakes for nearly a decade. Thus, we refrain from further division of the genus.

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Phyllorhynchus Stejneger 1890

P. browni Stejneger 1890 – Saddled Leaf-Nosed Snake

P. decurtatus (Cope 1868) – Spotted Leaf-Nosed Snake

McDiarmid and McCleary (1993, *Cat. Am. Amph. Rept.*: 579.1–5), argued that the four subspecies of *P. browni* and five subspecies of *P. decurtatus* not be recognized. Gardner and Mendelson (2004, *J. Herpetol.* 38: 187–196), based on morphological data, also concluded that subspecies of *P. decurtatus* should not be recognized.

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Pituophis Holbrook 1842

P. catenifer (Blainville 1835) – Gophersnake

Rodríguez-Robles et al. (2000, *Mol. Phylogenet. Evol.* 14: 35–50) discovered significant internal structuring among *P. catenifer* populations using mitochondrial data, which may signify the existence of additional species, though they did not attempt reclassification. Pending further study, we retain the present subspecific designations for the group.

Notes on the genus: Using mitochondrial data, Rodríguez-Robles and Jesus-Escobar (2000, *Mol. Phylogenet. Evol.* 14: 35–50) corroborated the current classification of United States *Pituophis* into three species: *melanoleucus*, *catenifer*, and *ruthveni*. However, the recognition of *ruthveni* rendered *catenifer* paraphyletic, and *P. catenifer* and *P. melanoleucus* have geographic structure that does not correspond with currently recognized subspecies. Thus, given further study of this group, some species of *Pituophis* may undergo taxonomic revision in the near future.

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P. catenifer affinis (Hallowell 1852) – Sonoran Gophersnake

P. catenifer annectens Baird and Girard 1853 – San Diego Gophersnake

P. catenifer catenifer (Blainville 1835) – Pacific Gophersnake

P. catenifer deserticola Stejneger 1893 – Great Basin Gophersnake

P. catenifer pumilus Klauber 1946 – Santa Cruz Island Gophersnake

P. catenifer sayi (Schlegel 1837) – Bullsake

P. melanoleucus (Daudin 1803) – Eastern Pinesnake

Notes on the genus: Using mitochondrial data, Rodríguez-Robles and Jesus-Escobar (2000, Mol. Phylogenet. Evol. 14: 35–50) corroborated the current classification of United States *Pituophis* into three species: *melanoleucus*, *catenifer*, and *ruthveni*. However, the recognition of *ruthveni* rendered *catenifer* paraphyletic, and *P. catenifer* and *P. melanoleucus* have geographic structure that does not correspond with currently recognized subspecies. Thus, given further study of this group, some species of *Pituophis* may undergo taxonomic revision in the near future.

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P. melanoleucus lodingi Blanchard 1924 – Black Pinesnake

P. melanoleucus melanoleucus (Daudin 1803) – Northern Pinesnake

P. melanoleucus mugitus Barbour 1921 – Florida Pinesnake

P. ruthveni Stull 1929 – Louisiana Pinesnake

Reichling (1995, J. Herpetol. 29: 186–198) concluded that *ruthveni* is a distinct species. Rodríguez-Robles et al. (2000, Mol. Phylogenet. Evol. 14: 35–50) argued for the recognition of *P. ruthveni*, despite lack of significant or independent differentiation from some populations of *P. c. sayi* using mitochondrial data.

Notes on the genus: Using mitochondrial data, Rodríguez-Robles and Jesus-Escobar (2000, Mol. Phylogenet. Evol. 14: 35–50) corroborated the current classification of United States *Pituophis* into three species: *melanoleucus*, *catenifer*, and *ruthveni*. However, the recognition of *ruthveni* rendered *catenifer* paraphyletic, and *P. catenifer* and *P. melanoleucus* have geographic structure that does not correspond with currently recognized subspecies. Thus, given further study of this group, some species of *Pituophis* may undergo taxonomic revision in the near future.

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Python Daudin 1803

P. molurus bivittatus Kuhl 1820 – Burmese Python

Alien Species:

The Burmese Python is native to South and Southeast Asia, has been reported from seven states, and is established in Florida.

Fred Kraus, 2015-01-19

P. sebae (Gmelin 1788) – Northern African Rock Python

Alien Species:

The Northern African Rock Python is native to sub-Saharan Africa, has been reported from two states, and is established in Florida.

Fred Kraus, 2015-01-19

Ramphotyphlops Fitzinger 1843

R. braminus (Daudin 1803) – Brahminy Blindsnake

Alien Species:

The Brahminy Blind Snake is likely native to South Asia, has been reported from 13 states, and is established in Alabama, Arizona, California, Florida, Georgia, Hawaii, Louisiana, Massachusetts, Texas, and Virginia.

Fred Kraus, 2015-01-19

Regina Baird and Girard 1853

R. grahamii Baird and Girard 1853 – Graham's Crayfish Snake

Using a multi-locus nuclear dataset, McVay and Carstens (2013, Mol. Phylogenet. Evol. 68: 425–431) corroborated Alfaro and Arnold (2001, Mol. Phylogenet. Evol. 21: 408–423) and Lawson (1985, Ph.D. dissertation, Louisiana State University) in finding that *Regina* is polyphyletic, removing *R. rigida* and *R. alleni* to *Liodytes*. Furthermore, *R. grahamii* and *R. septemvittata* do not form a strongly supported monophyletic group. Thus, *Regina* may also include *Tropidoconion*, but we await further study before making any additional changes.

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R. septemvittata (Say 1825) – Queensnake

Using a multi-locus nuclear dataset, McVay and Carstens (2013, Mol. Phylogenet. Evol. 68: 425–431) corroborated Alfaro and Arnold (2001, Mol. Phylogenet. Evol. 21: 408–423) and Lawson (1985, Ph.D. dissertation, Louisiana State University) in finding that *Regina* is polyphyletic, removing *R. rigida* and *R. alleni* to *Liodytes*. Furthermore, *R. grahamii* and *R. septemvittata* do not form a strongly supported monophyletic group. Thus, *Regina* may also include *Tropidoconion*, but we await further study before making any additional changes.

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Rena Baird and Girard 1853

R. dissectus (Cope 1896) – New Mexico Threadsnake

Dixon and Vaughan (2003, Texas J. Sci. 55: 3–24), using morphological data, elevated *R. d. dissectus* to species status, and diagnosed three subspecies within the nominate race, one of which remains unnamed. Adalsteinsson et al. (2009, Zootaxa 2224: 1–50) demonstrated that the former genus *Leptotyphlops* was composed of two large clades each composed Old World or New World taxa. The type for the genus *Leptotyphlops* is associated with Old World taxa, leaving the clade of North and Central American threadsnakes unnamed. The genus *Rena* has been restored to this group.

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R. dulcis (Baird and Girard 1853) – Texas Threadsnake

Dixon and Vaughan (2003, Texas J. Sci. 55: 3–24), using morphological data, elevated *R. d. dissectus* to species status, and diagnosed three subspecies within the nominate race, one of which remains unnamed. Adalsteinsson et al. (2009, Zootaxa 2224: 1–50) demonstrated that the former genus *Leptotyphlops* was composed of two large clades each composed Old World or New World taxa. The type for the genus *Leptotyphlops* is associated with Old World taxa, leaving the clade of North and Central American threadsnakes unnamed. The genus *Rena* has been restored to this group.

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R. dulcis dulcis (Baird and Girard 1853) – Plains Threadsnake

R. dulcis rubellum (Garman 1844) – South Texas Threadsnake

R. humilis (Baird and Girard 1853) – Western Threadsnake

Adalsteinsson et al. (2009, Zootaxa 2224: 1–50) demonstrated that the former genus *Leptotyphlops* was composed of two large clades each composed Old World or New World taxa. The type for the genus *Leptotyphlops* is associated with Old World taxa, leaving the clade of North and Central American threadsnakes unnamed. The genus *Rena* has been restored to this group.

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R. humilis cahuilae Klauber 1931 – Desert Threadsnake

R. humilis humilis (Baird and Girard 1853) – Southwestern Threadsnake

R. humilis segregus Klauber 1939 – Trans-Pecos Threadsnake

R. humilis utahensis Tanner 1938 – Utah Threadsnake

Rhadinaea Cope 1863

R. flavilata (Cope 1871) – Pine Woods Littersnake

Rhinocheilus Baird and Girard 1853

R. lecontei Baird and Girard 1853 – Long-Nosed Snake

Salvadora Baird and Girard 1853

S. grahamiae Baird and Girard 1853 – Eastern Patch-Nosed Snake

S. grahamiae grahamiae Baird and Girard 1853 – Mountain Patch-Nosed Snake

S. grahamiae lineata Schimdt 1940 – Texas Patch-Nosed Snake

S. hexalepis (Cope 1866) – Western Patch-Nosed Snake

Recognition of the species *S. deserticola* was made without justification by Bogert and Degenhardt (1961, Am. Mus. Novit. 2064: 13). Bogert (1985, Snake Syst. Newsl. Nov. no. 3) explained that the usage was based on characters discovered previously (Bogert, 1945, Am. Mus. Novit. 1285: 1–14) and on the absence of any intergrades. Although Bogert may be correct, we await a study to demonstrate it and retain *S. h. deserticola* as a subspecies of *S. hexalepis*.

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S. hexalepis deserticola Schmidt 1940 – Big Bend Patch-nosed Snake

S. hexalepis hexalepis (Cope 1866) – Desert Patch-Nosed Snake

S. hexalepis mojavensis Bogert 1945 – Mohave Patch-Nosed Snake

The spelling of the standard English name has been changed from “Mojave” to “Mohave” for consistency with other names in the list (see note for *Crotalus scutulatus*).

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S. hexalepis virgultea Bogert 1935 – Coast Patch-Nosed Snake

Senticolis Dowling and Fries 1987

S. triaspis (Cope 1866) – Green Ratsnake

Senticolis is more closely related to the New World tribe Lampropeltini than it is to the Old World genus *Elaphe* (Keogh 1996, Herpetologica 52: 406–416; Utiger et al., 2002, Russian J. Herpetol. 9: 105–124; Burbrink and Lawson, 2007, Mol. Phylogenet. Evol. 43: 173–189 and Pyron and Burbrink, 2009, Mol. Phylogenet. Evol. 52: 524–529).

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S. triaspis intermedia (Boettger 1883) – Northern Green Ratsnake

Sistrurus Garman 1883

S. catenatus (Rafinesque 1818) – Massasauga

Kubatko et al. (2011, Syst. Biol. 60: 393–409) used a multigene data set to infer two clades among the three previously recognized subspecies. One clade contained the eastern subspecies (*S. c. catenatus*) and the other clade contained the two western subspecies (*S. c. tergeminus* and *S. c. edwardsii*). Kubatko et al. (op. cit.) recommended elevating *S. c. catenatus*. However, if the recommendation was followed at that time, it would also require elevating *S. c. tergeminus* and the formation of three new combinations. In addition, Holycross et al. (2008, Copeia, 2008: 421–424) discovered that *S. c. tergeminus* is actually subsumed by *S. c. catenatus* because the type locality of *catenatus* is within the range of *tergeminus*, and that the name *Crotalus massassaugus* Kirtland, 1838 would be the available and valid name for the eastern subspecies. As such, *tergeminus* was not currently a valid name and if the Kubatko et al. recommendation was followed, the specific epithet for the eastern form would be *massassaugus*. Crother et al. (2011 Bull. Zool. Nomencl. 68: 271–274) submitted a petition to the ICZN for conservation of the names *catenatus* and *tergeminus*. The subsequent opinion by the ICZN (2013 Bull. Zool. Nomencl. 70: 282–283) retained the names *S. catenatus* and *S. tergeminus* by designation of neotypes for both species. We follow the recommendation of Kubatko et al. (op. cit.) and elevate *tergeminus*, leaving no recognized subspecies of *catenatus*. Also see notes under *Crotalus*.

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S. miliarius (Linnaeus 1766) – Pygmy Rattlesnake

See notes under *Crotalus*.

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S. miliarius barboursi Gloyd 1935 – Dusky Pygmy Rattlesnake

Gloyd (1935, Occ. Papers Mus. Zool. Univ. Michigan 322: 1–7) found *S. m. barboursi* distinct from the other two races by having the lateral spots in 3 series vs. 1–2 series for the other two.

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S. miliarius miliarius (Linnaeus 1766) – Carolina Pygmy Rattlesnake

S. miliarius streckeri Gloyd 1935 – Western Pygmy Rattlesnake

S. tergeminus (Say 1823) – Western Massasauga

Kubatko et al. (2011, Syst. Biol. 60: 393–409) found mixed signals and limited support for the separation of the subspecies. Also see notes under *Crotalus*.

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S. tergeminus edwardsii (Baird and Girard 1853) – Desert Massasauga

S. tergeminus tergeminus (Say 1823) – Prairie Massasauga

Sonora Baird and Girard 1853

S. semiannulata Baird and Girard 1853 – Western Groundsnake

S. semiannulata semiannulata Baird and Girard 1853 – Variable Groundsnake

S. semiannulata taylori (Boulenger 1894) – Southern Texas Groundsnake

Storeria Baird and Girard 1853

S. dekayi (Holbrook 1836) – Dekay's Brownsnake

S. dekayi dekayi (Holbrook 1836) – Northern Brownsnake

S. dekayi limnetes Anderson 1961 – Marsh Brownsnake

S. dekayi texana Trapido 1944 – Texas Brownsnake

S. dekayi wrightorum Trapido 1944 – Midland Brownsnake

S. occipitomaculata (Storer 1839) – Red-Bellied Snake

S. occipitomaculata obscura Trapido 1944 – Florida Red-Bellied Snake

S. occipitomaculata occipitomaculata (Storer 1839) – Northern Red-Bellied Snake

No evidence of separate lineages has been found between the sympatric brown and grey color morphs (Grudzien and Owens, 1991, J. Herpetol. 25: 90–92).

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S. occipitomaculata pahasapae Smith 1963 – Black Hills Red-bellied Snake

S. victa Hay 1892 – Florida Brownsnake

Christman (1980, Bull. Florida St. Mus. 25: 157–256) presented evidence, allopatric with no morphological convergence in proximal populations, to suggest species status for *victa*. This is supported by genomic sequence data from >350 nuclear genes (R. Pyron et al., unpubl. data).

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Tantilla Baird and Girard 1853

T. atriceps (Gunther, 1895 in Salvin and Godman, 1885-1902 1895) – Mexican Black-Headed Snake

T. coronata Baird and Girard 1853 – Southeastern Crowned Snake

T. cucullata Minton 1956 – Trans-pecos Black Headed Snake

The taxonomic status of *T. cucullata* and *T. diabolus* has been problematic. They have been alternately synonymized (Degenhardt et al., 1976, Texas J. Sci. 17: 225–234; Hillis and Campbell, 1982, Southwest. Nat. 27: 220–221; Irwin and Collins, 1995, Herpetol. Rev. 26: 47) or elevated to species (Collins, 1991, Herpetol. Rev. 22: 42–43). We follow the most recent proposals from Wilson (1999, Smithsonian Inform. Serv. 122: 1–34) and Dixon et al. (2000, Southwest Nat. 45) who both recognized *T. cucullata* as a species distinct from *T. rubra* (extralimital) and synonymized *T. diabolus* with the former.

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T. gracilis Baird and Girard 1853 – Flat-Headed Snake

T. hobartsmithi Taylor 1937 – Smith's Black-headed Snake

T. nigriceps Kennicott 1860 – Plains Black-Headed Snake

T. oolitica Telford 1966 – Rim Rock Crowned Snake

T. planiceps (Blainville 1835) – Western Black-Headed Snake

Cole and Hardy (1981, Bull. Am. Mus. Nat. Hist. 17: 201–284) noted local geographic variation but did not recognize any available subspecies of the many disjunct populations.

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T. relictata Telford 1966 – Florida Crowned Snake

T. relictata neilli Telford 1966 – Central Florida Crowned Snake

T. relictata pamlica Telford 1966 – Coastal Dunes Crowned Snake

T. relictata relictata Telford 1966 – Peninsula Crowned Snake

T. wilcoxi Stejneger 1903 – Chihuahuan Black-Headed Snake

T. yaquia Smith 1942 – Yaqui Black-Headed Snake

Thamnophis Fitzinger 1843

T. atratus (Kennicott 1860) – Aquatic Gartersnake

Rossman and Stewart (1987, Occ. Pap. Mus. Zool. Louisiana St. Univ. 63: 1–25) recognized *atratus* as distinct from *T. couchii* and recommended against recognizing *T. a. aquaticus*.

Notes on the genus: The specific and infraspecific status of *Thamnophis* below is based on Rossman et al. (1996, The Garter Snakes: Evolution and Ecology, Univ. Oklahoma Press).

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T. atratus atratus (Kennicott 1860) – Santa Cruz Gartersnake

T. atratus hydrophilus Fitch 1936 – Oregon Gartersnake

T. atratus zaxanthus Boundy 1999 – Diablo Range Gartersnake

T. brachystoma (Cope 1892) – Short-Headed Gartersnake

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, The Garter Snakes: Evolution and Ecology, Univ. Oklahoma Press).

T. butleri (Cope 1889) – Butler's Gartersnake

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, The Garter Snakes: Evolution and Ecology, Univ. Oklahoma Press)

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T. couchii (Kennicott 1859) – Sierra Gartersnake

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, The Garter Snakes: Evolution and Ecology, Univ. Oklahoma Press)

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T. cyrtopsis (Kennicott 1860) – Black-Necked Gartersnake

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, The Garter Snakes: Evolution and Ecology, Univ. Oklahoma Press)

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T. cyrtopsis cyrtopsis (Kennicott 1860) – Western Black-Necked Gartersnake

T. cyrtopsis ocellatus (Cope 1880) – Eastern Black-Necked Gartersnake

T. elegans (Baird and Girard 1853) – Terrestrial Gartersnake

Using mitochondrial data, Bronikowski and Arnold (2001, *Copeia* 2001: 508–513) identified several clades within *T. elegans* that did not, in some cases, follow phenotypic subspecies boundaries. Hammerson (1999, *Amphibians and Reptiles of Colorado*, 2nd ed. University of Colorado Press, Boulder) found phenotypes assignable to *T. e. arizonae* and *T. e. vascotanneri* outside of their purported distributions within Colorado, and recommended that the two names be synonymized with *T. e. vagrans*. Hammerson's data supported similar action for Arizona and New Mexico populations as well (J. Boundy, pers. obs.). Thus, we tentatively retain three subspecies.

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, *The Garter Snakes: Evolution and Ecology*, Univ. Oklahoma Press).

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T. elegans elegans (Baird and Girard 1853) – Mountain Gartersnake

T. elegans terrestris Fox 1951 – Coast Gartersnake

T. elegans vagrans (Baird and Girard 1853) – Wandering Gartersnake

T. eques (Reuss 1834) – Mexican Gartersnake

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, *The Garter Snakes: Evolution and Ecology*, Univ. Oklahoma Press)

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T. eques megalops (Kennicott 1860) – Brown Gartersnake

T. gigas Fitch 1940 – Giant Gartersnake

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, *The Garter Snakes: Evolution and Ecology*, Univ. Oklahoma Press)

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T. hammondi (Kennicott 1860) – Two-Striped Gartersnake

The extralimital *T. digueti* was synonymized with *T. hammondi* by McGuire and Grismer (1993, *Herpetologica* 49: 354–365).

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, *The Garter Snakes: Evolution and Ecology*, Univ. Oklahoma Press).

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T. marcianus (Baird and Girard 1853) – Checkered Gartersnake

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, *The Garter Snakes: Evolution and Ecology*, Univ. Oklahoma Press).

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T. marcianus marcianus (Baird and Girard 1853) – Marcy's Checkered Gartersnake

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, The Garter Snakes: Evolution and Ecology, Univ. Oklahoma Press).

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

T. ordinoides (Baird and Girard 1852) – Northwestern Gartersnake

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, The Garter Snakes: Evolution and Ecology, Univ. Oklahoma Press).

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T. proximus (Say 1823) – Western Ribbonsnake

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, The Garter Snakes: Evolution and Ecology, Univ. Oklahoma Press).

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T. proximus diabolicus Rossman 1963 – Arid Land Ribbonsnake

T. proximus orarius Rossman 1963 – Gulf Coast Ribbonsnake

T. proximus proximus (Say 1823) – Orange-Striped Ribbonsnake

T. proximus rubrilineatus Rossman 1963 – Red-Striped Ribbonsnake

T. radix (Baird and Girard 1853) – Plains Gartersnake

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, The Garter Snakes: Evolution and Ecology, Univ. Oklahoma Press).

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T. rufipunctatus (Cope 1875) – Narrow-Headed Gartersnake

Based on scale microstructure, Chiasson and Lowe (1989, J. Herpetol. 23: 109–118) suggested this taxon be moved from *Thamnophis* to *Nerodia*. De Queiroz and Lawson (1994, Biol. J. Linn. Soc. 53: 209–229) rejected the suggested reallocation, based on their finding that *rufipunctatus* is nested within *Thamnophis*.

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, The Garter Snakes: Evolution and Ecology, Univ. Oklahoma Press).

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T. sauritus (Linnaeus 1766) – Eastern Ribbonsnake

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, The Garter Snakes: Evolution and Ecology, Univ. Oklahoma Press).

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T. sauritus nitae Rossman 1963 – Blue-Striped Ribbonsnake

T. sauritus sackenii (Kennicott 1859) – Peninsula Ribbonsnake

T. sauritus sauritus (Linnaeus 1766) – Common Ribbonsnake

T. sauritus septentrionalis Rossman 1963 – Northern Ribbonsnake

T. sirtalis (Linnaeus 1758) – Common Gartersnake

Analyses of mitochondrial and nuclear data suggest that this species may be composed of multiple independently evolving lineages often not concordant with the subspecific taxonomy (F. Burbrink, pers. comm.).

Notes on the genus: The specific and infraspecific status of *Thamnophis* is based on Rossman et al. (1996, *The Garter Snakes: Evolution and Ecology*, Univ. Oklahoma Press).

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T. sirtalis annectens Brown 1950 – Texas Gartersnake

T. sirtalis concinnus (Hallowell 1852) – Red-Spotted Gartersnake

T. sirtalis dorsalis (Baird and Girard 1853) – New Mexico Gartersnake

T. sirtalis fitchi Fox 1951 – Valley Gartersnake

T. sirtalis infernalis (Blainville 1835) – California Red-Sided Gartersnake

The International Commission on Zoological Nomenclature (2000, *Bull. Zool. Nomencl.* 57: 191–192, Opinion 1961) has ruled that the name *Coluber infernalis* be re-associated with Pacific Coast populations referred to as *T. s. concinnus* by Crother et al. (2000, *Herpetol. Circular* 29: 73), as suggested by Boundy and Rossman (1995, *Copeia* 1995: 236–240).

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T. sirtalis pallidus Allen 1899 – Maritime Gartersnake

T. sirtalis parietalis (Say 1823) – Red-Sided Gartersnake

T. sirtalis pickeringii (Baird and Girard 1853) – Puget Sound Gartersnake

T. sirtalis semifasciatus Cope 1892 – Chicago Gartersnake

T. sirtalis similis Rossman 1965 – Blue-Striped Gartersnake

T. sirtalis sirtalis (Linnaeus 1758) – Eastern Gartersnake

T. sirtalis tetrataenia (Cope 1892) – San Francisco Gartersnake

Action by the International Commission on Zoological Nomenclature (2000, *Bull. Zool. Nomencl.* 57: 191–192, Opinion 1961) has retained the name *Eutaenia s. tetrataenia* for San Francisco Peninsula populations of *T. sirtalis*.

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Trimorphodon Cope 1861

T. lambda Cope 1866 – Sonoran Lyresnake

Devitt et al. (2008, *Copeia* 2008: 370–387) recognized six species (three extralimital), including *T. lambda* and *T. lyrophanes* based on morphological and mitochondrial data.

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T. lyrophanes (Cope 1860) – California Lyresnake

Devitt et al. (2008, *Copeia* 2008: 370–387) recognized six species (three extralimital), including *T. lambda* and *T. lyrophanes* based on morphological and mitochondrial data.

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T. vilkinsonii Cope 1886 – Texas Lyresnake

LaDuc and Johnson (2003, *Herpetologica* 59: 364–374) re-elevated *T. vilkinsonii* to species status.

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Tropidoclonion Cope 1860

T. lineatum (Hallowell 1856) – Lined Snake

See comments under *Virginia*.

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Virginia Baird and Girard 1853

V. valeriae Baird and Girard 1853 – Smooth Earthsnake

McVay and Carstens (2013, *Mol. Phylogenet. Evol.* 68: 425–431) found that *Virginia* is polyphyletic based on a multi-locus nuclear dataset, and resurrected *Haldea* for *V. striatula*

V. valeriae elegans Kennicott 1859 – Western Smooth Snake

V. valeriae pulchra (Richmond 1954) – Mountain Earthsnake

Collins (1991, *Herpetol. Rev.* 22: 42–43) elevated *pulchra* to specific status. Because no supporting data, aside from allopatric distribution, were published in his list, we retain *V. valeriae pulchra*

Brian I. Crother (Chair), Jeff Boundy, Frank T. Burbrink, Jonathan A. Campbell, R. Alexander Pyron, 2014-12-12

V. valeriae valeriae Baird and Girard 1853 – Eastern Smooth Earthsnake

Squamata – Lizard

Agama Daudin 1802

A. agama africana (Linnaeus 1758) – West African Rainbow Lizard

Alien Species:

The African Rainbow Lizard is native to Africa and is established in Florida. Subspecific identification was provided for five populations by Enge et al. (2004, Florida Scientist 67: 303–310).

Fred Kraus, 2015-01-19

Ameiva Meyer 1795

A. ameiva (Linnaeus 1758) – Giant Ameiva

Alien Species:

The Giant Ameiva is native to Amazonia and is established in Florida. Earlier confusion about the taxonomy of these lizards (King and Krakauer, 1966, Quart. J. Fla. Acad. Sci. 29: 144–154; Meshaka et al., 2004, The Exotic Amphibians and Reptiles of Florida, Krieger Publishing Co., Malabar, Florida) has been resolved by Ugueto and Harvey (2011. Herp. Monogr. 25: 113–170).

Fred Kraus, 2015-01-19

A. praesignis (Baird and Girard 1852) – Dusky Giant Ameiva

Alien Species:

The Dusky Giant Ameiva is native to lower Central American and northwestern South America; it is established in Florida. Earlier confusion about the taxonomy of these lizards (King and Krakauer, 1966, Quart. J. Fla. Acad. Sci. 29: 144–154; Meshaka et al., 2004, The Exotic Amphibians and Reptiles of Florida, Krieger Publishing Co., Malabar, Florida) has been resolved by Ugueto and Harvey (2011. Herp. Monogr. 25: 113–170).

Fred Kraus, 2015-01-19

Anniella Gray 1852

A. alexanderae Papenfuss and Parham 2013 – Temblor Legless Lizard

Taxonomy for *Anniella* follows Papenfuss and Parham (2013, Breviora 536: 1–17), who recognized five species for specimens previously referred to *A. pulchra* based on molecular and morphological evidence. Some of the common names proposed by Papenfuss and Parham (op. cit.) have been changed in the interest of brevity and descriptive accuracy.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. campi Papenfuss and Parham 2013 – Big Spring Legless Lizard

Taxonomy for *Anniella* follows Papenfuss and Parham (2013, Breviora 536: 1–17), who recognized five species for specimens previously referred to *A. pulchra* based on molecular and morphological evidence. Some of the common names proposed by Papenfuss and Parham (op. cit.) have been changed in the interest of brevity and descriptive accuracy.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. grinnelli Papenfuss and Parham 2013 – Bakersfield Legless Lizard

Taxonomy for *Anniella* follows Papenfuss and Parham (2013, Breviora 536: 1–17), who recognized five species for specimens previously referred to *A. pulchra* based on molecular and morphological evidence. Some of the common names proposed by Papenfuss and Parham (op. cit.) have been changed in the interest of brevity and descriptive accuracy.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. pulchra Gray 1852 – Northern Legless Lizard

Taxonomy for *Anniella* follows Papenfuss and Parham (2013, Breviora 536: 1–17), who recognized five species for specimens previously referred to *A. pulchra* based on molecular and morphological evidence. Some of the common names proposed by Papenfuss and Parham (op. cit.) have been changed in the interest of brevity and descriptive accuracy.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. stebbinsi Papenfuss and Parham 2013 – San Diegan Legless Lizard

Taxonomy for *Anniella* follows Papenfuss and Parham (2013, Breviora 536: 1–17), who recognized five species for specimens previously referred to *A. pulchra* based on molecular and morphological evidence. Some of the common names proposed by Papenfuss and Parham (op. cit.) have been changed in the interest of brevity and descriptive accuracy.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Anolis Daudin 1802

A. carolinensis (Voigt 1832) – Green Anole

Taxonomy for *Anolis* follows Williams (1976, *Breviora* 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, *Amphibians and Reptiles of the West Indies*, University of Florida Press). Tollis et al. (2012, *PLoS ONE* 7(6): e38474) and Campbell-Staton et al. (2012, *Ecol. Evol.* 2: 2274–2284) provided evidence for the existence of five mutually exclusive mitochondrial clades within *A. carolinensis*. Although nuclear DNA (Tollis et al., op. cit.) corroborated the existence of some of these units, it also suggested the existence of gene flow between others. More extensive geographic sampling and further analyses of gene flow are needed to determine whether these units represent separately evolving lineages and how they relate to the currently recognized subspecies. More extensive geographic sampling and further analyses of gene flow are needed to determine whether these units represent separately evolving lineages and how they relate to the currently recognized subspecies. Some authors divide *Anolis* into five (e.g., Guyer and Savage, 1986, *Syst. Zool.* 35: 509–531; 1992, *Syst. Biol.* 41: 89–110; Savage and Guyer, 1989, *Amphibia-Reptilia* 10: 105–116) or 8 (Nicholson et al., 2012, *Zootaxa* 3477: 1–108) genera (for criticisms see Williams, 1989, in C. A. Woods [ed.], *Biogeography of the West Indies*, Sandhill Crane Press, Pp. 433–477; Cannatella and de Queiroz, 1989, *Syst. Zool.* 38: 57–69; Jackman et al., 1999, *Syst. Biol.* 48: 254–285; Poe, 2004, *Herpetol. Monogr.* 18: 37–89; 2013, *Zootaxa* 3626: 295–299). Other authors (e.g., Nicholson, 2002, *Herpetol. Monogr.* 16: 93–120; Brandley and de Queiroz, 2004, *Herpetol. Monogr.* 18: 90–126; Castañeda and de Queiroz, 2011, *Mol. Phylogenet. Evol.* 61: 784–800; 2013, *Bull. Mus. Comp. Zool.* 160: 345–398) use the name *Anolis* for the larger clade, applying the other names to various of its subclades (sometimes with different circumscriptions than the genera with the same names). We have adopted the second approach and included names of subclades parenthetically, where applicable.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. carolinensis carolinensis (Voigt 1832) – Northern Green Anole

Taxonomy for *Anolis* follows Williams (1976, *Breviora* 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, *Amphibians and Reptiles of the West Indies*, University of Florida Press). Tollis et al. (2012, *PLoS ONE* 7(6): e38474) and Campbell-Staton et al. (2012, *Ecol. Evol.* 2: 2274–2284) provided evidence for the existence of five mutually exclusive mitochondrial clades within *A. carolinensis*. Although nuclear DNA (Tollis et al., op. cit.) corroborated the existence of some of these units, it also suggested the existence of gene flow between others. More extensive geographic sampling and further analyses of gene flow are needed to determine whether these units represent separately evolving lineages and how they relate to the currently recognized subspecies.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. carolinensis seminolus Vance 1991 – Southern Green Anole

Taxonomy for *Anolis* follows Williams (1976, *Breviora* 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, *Amphibians and Reptiles of the West Indies*, University of Florida Press). Tollis et al. (2012, *PLoS ONE* 7(6): e38474) and Campbell-Staton et al. (2012, *Ecol. Evol.* 2: 2274–2284) provided evidence for the existence of five mutually exclusive mitochondrial clades within *A. carolinensis*. Although nuclear DNA (Tollis et al., op. cit.) corroborated the existence of some of these units, it also suggested the existence of gene flow between others. More extensive geographic sampling and further analyses of gene flow are needed to determine whether these units represent separately evolving lineages and how they relate to the currently recognized subspecies.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. chlorocyanus Duméril and Bibron 1837 – Comb Anole

Alien Species: The Hispaniolan Green Anole is native to Hispaniola and is established in Florida

Taxonomy for *Anolis* follows Williams (1976, Breviora 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History, University of Florida Press) and modifications by Vance (1991, Bull. Maryland Herpetol. Soc. 27: 43–89; description of *A. carolinensis seminolus*). Some authors (e.g., Guyer and Savage, 1986, Syst. Zool. 35: 509–531; 1992, Syst. Biol. 41: 89–110; Savage and Guyer, 1989, Amphibia-Reptilia 10: 105–116; Nicholson et al., 2012, Zootaxa 3477: 1–108) divide *Anolis* into several genera and these are included in parentheses (as subclades). Assignments of species covered in this checklist to the genera of Nicholson et al. (2012) is as follows: *Anolis* (*carolinensis*, *porcatus*), *Audantia* (*cybotes*), *Ctenonotus* (*cratatellus*, *distichus*, *ferreus*), *Dactyloa* (*trinitatis*), *Deiropyx* (*equestris*), *Norops* (*garmani*, *sagei*), *Xiphosurus* (*chlorocyanus*).

Fred Kraus, 2015-01-19

A. cristatellus cristatellus Duméril and Bibron 1837 – Puerto Rican Crested Anole

Alien Species: The Puerto Rican Crested Anole is native to Puerto Rico and the Virgin Islands and is established in Florida. Subspecific identifications have been given for the Dade County specimens by Schwartz and Henderson (1988, Contrib. Biol. Geol. Milwaukee Publ. Mus. 74: 1–264; 1991, Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History, University of Florida Press).

Taxonomy for *Anolis* follows Williams (1976, Breviora 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History, University of Florida Press) and modifications by Vance (1991, Bull. Maryland Herpetol. Soc. 27: 43–89; description of *A. carolinensis seminolus*). Some authors (e.g., Guyer and Savage, 1986, Syst. Zool. 35: 509–531; 1992, Syst. Biol. 41: 89–110; Savage and Guyer, 1989, Amphibia-Reptilia 10: 105–116; Nicholson et al., 2012, Zootaxa 3477: 1–108) divide *Anolis* into several genera and these are included in parentheses (as subclades). Assignments of species covered in this checklist to the genera of Nicholson et al. (2012) is as follows: *Anolis* (*carolinensis*, *porcatus*), *Audantia* (*cybotes*), *Ctenonotus* (*cratatellus*, *distichus*, *ferreus*), *Dactyloa* (*trinitatis*), *Deiropyx* (*equestris*), *Norops* (*garmani*, *sagei*), *Xiphosurus* (*chlorocyanus*).

Fred Kraus, 2015-01-19

A. cybotes Cope 1862 – Large-Headed Anole

Alien Species: The Large-headed Anole is native to Hispaniola and the Bahamas and is established in Florida.

Taxonomy for *Anolis* follows Williams (1976, Breviora 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History, University of Florida Press) and modifications by Vance (1991, Bull. Maryland Herpetol. Soc. 27: 43–89; description of *A. carolinensis seminolus*). Some authors (e.g., Guyer and Savage, 1986, Syst. Zool. 35: 509–531; 1992, Syst. Biol. 41: 89–110; Savage and Guyer, 1989, Amphibia-Reptilia 10: 105–116; Nicholson et al., 2012, Zootaxa 3477: 1–108) divide *Anolis* into several genera and these are included in parentheses (as subclades). Assignments of species covered in this checklist to the genera of Nicholson et al. (2012) is as follows: *Anolis* (*carolinensis*, *porcatus*), *Audantia* (*cybotes*), *Ctenonotus* (*cratatellus*, *distichus*, *ferreus*), *Dactyloa* (*trinitatis*), *Deiropyx* (*equestris*), *Norops* (*garmani*, *sagei*), *Xiphosurus* (*chlorocyanus*).

Fred Kraus, 2015-01-19

A. cybotes cybotes Cope 1862 – Common Large-Headed Anole

Alien Species: The Dade County population has been identified as *A. c. cybotes* (Schwartz and Henderson, 1988, Contrib. Biol. Geol. Milwaukee Pub. Mus. 74: 1–264). No subspecific identification for the Broward County population has been provided.

Taxonomy for *Anolis* follows Williams (1976, Breviora 440: 1–21). The Large-headed Anole is native to Hispaniola and the Bahamas and is established in Florida. The Dade County population has been identified as *A. c. cybotes* (Schwartz and Henderson, 1988, Contrib. Biol. Geol. Milwaukee Pub. Mus. 74: 1–264). No subspecific identification for the Broward County population has been provided.

Fred Kraus, 2015-01-19

A. distichus Cope 1861 – Bark Anole

Taxonomy for *Anolis* follows Williams (1976, Breviora 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, Amphibians and Reptiles of the West Indies, University of Florida Press) and modifications by Vance (1991, Bull. Maryland Herpetol. Soc. 27: 43–89; description of *A. carolinensis seminolus*). Some authors divide *Anolis* into five (e.g., Guyer and Savage, 1986, Syst. Zool. 35: 509–531; 1992, Syst. Biol. 41: 89–110; Savage and Guyer, 1989, Amphibia-Reptilia 10: 105–116) or 8 (Nicholson et al., 2012, Zootaxa 3477: 1–108) genera (for criticisms see Williams, 1989, in C. A. Woods [ed.], Biogeography of the West Indies, Sandhill Crane Press, Pp. 433–477; Cannatella and de Queiroz, 1989, Syst. Zool. 38: 57–69; Jackman et al., 1999, Syst. Biol. 48: 254–285; Poe, 2004, Herpetol. Monogr. 18: 37–89; 2013, Zootaxa 3626: 295–299). Other authors (e.g., Nicholson, 2002, Herpetol. Monogr. 16: 93–120; Brandley and de Queiroz, 2004, Herpetol. Monogr. 18: 90–126; Castañeda and de Queiroz, 2011, Mol. Phylogenet. Evol. 61: 784–800; 2013, Bull. Mus. Comp. Zool. 160: 345–398) use the name *Anolis* for the larger clade, applying the other names to various of its subclades (sometimes with different circumscriptions than the genera with the same names). We have adopted the second approach and included names of subclades parenthetically, where applicable.

Alien Species: The Bark Anole is native to Hispaniola, has been reported from two states, and is established in Florida.

The potential natural occurrence of *A. (Ctenonotus) distichus* in Florida is an unresolved issue. Current populations show evidence of hybridization between introduced *A. d. dominicensis* and another form, but the origin of the other form is currently unknown. Smith and McCauley (1948, Proc. Biol. Soc. Washington 61: 159–166) named it as the subspecies *A. d. floridanus* based on differences from the Bahamian and Hispaniolan specimens. Schwartz (1968, Bull. Mus. Comp. Zool. 137: 255–310) reviewed morphological variation in *A. distichus* and confirmed differences between Floridian versus Bahamian and Hispaniolan populations. He considered *A. d. floridanus* to have colonized Florida recently, either by natural dispersal or human introduction, and that the Bimini chain (*A. d. biminiensis*) and Andros Island (*A. d. distichooides*) represented the most likely sources. A detailed study of genetic variation in *A. distichus*, similar to that done for *A. sagrei* (Kolbe et al., 2004, Nature 431: 177–181) and including the introduced populations, would help to clarify this issue.

Kevin de Quieroz (Chair) and Tod W. Reeder and Fred Kraus (Alien species), 2015-01-15

A. distichus dominicensis Reinhardt and Lütken 1863 – Green Bark Anole

Alien Species:

Taxonomy for *Anolis* follows Williams (1976, Breviora 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History, University of Florida Press).

The Bark Anole is native to Hispaniola, has been reported from two states, and is established in Florida. *Anolis distichus dominicensis* is established in Miami, Florida (King and Krakauer, 1966, Quart. J. Florida Acad. Sci. 29: 144–154; Wilson and Porras, 1983, Univ. Kansas Mus. Nat. Hist. Spec. Publ. 9: 1–89). *Anolis distichus dominicensis* is established in Miami, Florida (King and Krakauer, 1966, Quart. J. Florida Acad. Sci. 29: 144–154; Wilson and Porras, 1983, Univ. Kansas Mus. Nat. Hist. Spec. Publ. 9: 1–89). Another subspecies, *Anolis distichus ignigularis*, was introduced to Dade County, Florida (King and Krakauer, 1966, Quart. J. Florida Acad. Sci. 29: 144–154) and was listed as occurring there by Schwartz and Henderson (1988, Contrib. Biol. Geol. Milwaukee Pub. Mus. 74: 1–264; 1991, Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History, University of Florida Press); however, according to Wilson and Porras (1983, Univ. Kansas Mus. Nat. Hist. Spec. Publ. 9: 1–89), this population is no longer extant. Hybridization appears to have occurred between *A. d. dominicensis* and *A. d. floridanus* (Miyamoto et al., 1986, Copeia 1986: 76–86; see note on *A. d. floridanus*).

Fred Kraus, 2015-01-19

A. distichus floridanus Smith and McCauley 1948 – Florida Bark Anole

Taxonomy for *Anolis* follows Williams (1976, Breviora 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History, University of Florida Press).

Alien species: The Bark Anole is native to Hispaniola, has been reported from two states, and is established in Florida.

The potential natural occurrence of *A. (Ctenonotus) distichus* in Florida is an unresolved issue. Current populations show evidence of hybridization between introduced *A. d. dominicensis* and another form, but the origin of the other form is currently unknown. Smith and McCauley (1948, Proc. Biol. Soc. Washington 61: 159–166) named it as the subspecies *A. d. floridanus* based on differences from the Bahamian and Hispaniolan specimens. Schwartz (1968, Bull. Mus. Comp. Zool. 137: 255–310) reviewed morphological variation in *A. distichus* and confirmed differences between Floridian versus Bahamian and Hispaniolan populations. He considered *A. d. floridanus* to have colonized Florida recently, either by natural dispersal or human introduction, and that the Bimini chain (*A. d. biminiensis*) and Andros Island (*A. d. distichooides*) represented the most likely sources. A detailed study of genetic variation in *A. distichus*, similar to that done for *A. sagrei* (Kolbe et al., 2004, Nature 431: 177–181) and including the introduced populations, would help to clarify this issue.

Schwartz (1968, Bull. Mus. Comp. Zool. 137: 255–310) reviewed the evidence and discussed alternative hypotheses concerning the occurrence of *Anolis distichus floridanus* in Florida and concluded that this taxon was most likely introduced from Andros Island in the Bahamas; nevertheless, Wilson and Porras (1983, Univ. Kansas Mus. Nat. Hist. Spec. Publ. 9: 1–89) considered it a native component of the Florida herpetofauna. Although the specimens of *A. d. floridanus* examined by Schwartz (1968, Bull. Mus. Comp. Zool. 137: 255–310) are distinguishable from those of *A. d. dominicensis*, more recent samples of Bark Anoles from Florida form a continuum, suggesting intergradation between the two subspecies (Miyamoto et al., 1986, Copeia 1986: 76–86).

Kevin de Quieroz (Chair) and Tod W. Reeder and Fred Kraus (Alien species), 2015-01-15

A. equestris Merrem 1820 – Knight Anole

Alien Species:

The Knight Anole is native to Cuba and is established in Florida and Hawaii.

Taxonomy for *Anolis* follows Williams (1976, *Breviora* 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, *Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History*, University of Florida Press) and modifications by Vance (1991, *Bull. Maryland Herpetol. Soc.* 27: 43–89; description of *A. carolinensis seminolus*). Some authors (e.g., Guyer and Savage, 1986, *Syst. Zool.* 35: 509–531; 1992, *Syst. Biol.* 41: 89–110; Savage and Guyer, 1989, *Amphibia-Reptilia* 10: 105–116; Nicholson et al., 2012, *Zootaxa* 3477: 1–108) divide *Anolis* into several genera and these are included in parentheses (as subclades). Assignments of species covered in this checklist to the genera of Nicholson et al. (2012) is as follows: *Anolis* (*carolinensis*, *porcatus*), *Audantia* (*cybotes*), *Ctenonotus* (*crystalinus*, *distichus*, *ferreus*), *Dactyloa* (*trinitatis*), *Deiropyx* (*equestris*), *Norops* (*garmani*, *sagrei*), *Xiphosurus* (*chlorocyanus*).

Fred Kraus, 2015-01-19

A. equestris equestris Merrem 1820 – Western Knight Anole

Alien Species:

The subspecific identification for the Florida population was given by Schwartz and Henderson (1988, *Contrib. Biol. Geol. Milwaukee Pub. Mus.* 74: 1–264; 1991, *Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History*, University of Florida Press); that for the Hawaiian population was given by Lazell and McKeown (1998, *Bull. Chicago Herpetol. Soc.* 33: 181).

Taxonomy for *Anolis* follows Williams (1976, *Breviora* 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, *Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History*, University of Florida Press). The Knight Anole is native to Cuba and is established in Florida and Hawaii. The subspecific identification for the Florida population was given by Schwartz and Henderson (1988, *Contrib. Biol. Geol. Milwaukee Pub. Mus.* 74: 1–264; 1991, *Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History*, University of Florida Press); that for the Hawaiian population was given by Lazell and McKeown (1998, *Bull. Chicago Herpetol. Soc.* 33: 181).

Fred Kraus, 2015-01-19

A. ferreus Cope 1864 – Comb Anole

Alien species: The Comb Anole is native to Marie-Galante. Bartlett (1994, Reptile and Amphibian Magazine Mar/Apr.: 56–73, 103–109) and Bartlett and Bartlett (1999, A Field Guide to Florida Reptiles and Amphibians. Gulf Publishing Co., Houston, Texas) presented evidence of reproduction over several years in Florida in the early 1990's but population persistence has been disputed by Meshaka et al. (2004, The Exotic Amphibians and Reptiles of Florida. Krieger Publishing Co., Malabar, Florida), K. Enge (pers. comm.), and K. Krysko (pers. comm.), and voucher specimens are lacking. Hence, it remains uncertain if the species is truly established in Florida.

Taxonomy for *Anolis* follows Williams (1976, Breviora 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History, University of Florida Press) and modifications by Vance (1991, Bull. Maryland Herpetol. Soc. 27: 43–89; description of *A. carolinensis seminolus*). Some authors (e.g., Guyer and Savage, 1986, Syst. Zool. 35: 509–531; 1992, Syst. Biol. 41: 89–110; Savage and Guyer, 1989, Amphibia-Reptilia 10: 105–116; Nicholson et al., 2012, Zootaxa 3477: 1–108) divide *Anolis* into several genera and these are included in parentheses (as subclades). Assignments of species covered in this checklist to the genera of Nicholson et al. (2012) is as follows: *Anolis* (*carolinensis*, *porcatus*), *Audantia* (*cybotes*), *Ctenonotus* (*crystalinus*, *distichus*, *ferreus*), *Dactyloa* (*trinitatis*), *Deiroptyx* (*equestris*), *Norops* (*garmani*, *sagrei*), *Xiphosurus* (*chlorocyanus*).

Fred Kraus, 2015-01-19

A. garmani Stejneger 1899 – Jamaican Giant Anole

Alien Species: The Jamaican Giant Anole is native to Jamaica and is established in Florida.

Taxonomy for *Anolis* follows Williams (1976, Breviora 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History, University of Florida Press) and modifications by Vance (1991, Bull. Maryland Herpetol. Soc. 27: 43–89; description of *A. carolinensis seminolus*). Some authors (e.g., Guyer and Savage, 1986, Syst. Zool. 35: 509–531; 1992, Syst. Biol. 41: 89–110; Savage and Guyer, 1989, Amphibia-Reptilia 10: 105–116; Nicholson et al., 2012, Zootaxa 3477: 1–108) divide *Anolis* into several genera and these are included in parentheses (as subclades). Assignments of species covered in this checklist to the genera of Nicholson et al. (2012) is as follows: *Anolis* (*carolinensis*, *porcatus*), *Audantia* (*cybotes*), *Ctenonotus* (*crystalinus*, *distichus*, *ferreus*), *Dactyloa* (*trinitatis*), *Deiroptyx* (*equestris*), *Norops* (*garmani*, *sagrei*), *Xiphosurus* (*chlorocyanus*).

Fred Kraus, 2015-01-19

A. porcatus Gray 1840 – Cuban Green Anole

Alien Species:

The Cuban Green Anole is native to Cuba and is established in Florida.

Taxonomy for *Anolis* follows Williams (1976, Breviora 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History, University of Florida Press) and modifications by Vance (1991, Bull. Maryland Herpetol. Soc. 27: 43–89; description of *A. carolinensis seminolus*). Some authors (e.g., Guyer and Savage, 1986, Syst. Zool. 35: 509–531; 1992, Syst. Biol. 41: 89–110; Savage and Guyer, 1989, Amphibia-Reptilia 10: 105–116; Nicholson et al., 2012, Zootaxa 3477: 1–108) divide *Anolis* into several genera and these are included in parentheses (as subclades). Assignments of species covered in this checklist to the genera of Nicholson et al. (2012) is as follows: *Anolis* (*carolinensis*, *porcatus*), *Audantia* (*cybotes*), *Ctenonotus* (*crystalinus*, *distichus*, *ferreus*), *Dactyloa* (*trinitatis*), *Deiropyx* (*equestris*), *Norops* (*garmani*, *sagrei*), *Xiphosurus* (*chlorocyanus*).

Fred Kraus, 2015-01-19

A. sagrei Duméril and Bibron 1837 – Brown Anole

Alien Species:

The Brown Anole is native to Cuba and the Bahamas, has been reported from 13 states, and is established in Alabama, Florida, Georgia, Hawaii, Louisiana, North Carolina, and Texas. Reports from other southern states require confirmation of establishment.

Taxonomy for *Anolis* follows Williams (1976, Breviora 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History, University of Florida Press) and modifications by Vance (1991, Bull. Maryland Herpetol. Soc. 27: 43–89; description of *A. carolinensis seminolus*). Some authors (e.g., Guyer and Savage, 1986, Syst. Zool. 35: 509–531; 1992, Syst. Biol. 41: 89–110; Savage and Guyer, 1989, Amphibia-Reptilia 10: 105–116; Nicholson et al., 2012, Zootaxa 3477: 1–108) divide *Anolis* into several genera and these are included in parentheses (as subclades). Assignments of species covered in this checklist to the genera of Nicholson et al. (2012) is as follows: *Anolis* (*carolinensis*, *porcatus*), *Audantia* (*cybotes*), *Ctenonotus* (*crystalinus*, *distichus*, *ferreus*), *Dactyloa* (*trinitatis*), *Deiropyx* (*equestris*), *Norops* (*garmani*, *sagrei*), *Xiphosurus* (*chlorocyanus*).

Fred Kraus, 2015-01-19

A. sagrei sagrei Duméril and Bibron 1837 – Cuban Brown Anole

Alien Species:

According to Conant and Collins (1991, Reptiles and Amphibians of Eastern and Central North America, Houghton Mifflin Co.), two subspecies, *A. s. sagrei* and *A. s. ordinatus* were introduced to southern Florida, but they can no longer be distinguished from one another and differ from both original races. Lee (1992, Copeia 1992: 942–954) presented evidence that the Florida populations bear a much stronger phenotypic resemblance to populations from Cuba (*A. s. sagrei*) than to those from the Bahamas (*A. s. ordinatus*). Kolbe et al. (2004, Nature 431: 177–181) present evidence for multiple introductions of this species from Cuba to Florida, which suggests that *A. s. greyi* may also have been involved.

Taxonomy for *Anolis* follows Williams (1976, Breviora 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History, University of Florida Press) and modifications by Vance (1991, Bull. Maryland Herpetol. Soc. 27: 43–89; description of *A. carolinensis seminolus*). Some authors (e.g., Guyer and Savage, 1986, Syst. Zool. 35: 509–531; 1992, Syst. Biol. 41: 89–110; Savage and Guyer, 1989, Amphibia-Reptilia 10: 105–116; Nicholson et al., 2012, Zootaxa 3477: 1–108) divide *Anolis* into several genera and these are included in parentheses (as subclades). Assignments of species covered in this checklist to the genera of Nicholson et al. (2012) is as follows: *Anolis* (*carolinensis*, *porcatus*), *Audantia* (*cybotes*), *Ctenonotus* (*crystalinus*, *distichus*, *ferreus*), *Dactyloa* (*trinitatis*), *Deiroptyx* (*equestris*), *Norops* (*garmani*, *sagrei*), *Xiphosurus* (*chlorocyanus*).

Fred Kraus, 2015-01-19

A. trinitatis Reinhardt and Lütken 1862 – St. Vincent Bush Anole

Alien Species:

The St. Vincent Bush Anole is native to St. Vincent, Lesser Antilles, and is established in Florida.

Taxonomy for *Anolis* follows Williams (1976, Breviora 440: 1–21) with addition of subspecies from Schwartz and Henderson (1991, Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History, University of Florida Press) and modifications by Vance (1991, Bull. Maryland Herpetol. Soc. 27: 43–89; description of *A. carolinensis seminolus*). Some authors (e.g., Guyer and Savage, 1986, Syst. Zool. 35: 509–531; 1992, Syst. Biol. 41: 89–110; Savage and Guyer, 1989, Amphibia-Reptilia 10: 105–116; Nicholson et al., 2012, Zootaxa 3477: 1–108) divide *Anolis* into several genera and these are included in parentheses (as subclades). Assignments of species covered in this checklist to the genera of Nicholson et al. (2012) is as follows: *Anolis* (*carolinensis*, *porcatus*), *Audantia* (*cybotes*), *Ctenonotus* (*crystalinus*, *distichus*, *ferreus*), *Dactyloa* (*trinitatis*), *Deiroptyx* (*equestris*), *Norops* (*garmani*, *sagrei*), *Xiphosurus* (*chlorocyanus*).

Fred Kraus, 2015-01-19

A. arizonae (Van Denburgh 1896) – Arizona Striped Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). Walker et al. (2012, Herpetol. Conserv. Biol. 7: 265–275) and Sullivan et al. (2013, Copeia 2013:366–377) provided additional morphological evidence for the separation of *A. pai* from *A. arizonae*; however, Sullivan et al. (op. cit.) found that *A. arizonae* was not morphologically distinguishable from *A. i. llanuras*. We have retained *A. arizonae* as a species pending the results of genetic analyses currently being pursued by those authors.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. exsanguis (Lowe 1956) – Chihuahuan Spotted Whiptail (unisexual)

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. flagellicauda (Lowe and Wright 1964) – Gila Spotted Whiptail (unisexual)

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. gularis (Baird and Girard 1852) – Common Spotted Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Aspidoscelis scalaris (as *A. septemvittata*) was treated as a subspecies of *A. gularis* by Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) but as a species by Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. gularis gularis (Baird and Girard 1852) – Texas Spotted Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. hyperythra (Cope 1863) – Orange-Throated Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. hyperythra beldingi (Stejneger 1894) – Belding's Orange Throated Whiptail

According to previous taxonomies (e.g., Maslin and Secoy, 1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60; Wright, 1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81), the subspecies *Aspidoscelis hyperythra beldingi* occurs in the United States.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. inornata (Baird 1859 "1858") – Little Striped Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). Wright and Lowe (1993, J. Arizona-Nevada Acad. Sci. 27: 129–157) recognized six subspecies of *Aspidoscelis inornata* in the United States. Collins (1997, SSAR Herpetol. Circ. 25), treated three of them, *arizonae*, *gypsi*, and *pai*, as separate species, presumably because they are geographically separated and morphologically distinguishable both from one another and from the other subspecies of *A. inornata* recognized by Wright and Lowe (op. cit.).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. inornata gypsi (Wright and Lowe 1993) – Little White Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Rosenblum and Harmon (2010, Evolution 65: 946–960), in a study based on nuclear and mitochondrial DNA, coloration, and body size and proportions, concluded that although whiptails from the gypsum sands had diverged more from their dark soil counterparts in terms of body size and shape than sympatric earless and fence lizards (see notes on *Holbrookia maculata ruthveni* and *Sceloporus cowlesi*), the genetic data indicate that the whiptails are failing to speciate. This conclusion suggests that it is more appropriate to recognize the taxon not as a species (as proposed by Collins, 1997, SSAR Herpetol. Circ. 25) but as a subspecies of *A. inornata* (as originally proposed by Wright and Lowe, 1993, J. Arizona-Nevada Acad. Sci. 27: 129–157).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. inornata heptagramma (Axtell 1961) – Trans-pecos Striped Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Based on a highly variable sample of *Aspidoscelis inornata heptagramma* from Chihuahua, Walker et al. (1996, J. Herpetol. 30: 271–275) questioned the usefulness of this taxon for describing variation within *A. inornata*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. inornata junipera (Wright and Lowe 1993) – Little White Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Rosenblum and Harmon (2010, Evolution 65: 946–960), in a study based on nuclear and mitochondrial DNA, coloration, and body size and proportions, concluded that although whiptails from the gypsum sands had diverged more from their dark soil counterparts in terms of body size and shape than sympatric earless and fence lizards (see notes on *Holbrookia maculata ruthveni* and *Sceloporus cowlesi*), the genetic data indicate that the whiptails are failing to speciate. This conclusion suggests that it is more appropriate to recognize the taxon not as a species (as proposed by Collins, 1997, SSAR Herpetol. Circ. 25) but as a subspecies of *A. inornata* (as originally proposed by Wright and Lowe, 1993, J. Arizona-Nevada Acad. Sci. 27: 129–157).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. inornata llanuras (Wright and Lowe 1993) – Plains Striped Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Walker et al. (1996, J. Herpetol. 30: 271–275) called into question some of the characters used by Wright and Lowe (1993, J. Arizona-Nevada Acad. Sci. 27: 129–157) to separate *Aspidoscelis inornata llanuras* from *A. i. heptagramma* but did not explicitly treat the names as synonyms.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. laredoensis (Mckinney, kay and Anderson 1973) – Laredo Striped Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Abuhteba et al. (2001, Copeia 2001: 262–266) interpreted histoincompatibility between the members of two pattern classes within *Aspidoscelis laredoensis* as evidence for separate hybrid origins of the corresponding clones. The authors noted that two of them are planning to restrict the name *A. laredoensis* to one of the clones and propose a new species name for the other.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. marmorata (Baird and Girard 1852) – Marbled Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Dessauer and Cole (1991, Copeia 1991: 622–637; see also Dessauer et al., 2000, Bull. Am. Mus. Nat. Hist. 246: 1–148) presented evidence of both differentiation and interbreeding between *A. marmorata* and *A. tigris* along a transect near the southern part of the border between Arizona and New Mexico, including a narrow (3 km) hybrid zone in which hybrid indices based on color patterns and allele frequencies changed abruptly in concordant step clines. Although those authors interpreted their data as reflecting incomplete speciation between the two forms (i.e., a single species), the same data can be interpreted alternatively as reflecting largely separate gene pools (i.e., two species). Following the terminology of de Queiroz (1998, in D. J. Howard and S. H. Berlocher [eds.], Endless Forms: Species and Speciation, Oxford University Press, Pp. 57–75), they are here considered incompletely separated species.

Kevin de Queiroz (Chair) and Tod W. Reeder, 2015-01-26

A. marmorata marmorata (Baird and Girard 1852) – Western Marbled Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). Taylor et al. (2001, Am. Mus. Novit. 3345: 1–65) presented evidence for hybridization between *A. tessellata* and *A. marmorata*, but there is no indication that this hybridization has produced a new hybrid species.

Kevin de Queiroz (Chair) and Tod W. Reeder, 2015-01-26

A. marmorata reticulariens (Vance 1978) – Eastern Marbled Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). Taylor et al. (2001, Am. Mus. Novit. 3345: 1–65) presented evidence for hybridization between *A. tessellata* and *A. marmorata*, but there is no indication that this hybridization has produced a new hybrid species.

Kevin de Queiroz (Chair) and Tod W. Reeder, 2015-01-26

A. motaguae Sackett 1941 – Giant Whiptail

Alien Species:

The Giant Whiptail is native to Central America and is established in Florida.

Fred Kraus, 2015-01-19

A. neavesi Cole, Taylor, Baumann, and Baumann 2014 – Neaves' Whiptail (unisexual)

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). Cole et al. (2014, Breviora 539: 1–19) named this tetraploid parthenogenetic species that was generated in the laboratory by hybridization between triploid unisexual *A. exsanguis* and diploid bisexual *A. inornata*, as reported by Lutes et al. (2011, Proc. Natl. Acad. Sci. USA 108: 9910–9915).

Kevin de Queiroz (Chair) and Tod W. Reeder, 2015-01-26

A. neomexicana (Lowe and Wright 1993) – New Mexico Whiptail (unisexual)

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). Manning et al. (2005, Am. Mus. Novit. 3492: 1–56) presented evidence for hybridization between *A. neomexicana* and *A. sexlineatus viridis*, but there is no indication either that this hybridization has produced a new hybrid species or that it is leading to the fusion of the two hybridizing species. ICZN (1999, Bull. Zool. Nomencl. 56: 162–163) precedence of the name *A. neomexicana* over *A. perplexa*

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. neotesselata (Walker, Cordes and Taylor 1997) – Colorado Checkered Whiptail (unisexual)

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81), Walker et al. (1997, Herpetologica 53: 233–259; restriction of the name *A. tessellata* to the diploid members of the species formerly referred to by that name and recognition of the species *A. neotesselata* for the triploid members),

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. pai (Wright and Lowe 1993) – Pai Striped Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). Wright and Lowe (1993, J. Arizona-Nevada Acad. Sci. 27: 129–157) recognized six subspecies of *Aspidoscelis inornata* in the United States. Collins (1997, SSAR Herpetol. Circ. 25), treated three of them, *arizonae*, *gypsi*, and *pai*, as separate species, presumably because they are geographically separated and morphologically distinguishable both from one another and from the other subspecies of *A. inornata* recognized by Wright and Lowe (op. cit.). Walker et al. (2012, Herpetol. Conserv. Biol. 7: 265–275) and Sullivan et al. (2013, Copeia 2013:366–377) provided additional morphological evidence for the separation of *A. pai* from *A. arizonae*; however, Sullivan et al. (op. cit.) found that *A. arizonae* was not morphologically distinguishable from *A. i. llanuras*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. scalaris (Cope 1892) – Plateau Spotted Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). Smith et al. (1996, Herpetol. Rev. 27: 129; priority of the names *A. scalaris* and *A. semifasciata* over *A. septemvittata* and *A. sericea* and precedence of *A. scalaris* over *A. semifasciata* and *A. septemvittata* over *A. sericea*). *Aspidoscelis scalaris* (as *A. septemvittata*) was treated as a subspecies of *A. gularis* by Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) but as a species by Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. scalaris septemvittata (Cope 1892) – Big Bend Spotted Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). Smith et al. (1996, Herpetol. Rev. 27: 129; priority of the names *A. scalaris* and *A. semifasciata* over *A. septemvittata* and *A. sericea* and precedence of *A. scalaris* over *A. semifasciata* and *A. septemvittata* over *A. sericea*). *Aspidoscelis scalaris* (*as A. septemvittata*) was treated as a subspecies of *A. gularis** by Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) but as a species by Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. sexlineata (Linnaeus 1766) – Six-Lined Racerunner

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. sexlineata sexlineata (Linnaeus 1766) – Eastern Six-Lined Racerunner

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. sexlineata stephensae (Trauth 1992) – Texas Yellow-Headed Racerunner

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81), Trauth (1992, Texas J. Sci. 44: 437–443; description of *A. sexlineata stephensae*), Trauth (1995, Bull. Chicago Herpetol. Soc. 30: 68; spelling of *A. sexlineata stephensae*).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. sexlineata viridis (Lowe 1996) – Prairie Racerunner

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). Manning et al. (2005, Am. Mus. Novit. 3492: 1–56) presented evidence for hybridization between *A. neomexicana* and *A. sexlineatus viridis*, but there is no indication either that this hybridization has produced a new hybrid species or that it is leading to the fusion of the two hybridizing species.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. sonorae (Lowe and Wright 1964) – Sonoran Spotted Whiptail (unisexual)

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. stictogramma (Burger 1950) – Giant Spotted Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). Based on differences in body size, scutellation, and color patterns, Walker and Cordes (2011, Herp. Review 42: 33–39) inferred that *A. stictogramma* (formerly *A. burti stictogramma*) is a separate species from *A. burti*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. tessellata (Say, in James 1823) – Common Checkered Whiptail (unisexual)

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). *Aspidoscelis dixonii* was recognized as a species by Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81) and Walker et al. (1994, Texas J. Sci. 46: 27–33) because its origin was thought to have resulted from a separate hybridization event than the one involved in the origin of the clone represented by the type of *A. tessellata*. However, Cordes and Walker (2006, Copeia 2006: 14–26) presented evidence in the form of skin-graft histocompatibility that *A. dixonii* and *A. tessellata* resulted from a single hybridization event. We have therefore treated the name *A. dixonii* as a synonym of *A. tessellata* following Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60). Taylor et al. (2001, Am. Mus. Novit. 3345: 1–65) presented evidence for hybridization between *A. tessellata* and *A. marmorata*, but there is no indication that this hybridization has produced a new hybrid species. Cole et al. (2007, Am. Mus. Novit. 3555: 1–31) presented evidence for hybridization between *A. tessellata* (one of the pattern classes formerly recognized as *A. dixonii*) and *A. tigris punctilinealis* and hypothesized that it may be negatively impacting the former taxon.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. tigris (Baird and Girard 1852) – Tiger Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). Maslin and Walker (1981, Am. Midl. Nat. 105: 84–92; treatment of *A. t. stejnegeri* as the name of the subspecies of *A. tigris* occurring in coastal southern California), Collins (1991, Herpetol. Rev. 22: 42–43; treatment of *A. xanthonota* as a separate species from *A. burti*).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. tigris munda (Camp 1916) – California Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81); proposal of *A. t. munda* as a replacement name for the invalid name *A. (t.) undulata* Hallowell 1854).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. tigris punctilinealis (Dickerson 1919) – Sonoran Tiger Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). Cole et al. (2007, Am. Mus. Novit. 3555: 1–31) presented evidence for hybridization between *A. tessellata* (one of the pattern classes formerly recognized as *A. dixonii*) and *A. tigris punctilinealis* and hypothesized that it may be negatively impacting the former taxon.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. tigris septentrionalis (Burger 1950) – Plateau Tiger Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. tigris stejnegeri (Van Denburgh 1894) – San Diegan Tiger Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81), Maslin and Walker (1981, Am. Midl. Nat. 105: 84–92; treatment of *A. t. stejnegeri* as the name of the subspecies of *A. tigris* occurring in coastal southern California).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. tigris tigris (Baird and Girard 1852) – Great Basin Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81), Taylor and Walker (1996, Copeia 1996: 140–148; synonymy of *A. t. gracilis* with *A. t. tigris*)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. uniparens (Wright and Lowe 1953) – Desert Grassland Whiptail (unisexual)

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. velox (Springer 1928) – Plateau Striped Whiptail (unisexual)

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81). Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) treated the name *Aspidoscelis (sackii) innotata* as a synonym of *A. velox*, but Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81) applied the name *A. velox* to populations of triploid parthenogens and treated *A. innotata* as the name of a separate diploid species. Cuellar (1977, Evolution 31: 24–31) found histoincompatibility (rejection of skin grafts) between *A. velox*-like lizards from Colorado, New Mexico, and Utah, which Cuellar and Wright (1992, C. R. Soc. Biogeogr. 68: 157–160) interpreted as potential evidence for different ploidy levels. The type locality of *A. velox* is in Arizona, while that of *A. innotata* is in Utah, and lizards from New Mexico are known to be triploid (Neaves, 1969, J. Exper. Zool. 171: 175–184; Dessauer and Cole, 1989, in R. M. Dawley and J. P. Bogart [eds.], Evolution and Ecology of Unisexual Vertebrates, New York State Museum, Pp. 49–71). If lizards from the type locality of *A. innotata* turn out to be diploid, it would be reasonable to recognize a separate diploid species and apply the name *A. innotata* (Plateau Unspotted Whiptail) to it.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

A. xanthonota (Duellman and Lowe 1953) – Red-Backed Whiptail

Taxonomy for *Aspidoscelis* follows Maslin and Secoy (1986, Contrib. Zool. Univ. Colorado Mus. 1: 1–60) and Wright (1993, in J. W. Wright and L. J. Vitt [eds.], Biology of Whiptail Lizards [Genus *Cnemidophorus*], Oklahoma Mus. Nat. Hist., Pp. 27–81).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

***Basiliscus* Laurenti 1768**

B. vittatus (Wiegmann 1828) – Brown Basilisk

Alien Species:

The Brown Basilisk is native to Central and northern South America and is established in Florida.

Fred Kraus, 2015-01-19

Callisaurus Blainville 1835

C. draconoides Blainville 1835 – Zebra-Tailed Lizards

Taxonomy for *Callisaurus* follows de Queiroz (1989, Ph.D. dissertation, Univ. California, Berkeley). Two recent molecular phylogeographic studies shed some preliminary light on the relationships and status of the three U.S. subspecies of *C. draconoides*. Based on mitochondrial DNA (mtDNA), Lindell et al. (2005, Mol. Phylogenet. Evol. 36: 682–694) found that both *C. d. myurus* and *C. d. ventralis* are nested within *C. d. rhodostictus*, *C. d. ventralis* deeply so; however, both *C. d. myurus* and *C. d. ventralis* were represented by small samples, and there were large geographic gaps between these samples and those representing *C. d. rhodostictus*. Blaine (2008, Ph.D. dissertation, Washington Univ.) found that samples from the Mojave Desert and the Great Basin formed a mtDNA haplotype clade, as did those from the U.S. Sonoran Desert, but he had few samples from Baja California and none from the Mexican mainland. The status of the subspecies of *C. draconoides* deserves further study.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. draconoides myurus Richardson 1915 – Northern Zebra-Tailed Lizard

Taxonomy for *Callisaurus* follows de Queiroz (1989, Ph.D. dissertation, Univ. California, Berkeley). Based on mitochondrial DNA (mtDNA), Lindell et al. (2005, Mol. Phylogenet. Evol. 36: 682–694) found that both *C. d. myurus* and *C. d. ventralis* are nested within *C. d. rhodostictus*, *C. d. ventralis* deeply so; however, both *C. d. myurus* and *C. d. ventralis* were represented by small samples, and there were large geographic gaps between these samples and those representing *C. d. rhodostictus*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. draconoides rhodostictus Cope 1896 – Western Zebra-Tailed Lizard

Taxonomy for *Callisaurus* follows de Queiroz (1989, Ph.D. dissertation, Univ. California, Berkeley). Based on mitochondrial DNA (mtDNA), Lindell et al. (2005, Mol. Phylogenet. Evol. 36: 682–694) found that both *C. d. myurus* and *C. d. ventralis* are nested within *C. d. rhodostictus*, *C. d. ventralis* deeply so; however, both *C. d. myurus* and *C. d. ventralis* were represented by small samples, and there were large geographic gaps between these samples and those representing *C. d. rhodostictus*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. draconoides ventralis (Hallowell 1852) – Eastern Zebra-Tailed Lizard

Taxonomy for *Callisaurus* follows de Queiroz (1989, Ph.D. dissertation, Univ. California, Berkeley). Based on mitochondrial DNA (mtDNA), Lindell et al. (2005, Mol. Phylogenet. Evol. 36: 682–694) found that both *C. d. myurus* and *C. d. ventralis* are nested within *C. d. rhodostictus*, *C. d. ventralis* deeply so; however, both *C. d. myurus* and *C. d. ventralis* were represented by small samples, and there were large geographic gaps between these samples and those representing *C. d. rhodostictus*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Calotes Cuvier 1817

C. mystaceus (Duméril and Bibron 1837) – Indochinese Bloodsucker

Alien Species:

The Indochinese Bloodsucker is native to Southeast Asia and is reported as established in two Florida counties by several authors (Butterfield et al., 1997, Nonindigenous amphibians and reptiles, Pp. 123–138 in Simberloff, D., D.C. Schmitz, and T.C. Brown [eds.], *Strangers in Paradise: Impact and Management of Nonindigenous Species in Florida*. Island Press, Washington, DC; Bartlett and Bartlett, 1999, *A Field Guide to Florida Reptiles and Amphibians*, Gulf Publishing Co., Houston, Texas; Meshaka et al., 2004, *The Exotic Amphibians and Reptiles of Florida*, Krieger Publishing Co., Malabar, Florida). But K. Krysko (pers. comm.) cautions that voucher specimens or photos of wild animals are entirely lacking, so these reports require scientific confirmation.

Fred Kraus, 2015-01-19

C. versicolor (Daudin 1802) – Variable Bloodsucker

Alien Species:

The Variable Bloodsucker is native to southern and southeastern Asia and is established in Florida. The specific epithet is in quotation marks because Zug et al. (2006, *Proc. Cal. Acad. Sci.* 57: 35–68) demonstrated that *C. "versicolor"* is a complex of several species. The introduced population has yet to be identified in light of this information.

Fred Kraus, 2015-01-19

Chalcides Laurenti 1768

C. ocellatus (Forskål 1775) – Ocellated Skink

Alien Species:

The Ocellated Skink is native to the Mediterranean region, Middle East, and northern Africa and is established in Arizona and Florida.

Fred Kraus, 2015-01-19

Chamaeleo Laurenti 1768

C. calyptratus Duméril and Bibron 1851 – Veiled Chameleon

Alien Species:

Jackson's Chameleon is native to eastern Africa and is established in California and Hawaii.

Fred Kraus, 2015-01-19

C. jacksonii Boulenger 1896 – Jackson's Chameleon

Alien Species:

Jackson's Chameleon is native to eastern Africa and is established in California and Hawaii.

Fred Kraus, 2015-01-19

Chondrodactylus Peters 1870

C. bibronii (Smith 1846) – Bibron's Sand Gecko

Alien Species:

Bauer and Lamb (2005, African J. Herpetol. 54: 105–129) revised *Pachydactylus* and placed the *bibronii* group in *Chondrodactylus*. Bibron's Sand Gecko is native to southern Africa and is claimed to be established in Florida (Bartlett and Bartlett, 1999, A Field Guide to Florida Reptiles and Amphibians, Gulf Publishing Co., Houston, Texas; Meshaka et al., 2004, The Exotic Amphibians and Reptiles of Florida, Krieger Publishing Co., Malabar, Florida), but the claim is disputed (Krysko et al., 2011, Zootaxa 3028: 1–64).

Fred Kraus, 2015-01-19

Cnemidophorus Wagler 1830

C. lemniscatus (Linnaeus 1758) – Rainbow Whiptail

Alien Species:

Taxonomy for "*Cnemidophorus*" follows Peters and Donoso-Barros (1970, Bull. United States Natl. Mus. 297(Part II): 1–293). The Rainbow Whiptail is native to South America and is established in Florida. Several species, both uni- and bisexual, have been described for different parts of the taxon that was formerly known as "*C.*" *lemniscatus* (Cole and Dessauer, 1993, Am. Mus. Novit. 3081: 1–30; Markezich et al., 1997, Am. Mus. Novit. 3207: 1–60), and the introduced population has not yet been associated with one or more of those species.

Fred Kraus, 2015-01-19

Coleonyx Gray 1845

C. brevis Stejneger 1893 – Texas Banded Gecko

Taxonomy for *Coleonyx* follows Grismer (1988, in Phylogenetic Relationships of the Lizard Families, R. Estes and G. Pregill [eds.], Stanford Univ. Press, Pp. 369–469).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. reticulatus Davis and Dixon 1958 – Reticulate Banded Gecko

Taxonomy for *Coleonyx* follows Grismer (1988, in Phylogenetic Relationships of the Lizard Families, R. Estes and G. Pregill [eds.], Stanford Univ. Press, Pp. 369–469).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. switaki (Murphy 1974) – Switak's Banded Gecko

Taxonomy for *Coleonyx* follows Grismer (1988, in Phylogenetic Relationships of the Lizard Families, R. Estes and G. Pregill [eds.], Stanford Univ. Press, Pp. 369–469).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. switaki switaki (Murphy 1974) – Peninsula Banded Gecko

Taxonomy for *Coleonyx* follows Grismer (1988, in *Phylogenetic Relationships of the Lizard Families*, R. Estes and G. Pregill [eds.], Stanford Univ. Press, Pp. 369–469).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. variegatus (Baird 1859 "1858") – Western Banded Gecko

Grismer (2002, *Amphibians and Reptiles of Baja California*, Univ. California Press) treated previously recognized subspecies of *C. variegatus* in Baja California as pattern classes; however, that decision seems to have been based at least partly on a philosophical opposition to the recognition of subspecies as well as on qualitative assessments of intergradation and did not address the status of taxa not occurring in Baja California. We have retained the subspecies pending a more explicit and comprehensive study.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. variegatus abbotti Klauber 1945 – San Diego Banded Gecko

Taxonomy for *Coleonyx* follows Grismer (1988, in *Phylogenetic Relationships of the Lizard Families*, R. Estes and G. Pregill [eds.], Stanford Univ. Press, Pp. 369–469).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. variegatus bogerti Klauber 1945 – Tucson Banded Gecko

Taxonomy for *Coleonyx* follows Grismer (1988, in *Phylogenetic Relationships of the Lizard Families*, R. Estes and G. Pregill [eds.], Stanford Univ. Press, Pp. 369–469).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. variegatus utahensis Klauber 1945 – Utah Banded Gecko

Taxonomy for *Coleonyx* follows Grismer (1988, in *Phylogenetic Relationships of the Lizard Families*, R. Estes and G. Pregill [eds.], Stanford Univ. Press, Pp. 369–469).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. variegatus variegatus (Baird 1859) – Desert Banded Gecko

Taxonomy for *Coleonyx* follows Grismer (1988, in *Phylogenetic Relationships of the Lizard Families*, R. Estes and G. Pregill [eds.], Stanford Univ. Press, Pp. 369–469).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Cophosaurus Troschel 1852

C. texanus Troschel 1852 – Greater Earless Lizard

Taxonomy for *Cophosaurus* follows de Queiroz (1989, Ph.D. dissertation, Univ. California, Berkeley). Blaine (2008, Ph.D. dissertation, Washington Univ.) found that most *C. texanus* sampled within the United States formed three non-overlapping mtDNA haplotype clades, the relationships among which were poorly supported. If the central clade is more closely related to the western clade, then the two primary clades would correspond roughly with the two subspecies of *C. texanus* that occur in the United States. Samples from the vicinity of Eagle Pass, Maverick County, Texas, formed a separate, earlier diverging clade that could represent a separate species or subspecies.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. texanus scitulus (Peters 1952) – Chihuahuan Greater Earless Lizard

Taxonomy for *Cophosaurus* follows de Queiroz (1989, Ph.D. dissertation, Univ. California, Berkeley). Blaine (2008, Ph.D. dissertation, Washington Univ.) found that most *C. texanus* sampled within the United States formed three non-overlapping mtDNA haplotype clades, the relationships among which were poorly supported. If the central clade is more closely related to the western clade, then the two primary clades would correspond roughly with the two subspecies of *C. texanus* that occur in the United States. Samples from the vicinity of Eagle Pass, Maverick County, Texas, formed a separate, earlier diverging clade that could represent a separate species or subspecies.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. texanus texanus Trochel 1852 – Texas Greater Earless Lizard

Taxonomy for *Cophosaurus* follows de Queiroz (1989, Ph.D. dissertation, Univ. California, Berkeley). Blaine (2008, Ph.D. dissertation, Washington Univ.) found that most *C. texanus* sampled within the United States formed three non-overlapping mtDNA haplotype clades, the relationships among which were poorly supported. If the central clade is more closely related to the western clade, then the two primary clades would correspond roughly with the two subspecies of *C. texanus* that occur in the United States. Samples from the vicinity of Eagle Pass, Maverick County, Texas, formed a separate, earlier diverging clade that could represent a separate species or subspecies.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Crotaphytus Holbrook 1842

C. bicinctores Smith and Tanner 1972 – Great Basin Collared Lizard

Taxonomy for *Crotaphytus* follows McGuire (1996, Bull. Carnegie Mus. Nat. Hist. 32: 1–143). McGuire et al. (2007, Evolution 61: 2879–2897) interpreted incongruencies between their mtDNA phylogeny and currently recognized species boundaries in *Crotaphytus* as evidence for introgression of *C. collaris* haplotypes into both *C. reticulatus* and *C. bicinctores* resulting from past hybridization during glacial maxima.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. collaris (Say 1823) – Eastern Collared Lizard

Taxonomy for *Crotaphytus* follows McGuire (1996, Bull. Carnegie Mus. Nat. Hist. 32: 1–143). McGuire et al. (2007, Evolution 61: 2879–2897) interpreted incongruencies between their mtDNA phylogeny and currently recognized species boundaries in *Crotaphytus* as evidence for introgression of *C. collaris* haplotypes into both *C. reticulatus* and *C. bicinctores* resulting from past hybridization during glacial maxima.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. nebricus Axtell and Montanucci 1977 – Sonoran Collared Lizard

Taxonomy for *Crotaphytus* follows McGuire (1996, Bull. Carnegie Mus. Nat. Hist. 32: 1–143)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. reticulatus Baird 1859 "1858" – Reticulate Collared Lizard

Taxonomy for *Crotaphytus* follows McGuire (1996, Bull. Carnegie Mus. Nat. Hist. 32: 1–143). McGuire et al. (2007, Evolution 61: 2879–2897) interpreted incongruencies between their mtDNA phylogeny and currently recognized species boundaries in *Crotaphytus* as evidence for introgression of *C. collaris* haplotypes into both *C. reticulatus* and *C. bicinctores* resulting from past hybridization during glacial maxima.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

C. vestigium Smith and Tanner 1972 – Baja California Collared Lizard

Taxonomy for *Crotaphytus* follows McGuire (1996, Bull. Carnegie Mus. Nat. Hist. 32: 1–143). For precedence of *C. vestigium* over *C. fasciolatus* see McGuire (2000, Bull. Zool. Nomencl. 57: 158–161) and ICZN (2002, Bull. Zool. Nomencl. 59: 228–229).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Cryptoblepharus Wiegmann 1834

C. poecilopleurus (Wiegmann 1834) – Pacific Snake-Eyed Skink

Alien Species:

The Pacific Snake-eyed Skink is native to many Pacific islands and is established in Hawaii.

Fred Kraus, 2015-01-19

Ctenosaura Wiegmann 1828

C. conspicuosa Dickerson 1919 – Isla San Esteban Spiny-tailed Iguana

Alien Species:

A population of *Ctenosaura* established at the Arizona-Sonora Desert Museum in Arizona contains mitochondrial DNA from the Isla San Esteban Spiny-tailed Iguana, but it remains uncertain whether this represents a pure population of this species or a hybrid swarm with the next (Edwards et al., 2005, Sonoran Herpetologist 18: 122–125). Both are often considered subspecies of *C. hemilopha*.

Fred Kraus, 2015-01-19

C. macrolopha Smith 1972 – Sonoran Spiny-Tailed Iguana

Alien Species:

A population of *Ctenosaura* established at the Arizona-Sonora Desert Museum in Arizona contains mitochondrial DNA from the Sonoran Spiny-tailed Iguana, but it remains uncertain whether this represents a pure population of this species or a hybrid swarm with the preceding (Edwards et al., 2005, Sonoran Herpetologist 18: 122–125). Both are often considered subspecies of *C. hemilopha*.

Fred Kraus, 2015-01-19

C. pectinata (Wiegmann 1834) – Mexican Spiny-Tailed Iguana

Alien Species:

The Mexican Spiny-tailed Iguana is native to Central America and is established in Florida and Texas.

Fred Kraus, 2015-01-19

C. similis (Gray 1831) – Gray's Spiny-tailed Iguana

Alien Species:

Gray's Spiny-tailed Iguana is native to Central America and is established in Florida.

Fred Kraus, 2015-01-19

Cyrtopodion Fitzinger 1843

C. scabrum (Heyden 1827) – Rough-Tailed Gecko

Alien Species:

The Rough-tailed Gecko is native to the Middle East and northeastern Africa and is established in Texas.

Fred Kraus, 2015-01-19

Dipsosaurus Hallowell 1854

D. dorsalis (Baird and Girard 1852) – Desert Iguana

Taxonomy for *Dipsosaurus* follows de Queiroz (1995, Publ. Espec. Mus. Zool. Univ. Nac. Autón. México 9: 1–48).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Elgaria Gray 1838

E. coerulea (Wiegmann 1828) – Northern Alligator Lizard

Taxonomy for *Elgaria* follows Good (1988, Univ. California Pub. Zool. 121: 1–139).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

E. coerulea coerulea (Wiegmann 1828) – San Francisco Alligator Lizard

Taxonomy for *Elgaria* follows Good (1988, Univ. California Pub. Zool. 121: 1–139).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

E. coerulea palmeri (Stejneger 1893) – Sierra Alligator Lizard

Taxonomy for *Elgaria* follows Good (1988, Univ. California Pub. Zool. 121: 1–139).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

E. coerulea principis Baird and Girard 1852 – Northwestern Alligator Lizard

Taxonomy for *Elgaria* follows Good (1988, Univ. California Pub. Zool. 121: 1–139).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

E. coerulea shastensis (Fitch 1934) – Shasta Alligator Lizard

Taxonomy for *Elgaria* follows Good (1988, Univ. California Pub. Zool. 121: 1–139).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

E. kingii Gray 1838 – Madrean Alligator Lizard

Taxonomy for *Elgaria* follows Good (1988, Univ. California Pub. Zool. 121: 1–139).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

E. kingii nobilis Baird and Girard 1852 – Arizona Alligator Lizard

Taxonomy for *Elgaria* follows Good (1988, Univ. California Pub. Zool. 121: 1–139).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

E. multica rinata (Blainville 1835) – Southern Alligator Lizard

A molecular phylogeographic study of Feldman and Spicer (2006, Mol. Ecol. 15: 2201–2222) failed to support currently recognized subspecies boundaries within *E. multica rinata* (Fitch, 1938, Am. Midl. Nat. 20: 381–424). Haplotypes from the central Coast Ranges of California (formerly *E. m. multica rinata*) are more closely related to those from southern (*E. m. webbii*) rather than northern (*E. m. multica rinata*) California, while haplotypes from the Sierra Nevada (formerly *E. m. webbii*) are more closely related to those from northern (*E. m. multica rinata*) rather than southern (*E. m. webbii*) California. In addition, haplotypes representing *E. m. multica rinata* and *E. m. scincicauda* are phylogenetically intermixed, calling their separation into question.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

E. multica rinata multica rinata (Blainville 1835) – California Alligator Lizard

Taxonomy for *Elgaria* follows Good (1988, Univ. California Pub. Zool. 121: 1–139).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

E. multica rinata scincicauda (Skilton 1849) – Oregon Alligator Lizard

Taxonomy for *Elgaria* follows Good (1988, Univ. California Pub. Zool. 121: 1–139).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

E. multica rinata webbii (Baird 1859 "1858") – San Diego Alligator Lizard

Taxonomy for *Elgaria* follows Good (1988, Univ. California Pub. Zool. 121: 1–139).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

E. panamintina (Stebbins 1958) – Panamint Alligator Lizard

Taxonomy for *Elgaria* follows Good (1988, Univ. California Pub. Zool. 121: 1–139). The results of Feldman and Spicer (2006, Mol. Ecol. 15: 2201–2222) indicate that *E. panamintina* is derived from within *E. multica rinata*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Emoia Gray 1845

E. cyanura (Lesson 1830) – Copper-Tailed Skink

Alien Species:

The Copper-tailed Skink is native to the Pacific islands, was established in Hawaii, and may now be extinct there (Fisher and Ineich, 2012, *Oryx* 46: 187–195).

Fred Kraus, 2015-01-19

E. impar (Werner 1898) – Azure-Tailed Skink

Alien Species:

The Azure-tailed Skink is native to the Pacific islands and is established in Hawaii.

Fred Kraus, 2015-01-19

Furcifer Fitzinger 1843

F. oustaleti (Mocquard 1894) – Oustalet's Chameleon

Alien Species:

Oustalet's Chameleon is native to Madagascar and is established in Florida.

Fred Kraus, 2015-01-19

Gambelia Baird 1859 "1858"

G. copeii (Yarrow 1882) – Cope's Leopard Lizard

Taxonomy for *Gambelia* follows McGuire (1996, *Bull. Carnegie Mus. Nat. Hist.* 32: 1–143). McGuire et al. (2007 *Evolution* 61: 2879–2897) found the mtDNA of *G. copeii* to be deeply nested within that of *G. wislizenii* and suggested that perhaps the former should not be recognized as a separate species. A study of gene flow (or the absence thereof) between the two forms would clarify the situation.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

G. sila (Stejneger 1890) – Blunt-nosed Leopard Lizard

Taxonomy for *Gambelia* follows McGuire (1996, *Bull. Carnegie Mus. Nat. Hist.* 32: 1–143) with modifications by Frost and Collins (1988, *Herpetol. Rev.* 19: 73–74; spelling of the specific epithet of *G. sila*).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

G. wislizenii (Baird and Girard 1852) – Long Nosed-Leopard Lizard

Taxonomy for *Gambelia* follows McGuire (1996, *Bull. Carnegie Mus. Nat. Hist.* 32: 1–143)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Gehyra Gray 1834

G. mutilata (Wiegmann 1834) – Mutilating Gecko

Alien Species:

The Mutilating Gecko is native from South Asia through the Pacific islands, has been reported from three states, and is established in Hawaii. The date of publication of the name *Hemidactylus mutilatus* (= *Gehyra mutilata*) is sometimes given as 1835 (e.g., Kluge, 1991, Smithsonian Herpetol. Info. Serv. 85: 1–35) presumably based on the idea that the species was first described in a publication by Wiegmann in Nova Acta Acad. Caes. Leop. Carol. Nat. Cur. the date of which is either 1834 or 1835; however, the first valid use of the name is in Wiegmann (1834, Herpetologica Mexicana; see Bauer and Adler, 2001, Arch. Nat. Hist., 28: 313–326 for a discussion of the dates of the relevant publications).

Fred Kraus, 2015-01-19

Gekko Laurenti 1768

G. badenii Szczerbak and Nekrasova 1994 – Golden Gecko

Alien Species:

The Golden Gecko is native to Vietnam and is established in Florida.

Fred Kraus, 2015-01-19

G. gecko (Linnaeus 1758) – Tokay Gecko

Alien Species:

The Tokay Gecko is native to Southeast Asia and has been introduced to Florida and Hawaii. It is established in Florida but the single known incipient population in Hawaii is apparently now eradicated.

Fred Kraus, 2015-01-19

Gerrhonotus Wiegmann 1828

G. infernalis Baird 1859 "1858" – Texas Alligator Lizard

Taxonomy for *Gerrhonotus* follows Good (1994, Herpetol. Monog. 8: 180–202).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Gonatodes Fitzinger 1843

G. albogularis (Duméril and Bibron 1836) – Yellow-Headed Gecko

Alien Species:

The Yellow-headed Gecko is native to Central and South America and the Caribbean and is established in Florida.

Fred Kraus, 2015-01-19

Heloderma Wiegmann 1829

H. suspectum Cope 1869 – Gila Monster

Taxonomy for *Heloderma* follows Bogert and Martín del Campo (1956, Bull. Am. Mus. Nat. Hist. 109: 1–238).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

H. suspectum cinctum Bogert and Martin Del Campo 1956 – Banded Gila Monster

Taxonomy for *Heloderma* follows Bogert and Martín del Campo (1956, Bull. Am. Mus. Nat. Hist. 109: 1–238). Douglas et al. (2010, Mol. Phylogenet. Evol. 55: 153–167) stated that they found no mtDNA evidence for the two recognized subspecies of *H. suspectum*; however, their results are difficult to evaluate because little information is provided on the collection localities of the sampled specimens. Further study is needed.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

H. suspectum suspectum Cope 1869 – Reticulate Gila Monster

Taxonomy for *Heloderma* follows Bogert and Martín del Campo (1956, Bull. Am. Mus. Nat. Hist. 109: 1–238). Douglas et al. (2010, Mol. Phylogenet. Evol. 55: 153–167) stated that they found no mtDNA evidence for the two recognized subspecies of *H. suspectum*; however, their results are difficult to evaluate because little information is provided on the collection localities of the sampled specimens. Further study is needed.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Hemidactylus Gray 1825

H. frenatus Duméril and Bibron 1836 – Common House Gecko

Alien Species:

The Common House Gecko is native to South and Southeast Asia, has been reported from four states, and is established in Florida, Hawaii, and Texas.

Fred Kraus, 2015-01-19

H. garnotii Duméril and Bibron 1836 – Indo-pacific House Gecko

Alien Species:

The Indo-Pacific Gecko is native to South and Southeast Asia, has been reported from five states, and is established in Florida, Georgia, Hawaii, and Texas.

Fred Kraus, 2015-01-19

H. mabouia (Moreau De Jonnés 1818) – Wood Slave

Alien Species:

The Wood Slave is native to Africa (and perhaps parts of South America and the Caribbean, cf. Kluge, 1969, Misc. Publ. Univ. Michigan Mus. Zool. 138: 1–78) and is established in Florida.

Fred Kraus, 2015-01-19

H. parvimaculatus Deraniyagala 1953 – Sri Lankan Spotted House Gecko

Alien Species:

The Sri Lankan Spotted House Gecko is native to Sri Lanka and southern India and is established in Louisiana.

Fred Kraus, 2015-01-19

H. platyurus (Schneider 1792) – Asian Flat-tailed House Gecko

Alien Species:

The Asian Flat-tailed House Gecko is native to Southeast Asia and is established in Florida. This species was recently removed from *Cosymbotus* by Carranza and Arnold (2006, Mol. Phylog. Evol. 38: 531–545).

Fred Kraus, 2015-01-19

H. turcicus (Linnaeus 1758) – Mediterranean House Gecko

Alien Species:

The Mediterranean Gecko is native to the Mediterranean region, has been reported from 24 states, and is established in Alabama, Arizona, Arkansas, California, Florida, Georgia, Illinois, Kansas, Kentucky, Louisiana, Maryland, Mississippi, Missouri, Nevada, New Mexico, North Carolina, Oklahoma, South Carolina, Texas, Utah, and Virginia.

Fred Kraus, 2015-01-19

Hemiphyllodactylus Bleeker 1860

H. typus Bleeker 1860 – Indo-pacific Tree Gecko

Alien Species:

The Indo-Pacific Tree Gecko is native to Southeast Asia and the Pacific, has been reported from two states, and is established in Hawaii.

Fred Kraus, 2015-01-19

Holbrookia Girard 1851

H. elegans Boncourt, 1874 in Dumeril 1870-1909 1874 – Elegant Earless Lizard

Taxonomy for *Holbrookia* follows Smith (1946, Handbook of Lizards, Cornell Univ. Press), Lowe (1964, in C. H. Lowe [ed.], The Vertebrates of Arizona, Univ. Arizona Press, Pp. 153–174; recognition of *H. elegans* as a species. Blaine (2008, Ph.D. dissertation, Washington Univ.) found large levels of mtDNA sequence divergence between samples of this putative species from Arizona and southern Sonora (*H. e. thermophila*) versus those from southern Sinaloa (*H. e. elegans*), though large sampling gaps make it difficult to determine whether these forms represent separate species. His data also support the synonymy of *H. m. pulchra* with *H. e. thermophila*).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

H. elegans thermophila Barbour 1921 – Sonoran Earless Lizard

Taxonomy for *Holbrookia* follows Smith (1946, Handbook of Lizards, Cornell Univ. Press). Blaine (2008, Ph.D. dissertation, Washington Univ.) found large levels of mtDNA sequence divergence between samples of this putative species from Arizona and southern Sonora (*H. e. thermophila*) versus those from southern Sinaloa (*H. e. elegans*), though large sampling gaps make it difficult to determine whether these forms represent separate species. His data also support the synonymy of *H. m. pulchra* with *H. e. thermophila*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

H. lacerata Cope 1880 – Spot-tailed Earless Lizard

Taxonomy for *Holbrookia* follows Smith (1946, Handbook of Lizards, Cornell Univ. Press) with modifications by Axtell (1956, Bull. Chicago Acad. Sci 10: 163–179; description of *H. maculata perspicua* and treatment of *H. lacerata* as a species)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

H. lacerata lacerata Cope 1880 – Northern Spot-tailed Earless Lizard

Taxonomy for *Holbrookia* follows Smith (1946, Handbook of Lizards, Cornell Univ. Press) with modifications by Axtell (1956, Bull. Chicago Acad. Sci 10: 163–179; description of *H. maculata perspicua* and treatment of *H. lacerata* as a species)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

H. lacerata subcaudalis Axtell 1956 – Southern Spot-tailed Earless Lizard

Taxonomy for *Holbrookia* follows Smith (1946, Handbook of Lizards, Cornell Univ. Press) with modifications by Axtell (1956, Bull. Chicago Acad. Sci 10: 163–179; description of *H. maculata perspicua* and treatment of *H. lacerata* as a species)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

H. maculata Girard 1851 – Common Lesser Earless Lizard

Taxonomy for *Holbrookia* follows Smith (1946, Handbook of Lizards, Cornell Univ. Press). Blaine (2008, Ph.D. dissertation, Washington Univ.) found that *Holbrookia maculata* from the United States formed three non-overlapping mtDNA haplotype clades inhabiting the Great Plains, the northern Chihuahuan Desert, and the southern Colorado Plateau. Because his results contradict the taxonomy previously adopted in this list, we have applied the oldest available names to the three haplotype clades and treated them as subspecies.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

H. maculata campi Schmidt 1921 – Plateau Earless Lizard

Blaine (2008, Ph.D. dissertation, Washington Univ.) found that *Holbrookia maculata* from the United States formed three non-overlapping mtDNA haplotype clades inhabiting the Great Plains, the northern Chihuahuan Desert, and the southern Colorado Plateau. Because his results contradict the taxonomy previously adopted in this list, we have applied the oldest available names to the three haplotype clades and treated them as subspecies.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

H. maculata flavilenta Cope 1883 – Chihuahuan Lesser Earless Lizard

Blaine (2008, Ph.D. dissertation, Washington Univ.) found that *Holbrookia maculata* from the United States formed three non-overlapping mtDNA haplotype clades inhabiting the Great Plains, the northern Chihuahuan Desert, and the southern Colorado Plateau. Because his results contradict the taxonomy previously adopted in this list, we have applied the oldest available names to the three haplotype clades and treated them as subspecies.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

H. maculata maculata Girard 1851 – Great Plains Earless Lizard

Blaine (2008, Ph.D. dissertation, Washington Univ.) found that *Holbrookia maculata* from the United States formed three non-overlapping mtDNA haplotype clades inhabiting the Great Plains, the northern Chihuahuan Desert, and the southern Colorado Plateau. Because his results contradict the taxonomy previously adopted in this list, we have applied the oldest available names to the three haplotype clades and treated them as subspecies.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

H. maculata perspicua Axtell 1956 – Prairie Earless Lizard

Taxonomy for *Holbrookia* follows Smith (1946, Handbook of Lizards, Cornell Univ. Press). Axtell (1956, Bull. Chicago Acad. Sci 10: 163–179; description of *H. maculata perspicua* and treatment of *H. lacerata* as a species). This subspecies was not sampled by Blaine (2008, Ph.D. dissertation, Washington Univ.) and is thus presently retained until future studies can address its status.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

H. maculata ruthveni Smith 1943 – Bleached Earless Lizard

Taxonomy for *Holbrookia* follows Smith (1946, Handbook of Lizards, Cornell Univ. Press). Although mtDNA haplotypes of *H. m ruthveni* are nested within those of the taxon that is here called *H. m. flavilenta* (Blaine, 2008, Ph.D. dissertation, Washington Univ.), Rosenblum and Harmon (2010, Evolution 65: 946–960) found that earless lizards from the White Sands had diverged both morphologically and genetically from their counterparts on adjacent darker soils and concluded that the populations are well on their way toward completing speciation. On the other hand, data from ecotonal individuals suggest that the populations continue to exchange genes (i.e., that speciation is incomplete), and therefore it seems appropriate to treat the bleached form as a subspecies in the sense of a partially separated lineage.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

H. propinqua Baird and Girard 1852 – Keeled Earless Lizard

Taxonomy for *Holbrookia* follows Smith (1946, Handbook of Lizards, Cornell Univ. Press)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

H. propinqua propinqua Baird and Girard 1852 – Northern Keeled Earless Lizard

Taxonomy for *Holbrookia* follows Smith (1946, Handbook of Lizards, Cornell Univ. Press). Blaine (2008, Ph.D. dissertation, Washington Univ.) found that mtDNA from *H. p. propinqua* forms two non-overlapping haplotype clades, one from the red sands south of the Balcones Escarpment and another from the white sands near the southeastern part of the Balcones Escarpment south into the Gulf Coastal Plain.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Iguana Laurenti 1768

I. iguana (Linnaeus 1758) – Green Iguana

Alien Species:

The Green Iguana is native to Central and South America, has been reported from six states, and is established in Florida and Hawaii.

Fred Kraus, 2015-01-19

Lacerta Linnaeus 1758

L. bilineata Daudin 1802 – Western Green Lacerta

Alien Species:

The Western Green Lacerta is native to Western Europe, has been reported from two states, and is established in Kansas.

Fred Kraus, 2015-01-19

Lampropholis Fitzinger 1843

L. delicata (De Vis 1888) – Plague Skink

Alien Species:

The Plague Skink is native to eastern Australia and is established in Hawaii.

Fred Kraus, 2015-01-19

Leiocephalus Gray 1827

L. carinatus Gray 1827 – Northern Curly-Tailed Lizard

Alien Species:

The Northern Curly-tailed Lizard is native to Cuba, Bahamas, and the Cayman Islands and is established in Florida.

Fred Kraus, 2015-01-19

L. schreibersii (Gravenhorst 1837) – Red-sided Curly-tailed Lizard

Alien Species:

The Red-sided Curly-tailed Lizard is native to Hispaniola and is established in Florida.

Fred Kraus, 2015-01-19

Leiolepis Cuvier 1829

L. belliana (Gray 1827) – Butterfly Lizard

Alien Species:

The Butterfly Lizard is native to Southeast Asia and is established in Florida.

Fred Kraus, 2015-01-19

L. rubritaeniata Mertens 1961 – Reeve's Butterfly Lizard

Alien Species:

Reeves' Butterfly Lizard is native to Indochina and is established in Florida.

Fred Kraus, 2015-01-19

Lepidodactylus Fitzinger 1843

L. lugubris (Duméril and Bibron 1836) – Mourning Gecko

Alien Species:

The Mourning Gecko is native from South Asia through much of the Pacific, has been reported from four states, and is established in Florida and Hawaii. This taxon is a unisexual complex of diploid and triploid populations of apparently independent origins (Moritz et al., 1993, Biol. J. Linn. Soc. 48: 113–133; Volobouev, 1994, Biogeographica 70: 14).

Fred Kraus, 2015-01-19

Lipinia Gray 1845

L. noctua (Lesson 1830) – Moth Skink

Alien Species:

The Moth Skink is native to some of the Pacific Islands and is established in Hawaii.

Fred Kraus, 2015-01-19

Mabuya Fitzinger 1826

M. multifasciata (Kuhl 1820) – Brown Mabuya

Alien Species:

The Brown Mabuya is native to South and Southeast Asia and is established in Florida.

Fred Kraus, 2015-01-19

Ophisaurus Daudin 1803

O. attenuatus Cope 1880 – Slender Glass Lizard

Taxonomy for *Ophisaurus* follows McConkey (1954, Bull. Florida St. Mus. Biol. Sci. 2: 13–23). Macey et al. (1999, Mol. Phylogenet. Evol. 12: 250–272) presented mtDNA evidence that *Ophisaurus*, if it includes North American, European, African, and Asian species, is not monophyletic. Although they favored placing all species in *Anguis*, this action is both nomenclaturally disruptive and makes *Anguis* redundant with Anguinae; we have therefore adopted their alternative proposal of retaining *Ophisaurus* for the North American and Southeast Asian species.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

O. attenuatus attenuatus Cope 1880 – Western Slender Glass Lizard

Taxonomy for *Ophisaurus* follows McConkey (1954, Bull. Florida St. Mus. Biol. Sci. 2: 13–23). Macey et al. (1999, Mol. Phylogenet. Evol. 12: 250–272) presented mtDNA evidence that *Ophisaurus*, if it includes North American, European, African, and Asian species, is not monophyletic. Although they favored placing all species in *Anguis*, this action is both nomenclaturally disruptive and makes *Anguis* redundant with Anguinae; we have therefore adopted their alternative proposal of retaining *Ophisaurus* for the North American and Southeast Asian species.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

O. attenuatus longicaudus McConkey 1952 – Eastern Slender Glass Lizard

Taxonomy for *Ophisaurus* follows McConkey (1954, Bull. Florida St. Mus. Biol. Sci. 2: 13–23). Macey et al. (1999, Mol. Phylogenet. Evol. 12: 250–272) presented mtDNA evidence that *Ophisaurus*, if it includes North American, European, African, and Asian species, is not monophyletic. Although they favored placing all species in *Anguis*, this action is both nomenclaturally disruptive and makes *Anguis* redundant with Anguinae; we have therefore adopted their alternative proposal of retaining *Ophisaurus* for the North American and Southeast Asian species.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

O. compressus Cope 1900 – Island Glass Lizard

Taxonomy for *Ophisaurus* follows McConkey (1954, Bull. Florida St. Mus. Biol. Sci. 2: 13–23). Macey et al. (1999, Mol. Phylogenet. Evol. 12: 250–272) presented mtDNA evidence that *Ophisaurus*, if it includes North American, European, African, and Asian species, is not monophyletic. Although they favored placing all species in *Anguis*, this action is both nomenclaturally disruptive and makes *Anguis* redundant with Anguinae; we have therefore adopted their alternative proposal of retaining *Ophisaurus* for the North American and Southeast Asian species.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

O. mimicus Palmer 1987 – Mimic Glass Lizard

Taxonomy for *Ophisaurus* follows McConkey (1954, Bull. Florida St. Mus. Biol. Sci. 2: 13–23) with modifications by Palmer (1987, Herpetologica, 43: 415–423; description of *O. mimicus*). Macey et al. (1999, Mol. Phylogenet. Evol. 12: 250–272) presented mtDNA evidence that *Ophisaurus*, if it includes North American, European, African, and Asian species, is not monophyletic. Although they favored placing all species in *Anguis*, this action is both nomenclaturally disruptive and makes *Anguis* redundant with Anguinae; we have therefore adopted their alternative proposal of retaining *Ophisaurus* for the North American and Southeast Asian species.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

O. ventralis (Linnaeus 1766) – Eastern Glass Lizard

Taxonomy for *Ophisaurus* follows McConkey (1954, Bull. Florida St. Mus. Biol. Sci. 2: 13–23). Macey et al. (1999, Mol. Phylogenet. Evol. 12: 250–272) presented mtDNA evidence that *Ophisaurus*, if it includes North American, European, African, and Asian species, is not monophyletic. Although they favored placing all species in *Anguis*, this action is both nomenclaturally disruptive and makes *Anguis* redundant with Anguinae; we have therefore adopted their alternative proposal of retaining *Ophisaurus* for the North American and Southeast Asian species.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Petrosaurus Boulenger 1885

P. mearnsi (Stejneger 1894) – Mearns' Rock Lizard

Taxonomy for *Petrosaurus* follows Jennings (1990, Cat. Am. Amph. Rept. 494; 1990, Cat. Am. Amph. Rept. 495), with modifications by Grismer (1999, Herpetologica 55: 446–469; treatment of *P. mearnsi* and *P. slevini* as separate species).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. mearnsi mearnsi (Stejneger 1894) – Mearns' Rock Lizard

Taxonomy for *Petrosaurus* follows Jennings (1990, Cat. Am. Amph. Rept. 494; 1990, Cat. Am. Amph. Rept. 495), with modifications by Grismer (1999, Herpetologica 55: 446–469; treatment of *P. mearnsi* and *P. slevini* as separate species).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Phelsuma Gray 1825

P. grandis Gray 1870 – Madagascan Day Gecko

Alien Species:

The Madagascar Day Gecko is native to Madagascar and is established in Florida and Hawaii. Formerly referred to *P. madagascariensis* Gray, 1831 prior to partitioning of that species (Raxworthy et al., 2007, Syst. Biol. 56: 907–923).

Fred Kraus, 2015-01-19

P. guimbeui (Mertens 1963) – Orange-spotted Day Gecko

Alien Species:

The Orange-spotted Day Gecko is native to Mauritius and is established in Hawaii.

Fred Kraus, 2015-01-19

P. laticauda (Boettger 1880) – Gold Dust Day Gecko

Alien Species:

The Gold Dust Day Gecko is native to Madagascar and the Seychelles, is established in Hawaii, and may be established in Florida.

Fred Kraus, 2015-01-19

***Phrynosoma* Wiegmann 1828**

***P. blainvillii* Gray 1839 – Blainville's Horned Lizard**

Taxonomy for *Phrynosoma* follows Reeve (1952, Univ. Kansas Sci. Bull. 34: 817–960) with modifications by Zamudio et al. (1997, Syst. Biol. 46: 284–305; treatment of *P. hernandesi* as a separate species from *P. douglasii* and implied treatment of *P. d. brevirostre*, *P. d. ornatissum*, and *P. d. ornatum* as synonyms of *P. hernandesi*), Montanucci (2004, Herpetologica 60: 117–139; treatment of *P. blainvillii* as a separate species from *P. coronatum*; see also Leaché et al., 2009, Proc. Natl. Acad. Sci. USA 106: 12418–12423), Mulcahy et al. (2006, Mol. Ecol. 15: 1807–1826; treatment of *P. goodei* as a separate species from *P. platyrrhinos*), and those described in additional notes below. Leaché and McGuire (2006, Mol. Phylogenet. Evol. 39: 628–644) named four subclades of *Phrynosoma* based on the results of phylogenetic analyses of mitochondrial and nuclear genes. We have included names of subclades parenthetically, where applicable.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-15

***P. cornutum* Gray 1839 – Texas Horned Lizard**

Taxonomy for *Phrynosoma* follows Reeve (1952, Univ. Kansas Sci. Bull. 34: 817–960) with modifications by Zamudio et al. (1997, Syst. Biol. 46: 284–305; treatment of *P. hernandesi* as a separate species from *P. douglasii* and implied treatment of *P. d. brevirostre*, *P. d. ornatissum*, and *P. d. ornatum* as synonyms of *P. hernandesi*), Montanucci (2004, Herpetologica 60: 117–139; treatment of *P. blainvillii* as a separate species from *P. coronatum*; see also Leaché et al., 2009, Proc. Natl. Acad. Sci. USA 106: 12418–12423), Mulcahy et al. (2006, Mol. Ecol. 15: 1807–1826; treatment of *P. goodei* as a separate species from *P. platyrrhinos*), and those described in additional notes below. Leaché and McGuire (2006, Mol. Phylogenet. Evol. 39: 628–644) named four subclades of *Phrynosoma* based on the results of phylogenetic analyses of mitochondrial and nuclear genes. We have included names of subclades parenthetically, where applicable.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-15

***P. douglasii* (Bell 1829) – Pygmy Short-Horned Lizard**

Taxonomy for *Phrynosoma* follows Reeve (1952, Univ. Kansas Sci. Bull. 34: 817–960) with modifications by Zamudio et al. (1997, Syst. Biol. 46: 284–305; treatment of *P. hernandesi* as a separate species from *P. douglasii* and implied treatment of *P. d. brevirostre*, *P. d. ornatissum*, and *P. d. ornatum* as synonyms of *P. hernandesi*), Montanucci (2004, Herpetologica 60: 117–139; treatment of *P. blainvillii* as a separate species from *P. coronatum*; see also Leaché et al., 2009, Proc. Natl. Acad. Sci. USA 106: 12418–12423), Mulcahy et al. (2006, Mol. Ecol. 15: 1807–1826; treatment of *P. goodei* as a separate species from *P. platyrrhinos*), and those described in additional notes below. Leaché and McGuire (2006, Mol. Phylogenet. Evol. 39: 628–644) named four subclades of *Phrynosoma* based on the results of phylogenetic analyses of mitochondrial and nuclear genes. We have included names of subclades parenthetically, where applicable.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-15

P. goodei Stejneger 1893 – Goode's Horned Lizard

Taxonomy for *Phrynosoma* follows Reeve (1952, Univ. Kansas Sci. Bull. 34: 817–960) with modifications by Zamudio et al. (1997, Syst. Biol. 46: 284–305; treatment of *P. hernandesii* as a separate species from *P. douglasii* and implied treatment of *P. d. brevirostre*, *P. d. ornatissimum*, and *P. d. ornatum* as synonyms of *P. hernandesii*), Montanucci (2004, Herpetologica 60: 117–139; treatment of *P. blainvillii* as a separate species from *P. coronatum*; see also Leaché et al., 2009, Proc. Natl. Acad. Sci. USA 106: 12418–12423), Mulcahy et al. (2006, Mol. Ecol. 15: 1807–1826; treatment of *P. goodei* as a separate species from *P. platyrrhinos*), and those described in additional notes below. Leaché and McGuire (2006, Mol. Phylogenet. Evol. 39: 628–644) named four subclades of *Phrynosoma* based on the results of phylogenetic analyses of mitochondrial and nuclear genes. We have included names of subclades parenthetically, where applicable.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-15

P. hernandesii Girard 1858 – Greater Short-Horned Lizard

Taxonomy for *Phrynosoma* follows Reeve (1952, Univ. Kansas Sci. Bull. 34: 817–960) with modifications by Zamudio et al. (1997, Syst. Biol. 46: 284–305; treatment of *P. hernandesii* as a separate species from *P. douglasii* and implied treatment of *P. d. brevirostre*, *P. d. ornatissimum*, and *P. d. ornatum* as synonyms of *P. hernandesii*), Montanucci (2004, Herpetologica 60: 117–139; treatment of *P. blainvillii* as a separate species from *P. coronatum*; see also Leaché et al., 2009, Proc. Natl. Acad. Sci. USA 106: 12418–12423), Mulcahy et al. (2006, Mol. Ecol. 15: 1807–1826; treatment of *P. goodei* as a separate species from *P. platyrrhinos*), and those described in additional notes below. Leaché and McGuire (2006, Mol. Phylogenet. Evol. 39: 628–644) named four subclades of *Phrynosoma* based on the results of phylogenetic analyses of mitochondrial and nuclear genes. We have included names of subclades parenthetically, where applicable.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-15

P. hernandesii hernandesii Gray 1839 – Texas Horned Lizard

Zamudio et al. (1997, Syst. Biol. 46: 284–305) did not explicitly propose to eliminate the previously recognized subspecies taxa within *P. hernandesii*, though they presented mtDNA evidence that the subspecies *brevirostre*, *hernandesii*, and *ornatissimum*, as previously circumscribed, are artificial assemblages of populations. They also did not sample the Mexican taxon formerly known as *P. d. brachycercum*, which they noted shares morphological characters with *P. hernandesii*. The possibilities remain that *brachycercum* constitutes 1) a lineage that is related to but fully separated from *P. hernandesii*, 2) a partially separated lineage within *P. hernandesii*, or 3) an unseparated (artificial) part of the *hernandesii* lineage. Until the status of this taxon is addressed explicitly, we have treated it as a valid subspecies taxon and therefore have treated the remaining populations of *P. hernandesii*, including all those occurring in the United States, as the subspecies *P. h. hernandesii*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. mcallii (Hallowell 1852) – Flat-tailed Horned Lizard

Taxonomy for *Phrynosoma* follows Reeve (1952, Univ. Kansas Sci. Bull. 34: 817–960) with modifications by Zamudio et al. (1997, Syst. Biol. 46: 284–305; treatment of *P. hernandesi* as a separate species from *P. douglasii* and implied treatment of *P. d. brevirostre*, *P. d. ornatissum*, and *P. d. ornatum* as synonyms of *P. hernandesi*), Montanucci (2004, Herpetologica 60: 117–139; treatment of *P. blainvillii* as a separate species from *P. coronatum*; see also Leaché et al., 2009, Proc. Natl. Acad. Sci. USA 106: 12418–12423), Mulcahy et al. (2006, Mol. Ecol. 15: 1807–1826; treatment of *P. goodei* as a separate species from *P. platyrhinos*), and those described in additional notes below. Leaché and McGuire (2006, Mol. Phylogenet. Evol. 39: 628–644) named four subclades of *Phrynosoma* based on the results of phylogenetic analyses of mitochondrial and nuclear genes. We have included names of subclades parenthetically, where applicable.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. modestum Girard 1852 – Round-tailed Horned Lizard

Taxonomy for *Phrynosoma* follows Reeve (1952, Univ. Kansas Sci. Bull. 34: 817–960) with modifications by Zamudio et al. (1997, Syst. Biol. 46: 284–305; treatment of *P. hernandesi* as a separate species from *P. douglasii* and implied treatment of *P. d. brevirostre*, *P. d. ornatissum*, and *P. d. ornatum* as synonyms of *P. hernandesi*), Montanucci (2004, Herpetologica 60: 117–139; treatment of *P. blainvillii* as a separate species from *P. coronatum*; see also Leaché et al., 2009, Proc. Natl. Acad. Sci. USA 106: 12418–12423), Mulcahy et al. (2006, Mol. Ecol. 15: 1807–1826; treatment of *P. goodei* as a separate species from *P. platyrhinos*), and those described in additional notes below. Leaché and McGuire (2006, Mol. Phylogenet. Evol. 39: 628–644) named four subclades of *Phrynosoma* based on the results of phylogenetic analyses of mitochondrial and nuclear genes. We have included names of subclades parenthetically, where applicable.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-15

P. platyrhinos Girard 1852 – Desert Horned Lizard

According to Pianka (1991, Cat. Am. Amph. Rept. 517), the putative diagnostic characters for the subspecies of *Phrynosoma platyrhinos* are not reliable, which calls the taxa themselves into question. Phylogenetic analysis of mtDNA sequences by Mulcahy et al. (2006, Mol. Ecol. 15: 1807–1826) raised the possibility of an additional species or subspecies from the Yuma Proving Ground.

Notes on the genus: Taxonomy for *Phrynosoma* follows Reeve (1952, Univ. Kansas Sci. Bull. 34: 817–960) with modifications by Zamudio et al. (1997, Syst. Biol. 46: 284–305; treatment of *P. hernandesi* as a separate species from *P. douglasii* and implied treatment of *P. d. brevirostre*, *P. d. ornatissum*, and *P. d. ornatum* as synonyms of *P. hernandesi*), Montanucci (2004, Herpetologica 60: 117–139; treatment of *P. blainvillii* as a separate species from *P. coronatum*; see also Leaché et al., 2009, Proc. Natl. Acad. Sci. USA 106: 12418–12423), Mulcahy et al. (2006, Mol. Ecol. 15: 1807–1826; treatment of *P. goodei* as a separate species from *P. platyrhinos*), and those described in additional notes below. Leaché and McGuire (2006, Mol. Phylogenet. Evol. 39: 628–644) named four subclades of *Phrynosoma* based on the results of phylogenetic analyses of mitochondrial and nuclear genes. We have included names of subclades parenthetically, where applicable.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-15

P. platyrhinos calidiarum (Cope 1896) – Southern Desert Horned Lizard

P. platyrhinos platyrhinos Girard 1852 – Northern Desert Horned Lizard

P. solare Gray 1845 – Regal Horned Lizard

Notes on the genus: Taxonomy for *Phrynosoma* follows Reeve (1952, Univ. Kansas Sci. Bull. 34: 817–960) with modifications by Zamudio et al. (1997, Syst. Biol. 46: 284–305; treatment of *P. hernandesi* as a separate species from *P. douglasii* and implied treatment of *P. d. brevirostre*, *P. d. ornatissum*, and *P. d. ornatum* as synonyms of *P. hernandesi*), Montanucci (2004, Herpetologica 60: 117–139; treatment of *P. blainvillii* as a separate species from *P. coronatum*; see also Leaché et al., 2009, Proc. Natl. Acad. Sci. USA 106: 12418–12423), Mulcahy et al. (2006, Mol. Ecol. 15: 1807–1826; treatment of *P. goodei* as a separate species from *P. platyrhinos*), and those described in additional notes below. Leaché and McGuire (2006, Mol. Phylogenet. Evol. 39: 628–644) named four subclades of *Phrynosoma* based on the results of phylogenetic analyses of mitochondrial and nuclear genes. We have included names of subclades parenthetically, where applicable.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-15

Phyllodactylus Gray 1828

P. nocticolus Dixon 1964 – Peninsula Leaf-Toed Gecko

Taxonomy for *Phyllodactylus* follows Dixon (1969, Cat. Am. Amph. Rept. 79; 1973, Cat. Am. Amph. Rept. 141) with modifications by Murphy (1983, Occ. Pap. California Acad. Sci. 137: 1–48; treatment of *P. nocticolus* as a species separate from *P. xanti*; see also Blair et al., 2009, Zootaxa 2027: 28–42).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Plestiodon Dum 1839

P. anthracinus (Baird 1850) – Coal Sink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189)

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P. anthracinus anthracinus Baird 1850 – Northern Coal Sink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189) with modifications by Smith (1946, Univ. Kansas Pub. Mus. Nat. Hist. 1: 85–89; resurrection of *P. anthracinus pluvialis*)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. anthracinus pluvialis (Cope 1880) – Southern Coal Sink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. callicephalus (Boncourt, 1879 in Dum 1870) – Mountain Sink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. egregius Baird 1859 "1858" – Mole Sink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189). Branch et al. (2003, Conserv. Gen. 4: 199–212) found that the mainland subspecies *P. e. lividus*, *P. e. onocrepis*, and *P. e. similis* exhibit phylogenetic intermixing of mtDNA haplotypes, suggesting that continued recognition of these taxa may not be warranted.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. egregius egregius Baird 1859 – Florida Keys Mole Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189). Branch et al. (2003, Conserv. Gen. 4: 199–212) found that the mainland subspecies *P. e. lividus*, *P. e. onocrepis*, and *P. e. similis* exhibit phylogenetic intermixing of mtDNA haplotypes, suggesting that continued recognition of these taxa may not be warranted. Schrey et al. (2012, Jo. Herpetol. 46: 241–247) found evidence of genetic differentiation between populations of *P. e. lividus* north and south of Josephine Creek on the Lake Wales Ridge but did not propose taxonomic recognition of those units

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. egregius insularis (Mount 1965) – Cedar Key Mole Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), Mount (1965, The Reptiles and Amphibians of Alabama, Auburn Univ. Agric. Exper. Station; descriptions of *P. egregius lividus* and *P. e. insularis*)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. egregius lividus (Mount 1965) – Blue-tailed Mole Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), Mount (1965, The Reptiles and Amphibians of Alabama, Auburn Univ. Agric. Exper. Station; descriptions of *P. egregius lividus* and *P. e. insularis*). Schrey et al. (2012, Jo. Herpetol. 46: 241–247) found evidence of genetic differentiation between populations of *P. e. lividus* north and south of Josephine Creek on the Lake Wales Ridge but did not propose taxonomic recognition of those units.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. egregius onocrepis Cope 1871 – Peninsula Mole Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. egregius similis (McConkey 1957) – Northern Mole Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), McConkey (1957, Bull. Florida St. Mus. (Biol. Sci.) 2: 13–23; description of *P. egregius similis*)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. fasciatus (Linnaeus 1758) – Common Five-Lined Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), Howes et al. (2006, Mol. Phylogenet. Evol. 40: 183–194) and Richmond (2006, Evol. Dev. 8: 477–490) presented mitochondrial and nuclear DNA evidence of substantial phylogeographic structure within *P. fasciatus*. Although neither set of authors drew any taxonomic conclusions from their results, those results suggest the possibility of one or more cryptic species; in particular, samples from the eastern Carolinas are highly divergent in both mtDNA and microsatellites from nearby populations.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. gilberti (Van Denburgh 1896) – Gilbert's Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), Richmond and Reeder (2002, Evolution 56: 1498–1513) presented mitochondrial DNA evidence that populations previously referred to *Plestiodon gilberti* represent three lineages that separately evolved large body size and the loss of stripes in late ontogenetic stages. Although they considered those three lineages to merit species recognition, they did not propose specific taxonomic changes, and subsequently Richmond and Jockusch (2007, Proc. Roy. Soc. Lond. B 274: 1701–1708) and Richmond et al. (2011, Am. Nat. 178: 320–332) have treated them as a single species based on extensive introgressive hybridization between two of the forms and the lack of prezygotic isolation between members of all pairs of them.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. gilberti cancellosus (Rodgers and Fitch 1947) – Variegated Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189) Rodgers and Fitch (1947, Univ. California Pub. Zool. 48: 169–220; description of *P. gilberti cancellosus* and treatment of *P. skiltonianus brevipes* as a synonym of *P. gilberti gilberti*)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. gilberti gilberti (Van Denburgh 1896) – Greater Brown Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), Rodgers and Fitch (1947, Univ. California Pub. Zool. 48: 169–220; description of *P. gilberti cancellosus* and treatment of *P. skiltonianus brevipes* as a synonym of *P. gilberti gilberti*). Richmond and Reeder (2002, Evolution 56: 1498–1513) presented mitochondrial DNA evidence that populations previously referred to *Plestiodon gilberti* represent three lineages that separately evolved large body size and the loss of stripes in late ontogenetic stages. Although they considered those three lineages to merit species recognition, they did not propose specific taxonomic changes, and subsequently Richmond and Jockusch (2007, Proc. Roy. Soc. Lond. B 274: 1701–1708) and Richmond et al. (2011, Am. Nat. 178: 320–332) have treated them as a single species based on extensive introgressive hybridization between two of the forms and the lack of prezygotic isolation between members of all pairs of them.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. gilberti placerensis (Rodgers 1944) – Northern Brown Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189) with modifications by Rodgers (1944, Copeia 1944: 101–104; description of *P. gilberti placerensis*)

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P. gilberti rubricaudatus (Taylor 1935) – Western Red-Tailed Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189),

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. inexpectatus (Taylor 1932) – Southeastern Five-Lined Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. laticeps (Schneider 1801) – Broad-Headed Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189). Richmond (2006, Evol. Dev. 8: 477–490) found a substantial division between mtDNA haplotypes of eastern and western *P. laticeps* but did not draw any taxonomic conclusion from it.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. multivirgatus Hallowell 1857 – Many-Lined Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), Lowe (1955b, Herpetologica 11: 233–235; treatment of *P. gaigeae* as a subspecies of *P. multivirgatus*).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. multivirgatus epipleurotus (Cope 1880) – Variable Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), Axtell (1961, Texas J. Sci. 13: 345–351; see also Axtell and Smith, 2004, Southwest. Nat. 49: 100; priority of *P. multivirgatus epipleurotus* over *P. m. gaigeae*), Hammerson (1999, Amphibians and Reptiles in Colorado, Univ. Press of Colorado) argued, based on diagnosability and the apparent absence of intergrades, that *Plestiodon multivirgatus epipleurotus* (under the name *P. gaigeae*) is a different species than *P. m. multivirgatus*. We have refrained from adopting this proposal pending an explicit analysis.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. multivirgatus multivirgatus Hallowell 1857 – Northern Many-Lined Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. obsoletus Baird and Girard 1852 – Great Plains Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. reynoldsi (Stejneger 1910) – Florida Sand Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), Branch et al. (2003, Conserv. Gen. 4: 199–212) and Richmond et al. (2009, Conserv. Gen. 10: 1281–1297) found strong phylogeographic structuring in *P. reynoldsi*, with separate mtDNA clades occupying the Mt. Dora Ridge and the northern, central, and southern portions of the Lake Wales Ridge, but they did not propose to recognize those units taxonomically.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. septentrionalis Baird 1859 "1858" – Prairie Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), *Plestiodon septentrionalis septentrionalis* and *P. s. obtusirostris* have sometimes been recognized as species based on allopatry and morphological diagnosability (e.g., Collins, 1991, Herpetol. Rev. 22: 42–43; 1993, Univ. Kansas Mus. Nat. Hist. Public Edu. Ser. No. 13). Fuerst and Austin (2004, J. Herpetol. 38: 257–268) presented mtDNA evidence of 6–7% sequence divergence between *P. s. septentrionalis* and *P. s. obtusirostris*, however, their geographic sampling was inadequate to address genetic continuity versus discontinuity between these taxa. In addition, the name *P. s. pallidus*, absent from the literature of the last 40 years, apparently has never been explicitly treated as a synonym of either *P. s. septentrionalis* or *P. s. obtusirostris*. We have retained the older arrangement of a single species with three subspecies until a rearrangement is proposed based on a study of all three taxa and thorough geographic sampling.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. septentrionalis obtusirostris (Bocourt 1879) – Southern Prairie Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), *Plestiodon septentrionalis septentrionalis* and *P. s. obtusirostris* have sometimes been recognized as species based on allopatry and morphological diagnosability (e.g., Collins, 1991, Herpetol. Rev. 22: 42–43; 1993, Univ. Kansas Mus. Nat. Hist. Public Edu. Ser. No. 13). Fuerst and Austin (2004, J. Herpetol. 38: 257–268) presented mtDNA evidence of 6–7% sequence divergence between *P. s. septentrionalis* and *P. s. obtusirostris*, however, their geographic sampling was inadequate to address genetic continuity versus discontinuity between these taxa. In addition, the name *P. s. pallidus*, absent from the literature of the last 40 years, apparently has never been explicitly treated as a synonym of either *P. s. septentrionalis* or *P. s. obtusirostris*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. septentrionalis pallidus (Smith and Slater 1949) – Pallid Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), *Plestiodon septentrionalis septentrionalis* and *P. s. obtusirostris* have sometimes been recognized as species based on allopatry and morphological diagnosability (e.g., Collins, 1991, Herpetol. Rev. 22: 42–43; 1993, Univ. Kansas Mus. Nat. Hist. Public Edu. Ser. No. 13). Fuerst and Austin (2004, J. Herpetol. 38: 257–268) presented mtDNA evidence of 6–7% sequence divergence between *P. s. septentrionalis* and *P. s. obtusirostris*, however, their geographic sampling was inadequate to address genetic continuity versus discontinuity between these taxa. In addition, the name *P. s. pallidus*, absent from the literature of the last 40 years, apparently has never been explicitly treated as a synonym of either *P. s. septentrionalis* or *P. s. obtusirostris*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. septentrionalis septentrionalis Baird 1859 – Northern Prairie Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), *Plestiodon septentrionalis septentrionalis* and *P. s. obtusirostris* have sometimes been recognized as species based on allopatry and morphological diagnosability (e.g., Collins, 1991, Herpetol. Rev. 22: 42–43; 1993, Univ. Kansas Mus. Nat. Hist. Public Edu. Ser. No. 13). Fuerst and Austin (2004, J. Herpetol. 38: 257–268) presented mtDNA evidence of 6–7% sequence divergence between *P. s. septentrionalis* and *P. s. obtusirostris*, however, their geographic sampling was inadequate to address genetic continuity versus discontinuity between these taxa. In addition, the name *P. s. pallidus*, absent from the literature of the last 40 years, apparently has never been explicitly treated as a synonym of either *P. s. septentrionalis* or *P. s. obtusirostris*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. skiltonianus Baird and Girard 1852 – Western Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189). Richmond and Reeder (2002, Evolution 56: 1498–1513) presented mitochondrial DNA evidence that *P. s. skiltonianus* is paraphyletic with respect to both *P. s. interparietalis* and *P. s. utahensis* as well as to the species *P. lagunensis* (Baja California) and to two of the three lineages of *P. gilberti*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. skiltonianus interparietalis (Tanner 1958 "1957") – Coronado Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), Richmond and Reeder (2002, Evolution 56: 1498–1513) presented mitochondrial DNA evidence that *P. s. skiltonianus* is paraphyletic with respect to both *P. s. interparietalis* and *P. s. utahensis* as well as to the species *P. lagunensis* (Baja California) and to two of the three lineages of *P. gilberti*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. skiltonianus skiltonianus Baird and Girard 1852 – Skilton's Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189). Richmond and Reeder (2002, Evolution 56: 1498–1513) presented mitochondrial DNA evidence that *P. s. skiltonianus* is paraphyletic with respect to both *P. s. interparietalis* and *P. s. utahensis* as well as to the species *P. lagunensis* (Baja California) and to two of the three lineages of *P. gilberti*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. skiltonianus utahensis (Tanner 1958 "1858") – Great Basin Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), Richmond and Reeder (2002, Evolution 56: 1498–1513) presented mitochondrial DNA evidence that *P. s. skiltonianus* is paraphyletic with respect to both *P. s. interparietalis* and *P. s. utahensis* as well as to the species *P. lagunensis* (Baja California) and to two of the three lineages of *P. gilberti*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. tetragrammus Baird 1859 "1858" – Four-Lined Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), Lieb (1985, Contrib. Sci. Nat. Hist. Mus. Los Angeles Co. 357: 1–19) treated *Plestiodon callicephalus* as a subspecies of *P. tetragrammus*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. tetragrammus brevilineatus (Cope 1880) – Short-Lined Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), Lieb (1985, Contrib. Sci. Nat. Hist. Mus. Los Angeles Co. 357: 1–19) treated *Plestiodon callicephalus* as a subspecies of *P. tetragrammus*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

P. tetragrammus tetragrammus Baird 1859 – Long-Lined Skink

Taxonomy for *Plestiodon* (often as *Eumeces*) follows Taylor (1935, Univ. Kansas Sci. Bull. 23: 1–643) and Brandley et al. (2012, Zool. Jo. Linn. Soc. 165: 163–189), Lieb (1985, Contrib. Sci. Nat. Hist. Mus. Los Angeles Co. 357: 1–19) treated *Plestiodon callicephalus* as a subspecies of *P. tetragrammus*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Podarcis Wagler 1830

P. muralis (Laurenti 1768) – Common Wall Lizard

Alien Species:

The Common Wall Lizard is native to Europe, has been reported from four states, and is established in Indiana, Kentucky, Ohio, and British Columbia.

Fred Kraus, 2015-01-19

P. siculus (Rafinesque 1810) – Italian Wall Lizard

Alien Species:

The Italian Wall Lizard is native to Europe, has been reported from five states, and is established in California, Kansas, New Jersey, and New York. It was formerly established in Pennsylvania but is now extinct there.

Fred Kraus, 2015-01-19

Rhineura Cope 1861

R. floridana (Baird 1859 "1858") – Florida Wormlizard

Taxonomy for *Rhineura* follows Gans (1967, Cat. Am. Amph. Rept. 42; 1967, Cat. Am. Amph. Rept. 43). Mulvaney et al. (2005, J. Herpetol. 39: 118–124) found mtDNA evidence of substantial divergence between northern and southern populations of *Rhineura floridana* and indicated that these groups of populations may be candidates for recognition as separate species.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Sauromalus Dumeril 1856

S. ater Dumeril 1856 – Common Chuckwalla

Taxonomy for *Sauromalus* follows Hollingsworth (1998, Herpetol. Monog. 12: 38–191) and the ICZN (2004, Bull. Zool. Nomencl. 61: 74–75; precedence of the name *S. ater* over *S. obesus*). Although all mainland populations of *Sauromalus* are currently considered to constitute a single species, intergradation or the lack thereof between groups based on mtDNA haplotype clades (Petren and Case, 2002, in T. J. Case, M. L. Cody, and E. Ezcurra [eds.], A New Island Biogeography of the Sea of Cortés, Oxford Univ. Press, Pp. 574–579) deserves further study.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Sceloporus Wiegmann 1828

S. arenicolus Degenhardt and Jones 1972 – Dunes Sagebrush Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Chan et al. (2009, Conserv. Genet. 10: 131–142) found mitochondrial DNA and microsatellite evidence of differentiation of *S. arenicolus* populations into three genetic clusters that appear to be recently separated and still experiencing gene flow. Collins (1991, Herpetol. Rev. 22: 42–43; treatment of *S. arenicolus* as a species separate from *S. graciosus*, corroborated by Chan et al., 2013, Zootaxa 3664: 312–320).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. bimaculosus Phelan and Brattstrom 1955 – Twin-spotted Spiny Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago), Schulte et al. (2006, Mol. Phylogenet. Evol. 39: 873–880; treatment of *S. bimaculosus* and *S. uniformis* as species separate from *S. magister*, see Leaché and Mulcahy, 2007, Mol. Ecol. 16: 5216–5233 for clarification of the distributional limits of those species).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. clarkii Baird and Girard 1852 – Clark's Spiny Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. clarkii clarkii Baird and Girard 1852 – Sonoran Spiny Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. clarkii vallis Shannon and Urbano 1954 – Plateau Spiny Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. consobrinus Baird and Girard 1853 – Prairie Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Leaché and Reeder (2002, Syst. Biol. 51: 44–68) noted that the name *S. thayerii* Baird and Girard 1852 (type locality: Indianola, Calhoun Co., TX) may turn out to be the correct name of this species and that populations east of the Mississippi River along the Gulf Coast may represent a separate species.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. cowlesi Lowe and Norris 1956 – Southwestern Fence Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Leaché and Reeder (2002, Syst. Biol. 51: 44–68) applied the name *S. cowlesi* to the populations from roughly the region of the Chihuahuan Desert. Although the name *S. cowlesi* was originally applied to light colored lizards from the White Sands of New Mexico, Leaché and Reeder (op. cit.) presented evidence that mtDNA haplotypes from White Sands lizards are deeply nested within a clade of haplotypes from geographically proximate darker lizards, and Rosenblum (2006, Am. Nat. 167: 1–15) found both phylogenetic mixing of haplotypes between light and dark forms and evidence of gene flow between them. Rosenblum and Harmon (2010, Evolution 65: 946–960) found that fence lizards from the White Sands exhibited discordant patterns of morphological and genetic differentiation from their counterparts on adjacent darker soils and concluded that the populations have made incomplete progress toward speciation. Leaché and Cole (2007, Mol. Ecol. 16: 1035–1054) presented evidence for hybridization between *S. cowlesi* and *S. tristichus*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. cyanogenys Cope 1956 – Blue Spiny Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Olson (1987, Bull. Maryland Herpetol. Soc. 23: 158–167) treated *Sceloporus cyanogenys* as a subspecies of *S. serrifer* based on apparent intergrades between the former species and *S. serrifer pliopus*. Martínez-Méndez and Méndez de la Cruz (2007, Zootaxa 1609: 53–68) inferred *S. serrifer pliopus* and *S. cyanogenys* to form a mtDNA clade; however, that clade was relatively distantly related to *S. serrifer serrifer* and *S. serrifer prezygus* haplotypes (see also Wiens et al., 2010, Mol. Phylogenet. Evol. 54: 150–161). Therefore, they synonymized the name *S. s. pliopus* with *S. cyanogenys*, retaining *S. serrifer* for a species that occurs south and east of the Isthmus of Tehuantepec.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. graciosus Baird and Girard 1852 – Common Sagebrush Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Chan et al. (2013, Zootaxa 3664: 312–320) found that the currently recognized subspecies of *S. graciosus* are incongruent with mitochondrial haplotype clades, which often exhibit relatively deep divergences between geographically proximate samples, and that *S. graciosus* is paraphyletic relative to *S. arenicolus*. Although these findings suggest that *S. graciosus* is in need of taxonomic revision, those authors did not propose any taxonomic changes.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. graciosus gracilis Baird and Girard 1852 – Western Sagebrush Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Chan et al. (2013, Zootaxa 3664: 312–320) found that the currently recognized subspecies of *S. graciosus* are incongruent with mitochondrial haplotype clades, which often exhibit relatively deep divergences between geographically proximate samples, and that *S. graciosus* is paraphyletic relative to *S. arenicolus*. Although these findings suggest that *S. graciosus* is in need of taxonomic revision, those authors did not propose any taxonomic changes.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. graciosus graciosus Baird and Girard 1852 – Northern Sagebrush Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. graciosus vandenburgianus Cope 1896 – Southern Sagebrush Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Censky (1986, Cat. Am. Amph. Rept. 386) treated *Sceloporus graciosus vandenburgianus* as a subspecies of *S. graciosus*, but Collins (1991, Herpetol. Rev. 22: 42–43) proposed recognizing this taxon as a species, *S. vandenburgianus*. Wiens and Reeder (1997, Herpetol. Monog. 11: 1–101) followed Collins's proposal but noted the morphological similarity and geographic proximity of this taxon to populations of *S. graciosus gracilis*. Chan et al. (2013, Zootaxa 3664: 312–320) found that *S. g. vandenburgianus* was mitochondrially distinct from *S. g. gracilis* and paraphyletic relative to a clade formed by eastern populations of *S. g. graciosus* and *S. arenicolus*. We have retained *vandenburgianus* as a subspecies pending a detailed analysis of geographic variation in *S. graciosus*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. grammicus Wiegmann 1828 – Graphic Spiny Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Lizards currently referred to *Sceloporus grammicus* form a complex series of chromosome races that likely represent multiple species (Sites, 1983, Evolution 37: 38–53; Arévalo et al., 1991, Herpetol. Monog. 5: 79–115). A detailed phylogeographic study of this species complex is sorely needed.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. grammicus microlepidotus Wiegmann 1828 – Mesquite Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Lizards currently referred to *Sceloporus grammicus* form a complex series of chromosome races that likely represent multiple species (Sites, 1983, Evolution 37: 38–53; Arévalo et al., 1991, Herpetol. Monog. 5: 79–115). A detailed phylogeographic study of this species complex is sorely needed.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. jarrovii Cope, in Yarrow 1875 – Yarrow's Spiny Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Wiens et al. (1999, Evolution 53: 1884–1897; restriction of the name *S. jarrovii* to one of five inferred species formerly referred to by that name)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. magister Hallowell 1854 – Desert Spiny Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Leaché and Mulcahy (2007, Mol. Ecol. 16: 5216–5233) found evidence of asymmetrical gene flow between *S. magister* and both *S. bimaculosus* and *S. uniformis*, with *S. magister* acting as a genetic “sink”. Because these lineages show evidence of both separation (with divergence) and ongoing asymmetrical gene flow, they can be considered partially separated species. Leaché and Mulcahy (op. cit.) also identified a fourth potentially separate lineage in northeastern Baja California (currently unnamed). Schulte et al. (2006, Mol. Phylogenet. Evol. 39: 873–880) recognized the subspecies *S. m. magister* and *S. m. cephaloflavus* because their single sample from the Colorado Plateau (assumed to represent the subspecies *S. m. cephaloflavus*) was inferred to be the sister group of the samples representing *S. m. magister*. Leaché and Mulcahy (op. cit.), however, found that specimens from closer to the type locality of *S. m. cephaloflavus* were part of *S. uniformis* rather than *S. magister*; consequently, we have not recognized subspecies within *S. magister*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. merriami Stejneger 1904 – Canyon Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. merriami annulatus Smith 1937 – Big Bend Canyon Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. merriami longipunctatus Olson 1973 – Presidio Canyon Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. merriami merriami Stejneger 1904 – Merriam's Canyon Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. occidentalis Baird and Girard 1852 – Western Fence Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Leaché et al. (2010, Biol. Jo. Linn. Soc. 100: 630–641) presented mtDNA evidence that the previously recognized subspecies *S. o. tayloriis* polyphyletic and represents convergent phenotypic evolution among high elevation populations of *S. o. biseriatus*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. occidentalis becki Van Denburgh 1905 – Island Fence Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Wiens and Reeder (1997, Herpetol. Monog. 11: 1–101) suggested that *Sceloporus occidentalis becki* should probably be recognized as a species on the basis of diagnosability and allopatry relative to other *S. occidentalis*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. occidentalis biseriatus Hallowell 1854 – San Joaquin Fence Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Leaché et al. (2010, Biol. Jo. Linn. Soc. 100: 630–641) presented mtDNA evidence that the previously recognized subspecies *S. o. taylorii* polyphyletic and represents convergent phenotypic evolution among high elevation populations of *S. o. biseriatus*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. occidentalis bocourtii Boulenger 1885 – Coast Range Fence Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. occidentalis longipes Baird 1859 "1858" – Great Basin Fence Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. occidentalis occidentalis Baird and Girard 1852 – Northwestern Fence Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. olivaceus Smith 1934 – Texas Spiny Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. orcutti Stejneger 1893 – Granite Spiny Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. poinsettii Baird and Girard 1852 – Crevice Spiny Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Webb (2006, Bull. Md. Herpetol. Soc. 42: 65–114) recognized five subspecies of *S. poinsettii*, two of which occur in the United States. Given the large area inhabited by lizards not assigned to any of the five subspecies, geographic variation in this taxon deserves further study.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. poinsettii axtelli Webb 2006 – Texas Crevice Spiny Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago), Smith and Chrapliwy (1958, Herpetologica 13: 267–271; description of subspecies of *S. poinsettii*). Webb (2006, Bull. Md. Herpetol. Soc. 42: 65–114) recognized five subspecies of *S. poinsettii*, two of which occur in the United States. Given the large area inhabited by lizards not assigned to any of the five subspecies, geographic variation in this taxon deserves further study.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. poinsettii poinsettii Baird and Girard 1852 – New Mexico Crevice Spiny Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago), Smith and Chrapliwy (1958, Herpetologica 13: 267–271; description of subspecies of *S. poinsettii*). Webb (2006, Bull. Md. Herpetol. Soc. 42: 65–114) recognized five subspecies of *S. poinsettii*, two of which occur in the United States. Given the large area inhabited by lizards not assigned to any of the five subspecies, geographic variation in this taxon deserves further study.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. slevini Smith 1937 – Slevin's Bunchgrass Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago), Smith et al. (1996, Bull. Maryland Herpetol. Soc. 32: 70–74; treatment of *S. slevini* as a species separate from *S. scalaris*; corroborated by Bryson et al., 2012, Mol. Phylogenet. Evol. 62: 447–457 and Grummer et al., 2014, Syst. Biol. in press)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. tristichus Cope in Yarrow 1875 – Plateau Fence Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago), Leaché and Reeder (2002, Syst. Biol. 51: 44–68; treatment of *S. consobrinus*, *S. cowlesi*, and *S. tristichus* as separate species from *S. undulatus*). Leaché and Cole (2007, Mol. Ecol. 16: 1035–1054) presented evidence for hybridization between *S. tristichus* and *S. cowlesi*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. undulatus (Bosc and Daudin in Sonnini and Latreille 1801) – Eastern Fence Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. uniformis Phelan and Brattstrom 1955 – Yellow-backed Spiny Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. variabilis Wiegmann 1834 – Rose-Bellied Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Based on patterns of electrophoretically detectable genetic variation, Mendoza-Quijano et al. (1998, Copeia 1998: 354–366) treated *Sceloporus marmoratus* as a species separate from *S. variabilis*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. variabilis marmoratus Hallowell 1852 – Texas Rose-Bellied Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Based on patterns of electrophoretically detectable genetic variation, Mendoza-Quijano et al. (1998, Copeia 1998: 354–366) treated *Sceloporus marmoratus* as a species separate from *S. variabilis*; however, their sample of *S. v. marmoratus* was from a single locality separated by more than 500 km from the closest sample of *S. v. variabilis*. More extensive sampling of these taxa from intermediate localities is needed to determine if they constitute separate lineages.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. virgatus Smith 1938 – Striped Plateau Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Tennessen and Zamudio (2008, Copeia 2008: 558–564) presented evidence of high genetic divergence and, for the most part, reciprocal monophyly in mtDNA haplotypes, among populations of *S. virgatus* from the Chiricahua, Animas, Peloncillo, and San Luis mountain ranges, suggesting isolation of those populations for hundreds of thousands to millions of years and the possibility of intrinsic reproductive barriers.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. woodi Stejneger 1918 – Florida Scrub Lizard

Taxonomy for *Sceloporus* follows Schmidt (1953, A Check List of North American Amphibians and Reptiles, Univ. Chicago Press, Chicago). Branch et al. (2003, Conserv. Gen. 4: 199–212) found strong phylogeographic structuring in *S. woodi*, with mtDNA of lizards from populations occupying different major scrub archipelagos differing by 2.0–8.0% and likely qualifying as evolutionarily significant units.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Scincella Mittleman 1950

S. lateralis (Say in James 1823) – Little Brown Skink

Taxonomy for *Scincella* follows Greer (1974, Austral. J. Zool. Suppl. Ser. 31: 1–67). Jackson and Austin (2009, Evolution 64: 409–428; 2012, Biol. Jo. Linn. Soc. 107: 192–209) presented evidence of significant genetic structure among populations of *S. lateralis* as well as of gene flow between both haplotype clades and population clusters inferred from microsatellite and nuclear sequence data.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Sphaerodactylus Wagler 1830

S. argus Gosse 1850 – Ocellated Gecko

Alien Species:

The Ocellated Gecko is native to Cuba, Jamaica, and the Bahamas and is established in Florida.

Fred Kraus, 2015-01-19

S. elegans Macleay 1834 – Ashy Gecko

Alien Species:

The Ashy Gecko is native to Cuba and Hispaniola and is established in Florida.

Fred Kraus, 2015-01-19

S. notatus Baird 1859 "1858" – Reef Gecko

Taxonomy for *Sphaerodactylus* follows Kluge (1995, Am. Mus. Novit. 3139: 1–23) and Schwartz and Henderson (1988, Contrib. Biol. Geol. Milwaukee Pub. Mus. 74: 1–264).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

S. notatus notatus Baird 1859 "1858" – Florida Reef Gecko

Taxonomy for *Sphaerodactylus* follows Kluge (1995, Am. Mus. Novit. 3139: 1–23) and Schwartz and Henderson (1988, Contrib. Biol. Geol. Milwaukee Pub. Mus. 74: 1–264).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Tarentola Gray 1825

T. annularis (Geoffroy Saint-Hilaire 1827) – Ringed Wall Gecko

Alien Species:

The Ringed Wall Gecko is native to northern Africa and is established in California and Florida.

Fred Kraus, 2015-01-19

T. mauritanica (Linnaeus 1758) – Moorish Gecko

Alien Species:

The Moorish Gecko is native to the Mediterranean region, has been reported from four states, is established in California and Florida.

Fred Kraus, 2015-01-19

Trachylepis Fitzinger 1843

T. quinquetaeniata (Lichtenstein 1823) – African Five-Lined Skink

Alien Species:

The African Five-lined Skink is native to a wide band of sub-Saharan Africa and is established in Florida.

Fred Kraus, 2015-01-19

Tupinambis Daudin 1803

T. meriana Duméril and Bibron 1839 – Argentine Giant Tegu

Alien Species:

The Argentine Giant Tegu is native to South America and is established in Florida.

Fred Kraus, 2015-01-19

Uma Baird 1859 "1858"

U. inornata Cope 1895 – Coachella Fringe-Toed Lizard

Notes on genus:

Taxonomy for *Uma* follows Pough (1973, Cat. Am. Amph. Rept. 126; 1974, Cat. Am. Amph. Rept. 155; 1977, Cat. Am. Amph. Rept. 197; see also de Queiroz, 1989, Ph.D. dissertation, Univ. California, Berkeley), with modifications by Trépanier and Murphy (2001, Mol. Phylogenet. Evol. 18: 327–334; treatment of *U. rufopunctata* as a species separate from *U. notata*), and those described in additional notes below.

Hedtke et al. (2007, Herpetologica 63: 411–420) found low levels of differentiation among populations of *U. inornata*.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. notata Baird 1859 "1858" – Colorado Desert Fringe-toed Lizard

Notes on genus:

Taxonomy for *Uma* follows Pough (1973, Cat. Am. Amph. Rept. 126; 1974, Cat. Am. Amph. Rept. 155; 1977, Cat. Am. Amph. Rept. 197; see also de Queiroz, 1989, Ph.D. dissertation, Univ. California, Berkeley), with modifications by Trépanier and Murphy (2001, Mol. Phylogenet. Evol. 18: 327–334; treatment of *U. rufopunctata* as a species separate from *U. notata*), and those described in additional notes below.

Kevin de Quieroz (chair) and Tod Reeder, 2015-01-26

U. rufopunctata Cope 1895 – Yuman Desert Fringe-toed Lizard

Populations formerly assigned to *U. rufopunctata* from the Mohawk Dunes, Yuma Co., AZ appear to represent a currently undescribed cryptic species (Trépanier and Murphy, 2001, Mol. Phylogenet. Evol. 18: 327–334).

Kevin de Quieroz (chair) and Tod W. Reeder, 2015-01-26

U. scoparia Cope 1894 – Mohave Fringe-Toed Lizard

Murphy et al. (2006, *Jo. Arid Environ.* 67: 226–247) found that mtDNA haplotypes of *U. scoparia* formed northern and southern clades, with both northern and southern haplotypes present at one locality.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Urosaurus Hallowell 1854

U. graciosus Hallowell 1854 – Long-tailed Brush Lizard

Taxonomy for *Urosaurus* follows (Mittleman, 1942, *Bull. Mus. Comp. Zool.* 91: 103–181) with modifications by Smith and Taylor (1950, *Bull. U. S. Natl. Mus.* 199: 1–253; treatment of *U. graciosus* as a separate species from *U. ornatus*. Vitt and Dickson (1988, *Cat. Am. Amph. Rept.* 448) called into question the diagnostic characters used to separate these taxa, implying that there is little evidence for the existence of partially separated lineages.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. graciosus graciosus Hallowell 1854 – Western Long-tailed Brush Lizard

Taxonomy for *Urosaurus* follows (Mittleman, 1942, *Bull. Mus. Comp. Zool.* 91: 103–181) with modifications by Smith and Taylor (1950, *Bull. U. S. Natl. Mus.* 199: 1–253; treatment of *U. graciosus* as a separate species from *U. ornatus*, see also Lowe, 1955, *Herpetologica* 11: 96–101). Vitt and Dickson (1988, *Cat. Am. Amph. Rept.* 448) called into question the diagnostic characters used to separate these taxa, implying that there is little evidence for the existence of partially separated lineages.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. graciosus shannoni Lowe 1955 – Arizona Long-tailed Brush Lizard

Taxonomy for *Urosaurus* follows (Mittleman, 1942, *Bull. Mus. Comp. Zool.* 91: 103–181) with modifications by Smith and Taylor (1950, *Bull. U. S. Natl. Mus.* 199: 1–253; treatment of *U. graciosus* as a separate species from *U. ornatus*, see also Lowe, 1955, *Herpetologica* 11: 96–101), Lowe (1955, *Herpetologica* 11: 96–101; description of *U. graciosus shannoni*). Vitt and Dickson (1988, *Cat. Am. Amph. Rept.* 448) called into question the diagnostic characters used to separate these taxa, implying that there is little evidence for the existence of partially separated lineages.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. nigricaudus (Cope 1864) – Baja California Brush Lizard

Taxonomy for *Urosaurus* follows (Mittleman, 1942, Bull. Mus. Comp. Zool. 91: 103–181), Aguirre et al. (1999, Herpetologica 55: 369–381, treatment of the name *U. microscutatus* as a synonym of *U. nigricaudus*). Lindell et al. (2008, Biol. Jo. Linn. Soc. 94: 89–104) found several deep phylogeographic divergences in the mtDNA of *U. nigricaudus* that are congruent with Miocene and Pliocene temporary vicariance events. Those divergences, however, were not reflected in previously collected allozyme data (Aguirre et al. 1999, Herpetologica 55: 369–381), which Lindell et al. interpreted as evidence of ongoing gene flow and the absence of speciation. Feldman et al. (2011, Mol. Phylogenet. Evol. 61: 714–725) questioned the conspecificity of *U. nigricaudus* and *U. microscutatus*; however, they did not present any evidence supporting the alternative hypothesis. Moreover, the closer relationship of southern *U. microscutatus* with *U. nigricaudus* than with northern *U. microscutatus* calls into question the previous circumscriptions of those taxa, if not their status as separate species. For justification of the standard English name Baja California (rather than Black-tailed) Brush Lizard see the note on this species in de Queiroz et al. (2003, Herpetol. Rev. 34: 198–201; 2008, in Crother [Ed.], Herp. Circ. 37: 24–45).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. ornatus (Baird and Girard 1852) – Ornate Tree Lizard

Taxonomy for *Urosaurus* follows (Mittleman, 1942, Bull. Mus. Comp. Zool. 91: 103–181). Haanel (2007, Mol. Ecol. 16: 4321–4334) found substantial phylogeographic structure in the mtDNA of *U. ornatus*, some of which is roughly consistent with previously recognized subspecies (e.g., *U. o. wrighti* from the Colorado Plateau), though other aspects are not (e.g., deep splits within *U. o. schottii*, including some inferred clades for which there are available names). The phylogeography of *U. ornatus* deserves further study, particularly with regard to taxonomic implications.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. ornatus levis (Baird and Girard 1852) – Smooth Tree Lizard

Taxonomy for *Urosaurus* follows (Mittleman, 1942, Bull. Mus. Comp. Zool. 91: 103–181).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. ornatus ornatus (Baird and Girard 1852) – Texas Tree Lizard

Taxonomy for *Urosaurus* follows (Mittleman, 1942, Bull. Mus. Comp. Zool. 91: 103–181).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. ornatus schmidti (Mittleman 1940) – Big Bend Tree Lizard

Taxonomy for *Urosaurus* follows (Mittleman, 1942, Bull. Mus. Comp. Zool. 91: 103–181)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. ornatus schottii (Baird 1859 "1858") – Schott's Tree Lizard

Taxonomy for *Urosaurus* follows (Mittleman, 1942, Bull. Mus. Comp. Zool. 91: 103–181). Haanel (2007, Mol. Ecol. 16: 4321–4334) found substantial phylogeographic structure in the mtDNA of *U. ornatus*, some of which is roughly consistent with previously recognized subspecies (e.g., *U. o. wrighti* from the Colorado Plateau), though other aspects are not (e.g., deep splits within *U. o. schottii*, including some inferred clades for which there are available names).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. ornatus symmetricus (Baird 1859 "1858") – Colorado River Tree Lizard

Taxonomy for *Urosaurus* follows (Mittleman, 1942, Bull. Mus. Comp. Zool. 91: 103–181)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. ornatus wrighti (Schmidt 1921) – Northern Tree Lizard

Taxonomy for *Urosaurus* follows (Mittleman, 1942, Bull. Mus. Comp. Zool. 91: 103–181). Haanel (2007, Mol. Ecol. 16: 4321–4334) found substantial phylogeographic structure in the mtDNA of *U. ornatus*, some of which is roughly consistent with previously recognized subspecies (e.g., *U. o. wrighti* from the Colorado Plateau), though other aspects are not (e.g., deep splits within *U. o. schottii*, including some inferred clades for which there are available names).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Uta Baird and Girard 1852

U. stansburiana Baird and Girard in Stansbury 1852 – Common Side-Blotched Lizard

Taxonomy for *Uta* follows Pack and Tanner (1970, Great Basin Nat. 30: 71–90), McKinney (1971, Copeia 1971: 596–613), and Ballinger and Tinkle (1972, Misc. Pub. Mus. Zool. Univ. Michigan 145: 1–83).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. stansburiana elegans Yarrow 1882 – Western Side-Blotched Lizard

Notes on Genus:

Taxonomy for *Uta* follows Pack and Tanner (1970, Great Basin Nat. 30: 71–90), McKinney (1971, Copeia 1971: 596–613), and Ballinger and Tinkle (1972, Misc. Pub. Mus. Zool. Univ. Michigan 145: 1–83).

Upton and Murphy (1997, Mol. Phylogenet. Evol. 8: 104–113) presented mtDNA evidence for a distant relationship between *Uta* specimens from Durango versus those from Baja California and surrounding islands (as well as one locality in western Sonora), and they considered the Durango population to constitute a different species, to which they applied the name *U. stejnegeri*. Corl et al. (2009, Evolution, 64: 79–96) presented a phylogenetic tree based on mtDNA that is roughly congruent with previously recognized subspecies within the United States and corroborates the relatively distant relationship of *U. s. stejnegeri* to specimens from Baja California. Although these two studies are complementary in terms of geographic sampling, significant sampling gaps remain (central and eastern Nevada, northern Baja California, and the southeastern part of the distribution). We have therefore refrained from recognizing *U. stejnegeri* as a species pending a more comprehensive phylogeographic study.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. stansburiana nevadensis Ruthven 1913 – Nevada Side-Blotched Lizard

Notes on Genus:

Taxonomy for *Uta* follows Pack and Tanner (1970, Great Basin Nat. 30: 71–90), McKinney (1971, Copeia 1971: 596–613), and Ballinger and Tinkle (1972, Misc. Pub. Mus. Zool. Univ. Michigan 145: 1–83).

Upton and Murphy (1997, Mol. Phylogenet. Evol. 8: 104–113) presented mtDNA evidence for a distant relationship between *Uta* specimens from Durango versus those from Baja California and surrounding islands (as well as one locality in western Sonora), and they considered the Durango population to constitute a different species, to which they applied the name *U. stejnegeri*. Corl et al. (2009, Evolution, 64: 79–96) presented a phylogenetic tree based on mtDNA that is roughly congruent with previously recognized subspecies within the United States and corroborates the relatively distant relationship of *U. s. stejnegeri* to specimens from Baja California. Although these two studies are complementary in terms of geographic sampling, significant sampling gaps remain (central and eastern Nevada, northern Baja California, and the southeastern part of the distribution). We have therefore refrained from recognizing *U. stejnegeri* as a species pending a more comprehensive phylogeographic study.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. stansburiana stansburiana Baird and Girard 1852 – Northern Side-Blotched Lizard

Notes on Genus:

Taxonomy for *Uta* follows Pack and Tanner (1970, Great Basin Nat. 30: 71–90), McKinney (1971, Copeia 1971: 596–613), and Ballinger and Tinkle (1972, Misc. Pub. Mus. Zool. Univ. Michigan 145: 1–83).

Upton and Murphy (1997, Mol. Phylogenet. Evol. 8: 104–113) presented mtDNA evidence for a distant relationship between *Uta* specimens from Durango versus those from Baja California and surrounding islands (as well as one locality in western Sonora), and they considered the Durango population to constitute a different species, to which they applied the name *U. stejnegeri*. Corl et al. (2009, Evolution, 64: 79–96) presented a phylogenetic tree based on mtDNA that is roughly congruent with previously recognized subspecies within the United States and corroborates the relatively distant relationship of *U. s. stejnegeri* to specimens from Baja California. Although these two studies are complementary in terms of geographic sampling, significant sampling gaps remain (central and eastern Nevada, northern Baja California, and the southeastern part of the distribution). We have therefore refrained from recognizing *U. stejnegeri* as a species pending a more comprehensive phylogeographic study.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. stansburiana stejnegeri Schmidt 1921 – Eastern Side-Blotched Lizard

Notes on Genus:

Taxonomy for *Uta* follows Pack and Tanner (1970, Great Basin Nat. 30: 71–90), McKinney (1971, Copeia 1971: 596–613), and Ballinger and Tinkle (1972, Misc. Pub. Mus. Zool. Univ. Michigan 145: 1–83).

Upton and Murphy (1997, Mol. Phylogenet. Evol. 8: 104–113) presented mtDNA evidence for a distant relationship between *Uta* specimens from Durango versus those from Baja California and surrounding islands (as well as one locality in western Sonora), and they considered the Durango population to constitute a different species, to which they applied the name *U. stejnegeri*. Corl et al. (2009, Evolution, 64: 79–96) presented a phylogenetic tree based on mtDNA that is roughly congruent with previously recognized subspecies within the United States and corroborates the relatively distant relationship of *U. s. stejnegeri* to specimens from Baja California. Although these two studies are complementary in terms of geographic sampling, significant sampling gaps remain (central and eastern Nevada, northern Baja California, and the southeastern part of the distribution). We have therefore refrained from recognizing *U. stejnegeri* as a species pending a more comprehensive phylogeographic study.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

U. stansburiana uniformis Pack and Tanner 1970 – Plateau Side-Blotched Lizard

Notes on Genus:

Taxonomy for *Uta* follows Pack and Tanner (1970, Great Basin Nat. 30: 71–90), McKinney (1971, Copeia 1971: 596–613), and Ballinger and Tinkle (1972, Misc. Pub. Mus. Zool. Univ. Michigan 145: 1–83).

Upton and Murphy (1997, Mol. Phylogenet. Evol. 8: 104–113) presented mtDNA evidence for a distant relationship between *Uta* specimens from Durango versus those from Baja California and surrounding islands (as well as one locality in western Sonora), and they considered the Durango population to constitute a different species, to which they applied the name *U. stejnegeri*. Corl et al. (2009, Evolution, 64: 79–96) presented a phylogenetic tree based on mtDNA that is roughly congruent with previously recognized subspecies within the United States and corroborates the relatively distant relationship of *U. s. stejnegeri* to specimens from Baja California. Although these two studies are complementary in terms of geographic sampling, significant sampling gaps remain (central and eastern Nevada, northern Baja California, and the southeastern part of the distribution). We have therefore refrained from recognizing *U. stejnegeri* as a species pending a more comprehensive phylogeographic study.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Varanus Merrem 1820

V. niloticus (Linnaeus in Hasselquist 1762) – Nile Monitor

Alien Species:

The Nile Monitor is native to Africa, has been reported from two states, and is established in Florida.

Fred Kraus, 2015-01-19

Xantusia Baird 1859 "1858"

X. arizonae Klauber 1931 – Arizona Night Lizard

Taxonomy for *Xantusia* follows Savage (1963, Contrib. Sci. Los Angeles Co. Mus. 71: 1–38) with modifications by Bezy (1967, Copeia 1967: 653–661; treatment of *X. arizonae* as a subspecies of *X. vigilis*, Papenfuss et al. (2001, Sci. Pap. Nat. Hist. Mus. Univ. Kansas 23: 1–9; description of *X. bezyi* and treatment of *X. arizonae* as a separate species from *X. vigilis*; see also Sinclair et al., 2004, Am. Nat. 164: 396–414 and Leavitt et al., 2007, Mol. Ecol. 16: 4455–4481).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

X. bezyi Papenfuss, Macey, and Schulte 2001 – Bezy's Night Lizard

Taxonomy for *Xantusia* follows Savage (1963, Contrib. Sci. Los Angeles Co. Mus. 71: 1–38)

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

X. gracilis Grismer and Galvan 1986 – Sandstone Night Lizard

Taxonomy for *Xantusia* follows Savage (1963, Contrib. Sci. Los Angeles Co. Mus. 71: 1–38), Lovich (2001, Herpetologica 57: 470–487; treatment of *X. gracilis* as a separate species from *X. henshawi*).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

X. henshawi Stejneger 1893 – Granite Night Lizard

Taxonomy for *Xantusia* follows Savage (1963, Contrib. Sci. Los Angeles Co. Mus. 71: 1–38), Grismer and Galvan (1983, Trans. San Diego Soc. Nat. Hist. 21: 155–165; description of *X. henshawi gracilis*).

Lovich (2001, Herpetologica 57: 470–487) presented mtDNA evidence that the populations of *Xantusia henshawi* represent at least three separately evolving lineages, though he did not propose recognizing them as species.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

X. riversiana Cope 1883 – Island Night Lizard

Taxonomy for *Xantusia* follows Savage (1963, Contrib. Sci. Los Angeles Co. Mus. 71: 1–38).

Although not mentioned by Noonan et al. (2012, Mol. Phylogenet. Evol. 69: 109–122), their results support the taxonomic distinction between populations of *X. riversiana* on San Nicolas Island (*X. r. riversiana*) and those on San Clemente and Santa Barbara Islands (*X. r. reticulata*).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

X. riversiana reticulata Smith 1946 – San Clemente Night Lizard

Taxonomy for *Xantusia* follows Savage (1963, Contrib. Sci. Los Angeles Co. Mus. 71: 1–38).

Although not mentioned by Noonan et al. (2012, Mol. Phylogenet. Evol. 69: 109–122), their results support the taxonomic distinction between populations of *X. riversiana* on San Nicolas Island (*X. r. riversiana*) and those on San Clemente and Santa Barbara Islands (*X. r. reticulata*).

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X. riversiana riversiana Cope 1883 – San Nicolas Night Lizard

Taxonomy for *Xantusia* follows Savage (1963, Contrib. Sci. Los Angeles Co. Mus. 71: 1–38).

Although not mentioned by Noonan et al. (2012, Mol. Phylogenet. Evol. 69: 109–122), their results support the taxonomic distinction between populations of *X. riversiana* on San Nicolas Island (*X. r. riversiana*) and those on San Clemente and Santa Barbara Islands (*X. r. reticulata*).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

X. sierrae Bezy 1967 – Sierra Night Lizard

Taxonomy for *Xantusia* follows Savage (1963, Contrib. Sci. Los Angeles Co. Mus. 71: 1–38).

Sinclair et al. (2004, Am. Nat. 164: 396–414) considered the treatment of *Xantusia sierrae* as a separate species from *X. vigilis* as tentative, because of nesting of mtDNA haplotypes of the former within those of the latter (see also Leavitt et al., 2007, Mol. Ecol. 16: 4455–4481).

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

X. vigilis Baird 1859 "1858" – Desert Night Lizard

Taxonomy for *Xantusia* follows Savage (1963, Contrib. Sci. Los Angeles Co. Mus. 71: 1–38)

X. wigginsi Savage 1952 – Wiggins' Night Lizard

Taxonomy for *Xantusia* follows Savage (1963, Contrib. Sci. Los Angeles Co. Mus. 71: 1–38).

Leavitt et al. (2007, Mol. Ecol. 16: 4455-4481) documented overlap of the *X. wigginsi* and *X. vigilis* haplotype clades in San Diego County, where it remains to be determined if the two forms are exchanging genes. Those authors also identified two haplotype clades (designated by them as the San Jacinto and Yucca Valley clades) that may represent separate species.

Kevin de Quieroz (Chair) and Tod W. Reeder, 2015-01-26

Testudines – Turtles

Actinemys Agassiz 1857

A. marmorata (Baird and Girard 1852) – Northwestern Pond Turtle

Based on an analysis of mitochondrial sequence data (see also Spinks and Shaffer, 2005, *Mol. Ecol.* 14: 2047–2064), nuclear gene sequence data (see also Spinks et al., 2010, *Mol. Ecol.* 19: 542-556), and nuclear single nucleotide polymorphisms (SNPs), Spinks et al. (2014, *Mol. Ecol.* 23:2228-2241) demonstrated a distinct divergence between pond turtles from the San Joaquin valley to Washington state and those from the Central Coastal Range of California and southern California. They recommended species recognition of these two taxa (previously considered subspecies by Seeliger, 1945, *Copeia* 1945:150-159, and many other authors). We follow that recommendation here. In addition, Spinks et al. (2014, op cit.) provided preliminary genetic evidence that populations in Baja California likely also deserve species recognition, a distinction recognized earlier by Seeliger (1945, op cit.) based on morphology.

John B. Iverson (Chair), Peter A. Meylan, Michael E. Seidel, 2015-01-15

A. pallida (Baird and Girard 1852) – Southwestern Pond Turtle

Based on an analysis of mitochondrial sequence data (see also Spinks and Shaffer, 2005, *Mol. Ecol.* 14: 2047–2064), nuclear gene sequence data (see also Spinks et al., 2010, *Mol. Ecol.* 19: 542-556), and nuclear single nucleotide polymorphisms (SNPs), Spinks et al. (2014, *Mol. Ecol.* 23:2228-2241) demonstrated a distinct divergence between pond turtles from the San Joaquin valley to Washington state and those from the Central Coastal Range of California and southern California. They recommended species recognition of these two taxa (previously considered subspecies by Seeliger, 1945, *Copeia* 1945:150-159, and many other authors). We follow that recommendation here. In addition, Spinks et al. (2014, op cit.) provided preliminary genetic evidence that populations in Baja California likely also deserve species recognition, a distinction recognized earlier by Seeliger (1945, op cit.) based on morphology.

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Apalone Rafinesque 1832

A. ferox (Schneider 1783) – Florida Softshell

A. mutica (Lesueur 1827) – Smooth Softshell

A. mutica calvata (Webb 1959) – Gulf Coast Smooth Softshell

A. mutica mutica (Lesueur 1827) – Midland Smooth Softshell

A. spinifera (Lesueur 1827) – Spiny Softshell

A. spinifera aspera (Agassiz 1857) – Gulf Coast Spiny Softshell

A. spinifera emoryi (Agassiz 1857) – Texas Spiny Softshell

A. spinifera guadalupensis (Webb 1962) – Guadalupe Spiny Softshell

A. spinifera pallida (Webb 1962) – Pallid Spiny Softshell

A. spinifera spinifera (Lesueur 1827) – Eastern Spiny Softshell

Content follows McGaugh et al. (2008, *Zoologica Scripta* 37: 289–304), who synonymized *A. s. hartwegi* with *A. s. spinifera*.

John B. Iverson (Chair), Peter A. Meylan, Michael E. Seidel, 2015-01-15

Caretta Rafinesque 1814

C. caretta (Linnaeus 1758) – Loggerhead Sea Turtle

We have returned to the use of “sea turtles” (rather than “seaturtles”) as part of the standard English name for marine turtles. The combined name has not been used recently in the literature.

John B. Iverson (Chair), Peter A. Meylan, Michael E. Seidel, 2015-01-15

Chelonia Brongniart 1800

C. mydas (Linnaeus 1758) – Green Sea Turtle

The Black Turtle of the Pacific Ocean has been considered a separate species (*Chelonia agassizii*) by some authors (e.g., Pritchard and Trebbau, 1984, *SSAR Contrib. Herpetol.* 2: 1–403), a subspecies of *Chelonia mydas* by others (Kamezaki and Matsui, 1995, *J. Herpetol.* 29: 51–60), and synonymous with *Chelonia mydas* by others (e.g., Bowen et al., 1992, *Evolution* 46: 865–881). We follow Parham and Zug (1996, *Marine Turtle Newsl.* 72: 2–5) and Karl and Bowen (1999, *Cons. Biol.* 13: 990–999) in not recognizing it taxonomically until more work is done.

We have returned to the use of “sea turtles” (rather than “seaturtles”) as part of the standard English name for marine turtles. The combined name has not been used recently in the literature.

John B. Iverson (Chair), Peter A. Meylan, Michael E. Seidel, 2015-01-15

Chelydra Schweigger 1812

C. serpentina (Linnaeus 1758) – Snapping Turtle

This species has often been called the Common Snapping Turtle (e.g., Collins, 1997, *SSAR Herpetol. Circ.* 25). We have dropped the adjective because it might be misinterpreted as referring to the abundance of the species rather than to its being the typical, most widespread species of its family. Shaffer et al. (2008; *Biology of the Snapping Turtle*, John Hopkins Univ. Press.) provided convincing genetic evidence that *C. serpentina* is a “single, virtually invariant lineage” and hence abandoned the recognition of the subspecies *C. s. osceola* Stejneger, 1918.

John B. Iverson (Chair), Peter A. Meylan, Michael E. Seidel, 2015-01-15

***C. dorsalis* Agassiz 1857 – Southern Painted Turtle**

Starkey et al. (2003, *Evolution* 57: 119–128) have argued that the southern painted turtle is genetically divergent and hence should be elevated to the species level. They also questioned the recognition of the remaining subspecies on genetic grounds, but did not take a position on their abandonment. However, Ernst et al. (2006, *Herpetol. Bull.* 95: 6–15) reexamined color patterns and dorsal scute alignment in *Chrysemys* and identified intermediate specimens between *C. dorsalis* and *C. p. marginata* and *C. p. bellii*. Based on these findings Fritz and Havas (2007, *Checklist of Chelonians of the World*, Museum of Zoology, Dresden) returned *dorsalis* to subspecies rank under *C. picta*. Until this conflict between genetic and color pattern data can be resolved, we rely on the genetic data and continue to recognize *dorsalis* as a full species.

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***C. picta* (Schneider 1783) – Painted Turtle**

Starkey et al. (2003, *Evolution* 57: 119–128) have argued that the southern painted turtle is genetically divergent and hence should be elevated to the species level. They also questioned the recognition of the remaining subspecies on genetic grounds, but did not take a position on their abandonment. However, Ernst et al. (2006, *Herpetol. Bull.* 95: 6–15) reexamined color patterns and dorsal scute alignment in *Chrysemys* and identified intermediate specimens between *C. dorsalis* and *C. p. marginata* and *C. p. bellii*. Based on these findings Fritz and Havas (2007, *Checklist of Chelonians of the World*, Museum of Zoology, Dresden) returned *dorsalis* to subspecies rank under *C. picta*. Until this conflict between genetic and color pattern data can be resolved, we rely on the genetic data and continue to recognize *dorsalis* as a full species.

***C. picta bellii* (Gray 1831) – Western Painted Turtle**

Starkey et al. (2003, *Evolution* 57: 119–128) have argued that the southern painted turtle is genetically divergent and hence should be elevated to the species level. They also questioned the recognition of the remaining subspecies on genetic grounds, but did not take a position on their abandonment. However, Ernst et al. (2006, *Herpetol. Bull.* 95: 6–15) reexamined color patterns and dorsal scute alignment in *Chrysemys* and identified intermediate specimens between *C. dorsalis* and *C. p. marginata* and *C. p. bellii*. Based on these findings Fritz and Havas (2007, *Checklist of Chelonians of the World*, Museum of Zoology, Dresden) returned *dorsalis* to subspecies rank under *C. picta*. Until this conflict between genetic and color pattern data can be resolved, we rely on the genetic data and continue to recognize *dorsalis* as a full species.

***C. picta marginata* Agassiz 1857 – Midland Painted Turtle**

Starkey et al. (2003, *Evolution* 57: 119–128) have argued that the southern painted turtle is genetically divergent and hence should be elevated to the species level. They also questioned the recognition of the remaining subspecies on genetic grounds, but did not take a position on their abandonment. However, Ernst et al. (2006, *Herpetol. Bull.* 95: 6–15) reexamined color patterns and dorsal scute alignment in *Chrysemys* and identified intermediate specimens between *C. dorsalis* and *C. p. marginata* and *C. p. bellii*. Based on these findings Fritz and Havas (2007, *Checklist of Chelonians of the World*, Museum of Zoology, Dresden) returned *dorsalis* to subspecies rank under *C. picta*. Until this conflict between genetic and color pattern data can be resolved, we rely on the genetic data and continue to recognize *dorsalis* as a full species.

C. picta picta (Schneider 1783) – Eastern Painted Turtle

Starkey et al. (2003, *Evolution* 57: 119–128) have argued that the southern painted turtle is genetically divergent and hence should be elevated to the species level. They also questioned the recognition of the remaining subspecies on genetic grounds, but did not take a position on their abandonment. However, Ernst et al. (2006, *Herpetol. Bull.* 95: 6–15) reexamined color patterns and dorsal scute alignment in *Chrysemys* and identified intermediate specimens between *C. dorsalis* and *C. p. marginata* and *C. p. bellii*. Based on these findings Fritz and Havas (2007, *Checklist of Chelonians of the World*, Museum of Zoology, Dresden) returned *dorsalis* to subspecies rank under *C. picta*. Until this conflict between genetic and color pattern data can be resolved, we rely on the genetic data and continue to recognize *dorsalis* as a full species.

Clemmys Ritgen 1828

C. guttata (Schneider 1792) – Spotted Turtle

Reviewed by Ernst (1972, Cat. Am. Amph. Rept. 124).

Note on genus:

Work by Bickham et al. (1996, *Herpetologica* 52: 89–97), Burke et al. (1996, *Herpetologica* 52: 572–584), Lenk et al. (1999, *Mol. Ecol.* 8: 1911–1922), Holman and Fritz (2001, *Zoolog. Abhand. Staat. Mus. für Tierkunde Dresden* 51: 331–354), Feldman and Parham (2002, *Mol. Phylogenet. Evol.* 22: 388–398), Seidel (2002, *Copeia* 2002: 1118–1121), Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610), Wiens et al. (2010, *Biol. J. Linn. Soc.* 99: 445–461), and Fritz et al. (2011, *Zootaxa* 2791: 41–53) provided ample evidence that the genus *Clemmys* as previously recognized (e.g., McDowell, 1964, *Proc. Zool. Soc. Lond.* 143: 239–279) was paraphyletic with respect to the sister genera *Emys* and *Emydoidea*, and also possibly *Terrapene*. Two taxonomic schemes reflecting these relationships are currently in contention. Both would place sister taxa *insculpta* and *muhlenbergii* in the genus *Glyptemys* and leave *guttata* in the monotypic genus *Clemmys* (both changes are recognized in this list). However, one scheme (e.g., Feldman and Parham, 2002, *op. cit.*; Spinks and Shaffer, 2005, *Mol. Ecol.* 14: 2047–2064) would expand the definition of *Emys* to include *marmorata*, *blandingii*, *orbicularis* (European) and *trinacris* (Sicilian). This would involve two taxonomic changes and eliminate the genus *Emydoidea*, which is monotypic as a living taxon, but polytypic if the fossil record is included (Holman, 2002, *Michigan Academician* 34: 393–394). The other scheme (Holman and Fritz, *op. cit.*; Stephens and Wiens, 2003, *op. cit.*; Wiens et al. 2010, *op. cit.*; Fritz et al. 2011, *op. cit.*) involves only one taxonomic change, placing *marmorata* in the now polytypic genus *Actinemys* (see Spinks and Shaffer, 2005, *op. cit.*; Spinks et al., 2010, *Mol. Ecol.* 19: 542–556; and Spinks et al., 2014, *Mol. Ecol.* 23: 2228–2241), and retaining the polytypic genera *Emydoidea* (North America) and *Emys* (Eurasia). The contention hinges on the relative importance of eliminating monotypic genera versus maintaining taxonomic stability (fewer changes being preferable). The former is supported primarily by taxonomists who consider monotypic genera to be redundant names and hence of no value in providing phylogenetic information. Thus, although the former scheme requires more changes, it eliminates the genus *Emydoidea* (which is monotypic if the fossil record is ignored: Holman, 2002, *op. cit.*), although it retains the monotypic genus *Clemmys*. Many proponents of the latter scheme believe that monotypic genera are not taxonomically redundant but rather reflect evolutionary distinctiveness (see Mayr and Bock, 2002, *J. Zool. Syst. Evol. Research* 40: 169–194 for a general discussion of the values of taxonomic stability and recording anagenesis in classification schemes). Finally, a recent analysis (Angielczyk and Feldman, 2013, *Biol. J. Linn. Soc.* 108: 727–755), based on 14 nuclear genes, found that *Emys* broadly defined is paraphyletic with respect to *Clemmys*. Hence, because of the value of current stability, the fact that *Actinemys*, *Emydoidea* and *Emys* (*sensu stricto*) are no longer considered monotypic genera, and the uncertainty concerning the monophyly of *Emys sensu lato*, we here follow the second scheme, recognizing *Actinemys*, *Emydoidea* and *Emys*, as recommended by Fritz et al. (2011, *op. cit.*) and followed by other recent authorities including Ernst and Lovich (2009, *Turtles of the United States and Canada*, Johns Hopkins Univ. Press) and Legler and Vogt (2013, *The Turtles of Mexico*, Univ. California Press).

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Deirochelys Agassiz 1857

D. reticularia (Latreille, in Sonnini and Latreille 1801) – Chicken Turtle

D. reticularia chrysea Schwartz 1956 – Florida Chicken Turtle

D. reticularia miaria Schwartz 1956 – Western Chicken Turtle

D. reticularia reticularia (Latreille, in Sonnini and Latreille 1801) – Eastern Chicken Turtle

Dermochelys Blainville 1816

D. coriacea (Vandelli 1761) – Leatherback Sea Turtle

We have returned to the use of “sea turtles” (rather than “seaturtles”) as part of the standard English name for marine turtles. The combined name has not been used recently in the literature.

Emydoidea Gray 1870

E. blandingii (Holbrook 1838) – Blanding's Turtle

Work by Bickham et al. (1996, *Herpetologica* 52: 89–97), Burke et al. (1996, *Herpetologica* 52: 572–584), Lenk et al. (1999, *Mol. Ecol.* 8: 1911–1922), Holman and Fritz (2001, *Zoolog. Abhand. Staat. Mus. für Tierkunde Dresden* 51: 331–354), Feldman and Parham (2002, *Mol. Phylogenet. Evol.* 22: 388–398), Seidel (2002, *Copeia* 2002: 1118–1121), Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610), Wiens et al. (2010, *Biol. J. Linn. Soc.* 99: 445–461), and Fritz et al. (2011, *Zootaxa* 2791: 41–53) provided ample evidence that the genus *Clemmys* as previously recognized (e.g., McDowell, 1964, *Proc. Zool. Soc. Lond.* 143: 239–279) was paraphyletic with respect to the sister genera *Emys* and *Emydoidea*, and also possibly *Terrapene*. Two taxonomic schemes reflecting these relationships are currently in contention.

Eretmochelys Fitzinger 1843

E. imbricata (Linnaeus 1766) – Hawksbill Sea Turtle

Although many recent authors have abandoned use of Atlantic versus Indo-Pacific Ocean subspecies (Meylan, 2006, *Chelon. Res. Monogr.* 3: 105–127), the names have not been formally synonymized. Because mitochondrial genome comparisons by Okayama et al. (1999, *Chelon. Conserv. Biol.* 3: 362–367) suggested genetic divergence between the Caribbean and Indo-Pacific populations, we retain the subspecies names pending further study. We have returned to the use of “sea turtles” (rather than “seaturtles”) as part of the standard English name for marine turtles. The combined name has not been used recently in the literature.

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E. imbricata bisssa (Rüppell 1835) – Pacific Hawksbill Sea Turtle

Although many recent authors have abandoned use of Atlantic versus Indo-Pacific Ocean subspecies (Meylan, 2006, *Chelon. Res. Monogr.* 3: 105–127), the names have not been formally synonymized. Because mitochondrial genome comparisons by Okayama et al. (1999, *Chelon. Conserv. Biol.* 3: 362–367) suggested genetic divergence between the Caribbean and Indo-Pacific populations, we retain the subspecies names pending further study. We have returned to the use of “sea turtles” (rather than “seaturtles”) as part of the standard English name for marine turtles. The combined name has not been used recently in the literature.

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E. imbricata imbricata (Linnaeus 1766) – Atlantic Hawksbill Sea Turtle

Although many recent authors have abandoned use of Atlantic versus Indo-Pacific Ocean subspecies (Meylan, 2006, *Chelon. Res. Monogr.* 3: 105–127), the names have not been formally synonymized. Because mitochondrial genome comparisons by Okayama et al. (1999, *Chelon. Conserv. Biol.* 3: 362–367) suggested genetic divergence between the Caribbean and Indo-Pacific populations, we retain the subspecies names pending further study. We have returned to the use of “sea turtles” (rather than “seaturtles”) as part of the standard English name for marine turtles. The combined name has not been used recently in the literature.

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Glyptemys Agassiz 1857

G. insculpta (Leconte 1830) – Wood Turtle

Work by Bickham et al. (1996, *Herpetologica* 52: 89–97), Burke et al. (1996, *Herpetologica* 52: 572–584), Lenk et al. (1999, *Mol. Ecol.* 8: 1911–1922), Holman and Fritz (2001, *Zoolog. Abhand. Staat. Mus. für Tierkunde Dresden* 51: 331–354), Feldman and Parham (2002, *Mol. Phylogenet. Evol.* 22: 388–398), Seidel (2002, *Copeia* 2002: 1118–1121), Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610), Wiens et al. (2010, *Biol. J. Linn. Soc.* 99: 445–461), and Fritz et al. (2011, *Zootaxa* 2791: 41–53) provided ample evidence that the genus *Clemmys* as previously recognized (e.g., McDowell, 1964, *Proc. Zool. Soc. Lond.* 143: 239–279) was paraphyletic with respect to the sister genera *Emys* and *Emydoidea*, and also possibly *Terrapene*. Two taxonomic schemes reflecting these relationships are currently in contention. Both would place sister taxa *insculpta* and *muhlenbergii* in the genus *Glyptemys* and leave *guttata* in the monotypic genus *Clemmys*.

G. muhlenbergii (Schoepff 1801) – Bog Turtle

Work by Bickham et al. (1996, *Herpetologica* 52: 89–97), Burke et al. (1996, *Herpetologica* 52: 572–584), Lenk et al. (1999, *Mol. Ecol.* 8: 1911–1922), Holman and Fritz (2001, *Zoolog. Abhand. Staat. Mus. für Tierkunde Dresden* 51: 331–354), Feldman and Parham (2002, *Mol. Phylogenet. Evol.* 22: 388–398), Seidel (2002, *Copeia* 2002: 1118–1121), Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610), Wiens et al. (2010, *Biol. J. Linn. Soc.* 99: 445–461), and Fritz et al. (2011, *Zootaxa* 2791: 41–53) provided ample evidence that the genus *Clemmys* as previously recognized (e.g., McDowell, 1964, *Proc. Zool. Soc. Lond.* 143: 239–279) was paraphyletic with respect to the sister genera *Emys* and *Emydoidea*, and also possibly *Terrapene*. Two taxonomic schemes reflecting these relationships are currently in contention. Both would place sister taxa *insculpta* and *muhlenbergii* in the genus *Glyptemys* and leave *guttata* in the monotypic genus *Clemmys*.

G. agassizii (Cooper 1861) – Mohave Desert Tortoise

The spelling of the standard English name has been changed from “Mojave” to “Mohave” for consistency with other names in the list (see note for *Crotalus scutulatus*).

G. morafkai was formerly included in *G. agassizii* (Murphy et al., 2011, ZooKeys 113: 39–71). The original description noted that *G. morafkai* occurs in the Sonoran desert as well as part of the Mohave Desert and part of the Sinaloan thornscrub, and that the restricted *G. agassizii* occurs in the Mohave Desert as well as part of the Sonoran Desert. Hence, the authors recommended the patronyms Morafka’s Desert Tortoise and Agassiz’s Desert Tortoise, respectively, rather than the geographic names Sonoran Desert Tortoise (often abbreviated SDT) and Mohave Desert Tortoise (MDT), reflecting their primary distributions. However, because the latter names have long been used as standard names for these two populations (including legislation by the US Fish and Wildlife Service), and because of the potential for confusion of the abbreviation for Morafka’s Desert Tortoise (also MDT) with that for the Mohave Desert Tortoise, we support the use of the traditional geographic standard names.

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G. berlandieri (Agassiz 1857) – Berlandier's Tortoise

Because most of the range of this tortoise is in Mexico (not Texas), we follow Ernst and Lovich (2009, Turtles of the United States and Canada. Second Edition. Johns Hopkins Univ. Press, Baltimore) in using the patronym Berlandier’s Tortoise, rather than the frequently used name of Texas Tortoise.

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G. morafkai Murphy, Berry, Edwards, Leviton, Lathrop, and Riedle 2011 – Sonoran Desert Tortoise

This cryptic species was formerly included in *G. agassizii* (Murphy et al., 2011, ZooKeys 113: 39–71). The original description noted that *G. morafkai* occurs in the Sonoran desert as well as part of the Mohave Desert and part of the Sinaloan thornscrub, and that the restricted *G. agassizii* occurs in the Mohave Desert as well as part of the Sonoran Desert. Hence, the authors recommended the patronyms Morafka’s Desert Tortoise and Agassiz’s Desert Tortoise, respectively, rather than the geographic names Sonoran Desert Tortoise (often abbreviated SDT) and Mohave Desert Tortoise (MDT), reflecting their primary distributions. However, because the latter names have long been used as standard names for these two populations (including legislation by the US Fish and Wildlife Service), and because of the potential for confusion of the abbreviation for Morafka’s Desert Tortoise (also MDT) with that for the Mohave Desert Tortoise, we support the use of the traditional geographic standard names.

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G. polyphemus (Daudin 1802) – Gopher Tortoise

Graptemys Agassiz 1857

G. barbouri Carr and Marchand 1942 – Barbour's Map Turtle

Note on genus:

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

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G. caglei Haynes and Mckown 1974 – Cagle's Map Turtle

Note on genus:

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

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G. ernsti Lovich and Mccoy 1992 – Escambia Map Turtle

Note on genus:

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

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G. flavimaculata Cagle 1954 – Yellow-blotched Map Turtle

Ennen et al. (2010, *J. Herpetol.* 44: 544-554) argued for the continued recognition of this species and the closely related *G. oculifera*, despite their limited genetic divergence.

Note on genus:

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

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G. geographica (Lesueur 1817) – Northern Map Turtle

We do not refer to this species as the Common Map Turtle because of the possibility that the word 'common' might be misinterpreted to imply abundance rather than to the fact that it has a broad geographic distribution.

Note on genus:

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

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G. gibbonsi Lovich and Mccoy 1992 – Pascagoula Map Turtle

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

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G. nigrinoda Cagle 1954 – Black-Knobbed Turtle

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

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G. nigrinoda delticola Folkerts and Mount 1969 – Southern Black-knobbed Map Turtle

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

G. nigrinoda nigrinoda Cagle 1954 – Northern Black-knobbed Map Turtle

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

G. oculifera (Bauer 1890) – Ringed Map Turtle

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

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G. ouachitensis Cagle 1953 – Ouachita Map Turtle

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

G. pearlensis Ennen, Lovich, Kreiser, Selman, and Qualls 2010 – Pearl River Map Turtle

This cryptic species was formerly included in *G. gibbonsi* (Ennen et al., 2010, *Chel. Conserv. Biol.* 9: 98–113).

Note on genus:

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

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G. pseudogeographica (Gray 1831) – False Map Turtle

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

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G. pseudogeographica kohnii (Baur 1890) – Mississippi Map Turtle

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

G. pseudogeographica pseudogeographica (Gray 1831) – Northern False Map Turtle

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

G. pulchra Baur 1893 – Alabama Map Turtle

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

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G. sabinensis Cagle 1953 – Sabine Map Turtle

Although *sabinensis* has been considered a subspecies of *G. ouachitensis* by most authors since Vogt (1980, *Tulane Stud. Zool. Bot.* 22: 17–48), the morphological and molecular evidence for its species status has slowly been mounting (Ward, 1980, Ph.D. dissertation, North Carolina State Univ.; Stephens and Wiens, 2003, *Biol. J. Linn. Soc.* 79: 577–610; Myers, 2008, Ph.D. dissertation, Iowa State Univ.; Wiens et al., 2010, *Biol. J. Linn. Soc.* 99: 445–461; Brown et al., 2012, *Copeia* 2012: 301–306). Based on these data and his own field sampling, Lindeman (2013, Univ. Oklahoma Press, Norman) noted that *sabinensis* is allopatric, non-intergrading, and diagnosable, and formally elevated it to a full species.

Note on genus:

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

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G. versa Stejneger 1925 – Texas Map Turtle

Evidence for monophyly and content of this genus was reviewed by Dobie (1981, *Tulane Stud. Zool. Bot.* 23: 85), Lamb and Osentoski (1997, *J. Herpetol.* 31: 258–265), and Stephens and Wiens (2003, *Biol. J. Linn. Soc.* 79: 577–610).

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Kinosternon Spix 1824

K. arizonense Gilmore 1922 – Arizona Mud Turtle

Formerly a subspecies of *K. flavescens*, Serb et al. (2001, *Mol. Phylogenet. Evol.* 18: 149–162) demonstrated that including this taxon in *K. flavescens* made the latter paraphyletic with respect to *K. baurii* and *K. subrubrum*. They recommended recognition as a species. In addition, Iverson (1989, *Southwest. Natur.* 34: 356–368) demonstrated the distinctiveness of this form, confirmed its allopatry with *K. flavescens*, and suggested that its reproductive season is asynchronous with that of *K. flavescens*.

Note on genus:

Iverson (1991, *Herpetol. Monog.* 5: 1–27) and Iverson et al. (2013, *Mol. Phylogenet. Evol.* 69: 929–939) are the most recent reviewers of this genus.

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K. baurii (Garman 1891) – Striped Mud Turtle

Note on genus:

Iverson (1991, Herpetol. Monog. 5: 1–27) and Iverson et al. (2013, Mol. Phylogenet. Evol. 69: 929–939) are the most recent reviewers of this genus.

K. flavescens (Agassiz 1857) – Yellow Mud Turtle

The validity of the subspecies *Kinosternon flavescens spooneri* Smith, 1951 (Illinois Mud Turtle) has been questioned on morphological and molecular grounds by Houseal et al. (1982, Copeia 1982: 567–580), Berry and Berry (1984, Ann. Carnegie Mus. Nat. Hist. 53: 185–206), and Serb et al. (2001, Mol. Phylogenet. Evol. 18: 149–162).

Note on genus:

Iverson (1991, Herpetol. Monog. 5: 1–27) and Iverson et al. (2013, Mol. Phylogenet. Evol. 69: 929–939) are the most recent reviewers of this genus.

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K. hirtipes (Wagler 1830) – Rough-footed Mud Turtle

Collins (1997, SSAR Herpetol. Circ. 25) suggested the name Mexican Mud Turtle for this turtle, but that name is generally applied to *Kinosternon integrum* (Iverson et al., 1998, Cat. Am. Amph. Rept. 652).

Note on genus:

Iverson (1991, Herpetol. Monog. 5: 1–27) and Iverson et al. (2013, Mol. Phylogenet. Evol. 69: 929–939) are the most recent reviewers of this genus.

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K. hirtipes murrayi Glass and Hartweg 1951 – Mexican Plateau Mud Turtle

Note on genus:

Iverson (1991, Herpetol. Monog. 5: 1–27) and Iverson et al. (2013, Mol. Phylogenet. Evol. 69: 929–939) are the most recent reviewers of this genus.

K. sonoriense Leconte 1854 – Sonora Mud Turtle

Note on genus:

Iverson (1991, Herpetol. Monog. 5: 1–27) and Iverson et al. (2013, Mol. Phylogenet. Evol. 69: 929–939) are the most recent reviewers of this genus.

K. sonoriense longifemorale Iverson 1981 – Sonoyta Mud Turtle

There is speculation that this taxon might deserve species status, but molecular studies are needed to resolve that question.

Note on genus:

Iverson (1991, Herpetol. Monog. 5: 1–27) and Iverson et al. (2013, Mol. Phylogenet. Evol. 69: 929–939) are the most recent reviewers of this genus.

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K. sonoriense sonoriense Leconte 1854 – Desert Mud Turtle

Note on genus:

Iverson (1991, Herpetol. Monog. 5: 1–27) and Iverson et al. (2013, Mol. Phylogenet. Evol. 69: 929–939) are the most recent reviewers of this genus.

K. steindachneri Siebenrock 1906 – Florida Mud Turtle

Walker et al. (1998, *Herpetologica* 54:174–184) first demonstrated the distinctiveness of *steindachneri* relative to the other subspecies of *K. subrubrum* based on mitochondrial DNA restriction fragment analyses. In a subsequent phylogenetic analysis of mitochondrial and nuclear DNA, Iverson et al. (2013, *Mol. Phylogenet. Evol.* 69: 929–939) found that *steindachneri* was sister to *K. baurii*, rendering *K. subrubrum* paraphyletic. They recommended elevating *steindachneri* to species status, a suggestion previously also made by Meshaka and Gibbons (2006, in Meylan, *Biology and Conservation of Florida Turtles*, *Chel. Res. Monographs* 3) and Bourque (2012, *J. Vert. Paleo.* 32: 68–81) based on morphological evidence from extant and fossil *Kinosternon*. Although additional nuclear DNA sampling is warranted, we follow these authors in elevating *steindachneri* to full species status.

Note on genus:

Iverson (1991, *Herpetol. Monog.* 5: 1–27) and Iverson et al. (2013, *Mol. Phylogenet. Evol.* 69: 929–939) are the most recent reviewers of this genus.

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K. subrubrum (Lac 1788) – Eastern Mud Turtle

Iverson (1991, *Herpetol. Monog.* 5: 1–27) and Iverson et al. (2013, *Mol. Phylogenet. Evol.* 69: 929–939) are the most recent reviewers of this genus.

K. subrubrum hippocrepis Gray 1855 – Mississippi Mud Turtle

Note on genus:

Iverson (1991, *Herpetol. Monog.* 5: 1–27) and Iverson et al. (2013, *Mol. Phylogenet. Evol.* 69: 929–939) are the most recent reviewers of this genus.

K. subrubrum subrubrum (Lac 1788) – Southeastern Mud Turtle

Note on genus:

Iverson (1991, *Herpetol. Monog.* 5: 1–27) and Iverson et al. (2013, *Mol. Phylogenet. Evol.* 69: 929–939) are the most recent reviewers of this genus.

Lepidochelys Fitzinger 1843

L. kempii (Garman 1880) – Kemp's Ridley Sea Turtle

Bowen et al. (1991, *Nature* 352: 709) reviewed variation within this genus. We have returned to the use of “sea turtles” (rather than “seaturtles”) as part of the standard English name for marine turtles. The combined name has not been used recently in the literature.

L. olivacea (Eschscholtz 1829) – Olive Ridley Sea Turtle

Bowen et al. (1991, *Nature* 352: 709) reviewed variation within this genus. We have returned to the use of “sea turtles” (rather than “seaturtles”) as part of the standard English name for marine turtles. The combined name has not been used recently in the literature.

Macrochelys Gray 1855

M. apalachicola Thomas, Granatosky, Bourque, Krysko, Moler, Gamble, Suarez, Leone, Enge, and Roman 2014 – Apalachicola Alligator Snapping Turtle

Note on genus:

Webb (1995, *Chelonian Conserv. Biol.* 1: 322–323) demonstrated that the name *Macrochelys* Gray has precedence over the name *Macroclmys* Gray (contra Smith, 1955, *Herpetologica* 11: 16). Preliminary mitochondrial and microsatellite data (Roman et al., 1999, *Conserv. Biol.* 13: 135–142; Echelle et al., 2010, *Conserv. Genetics* 11: 1375–1387) had indicated the presence of significant genetic structure across the current range of this formerly monotypic genus. Subsequently, Thomas et al. (2104, *Zootaxa* 3786(2): 1–165) provided further analysis of the mitochondrial data as well as morphological data that supported the recognition of three monophyletic lineages in this genus. They retained the older species name for the western lineage, but those in the Apalachicola and Suwannee River basins were described as full species.

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M. suwanniensis Thomas, Granatosky, Bourque, Krysko, Moler, Gamble, Suarez, Leone, Enge, and Roman 2014 – Suwannee Alligator Snapping Turtle

Note on genus:

Webb (1995, *Chelonian Conserv. Biol.* 1: 322–323) demonstrated that the name *Macrochelys* Gray has precedence over the name *Macroclmys* Gray (contra Smith, 1955, *Herpetologica* 11: 16). Preliminary mitochondrial and microsatellite data (Roman et al., 1999, *Conserv. Biol.* 13: 135–142; Echelle et al., 2010, *Conserv. Genetics* 11: 1375–1387) had indicated the presence of significant genetic structure across the current range of this formerly monotypic genus. Subsequently, Thomas et al. (2104, *Zootaxa* 3786(2): 1–165) provided further analysis of the mitochondrial data as well as morphological data that supported the recognition of three monophyletic lineages in this genus. They retained the older species name for the western lineage, but those in the Apalachicola and Suwannee River basins were described as full species.

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M. temminckii (Harlan 1835) – Alligator Snapping Turtle

Although Troost coined the species name, it was Harlan (1835) alone who authored the original description.

Note on genus:

Webb (1995, *Chelonian Conserv. Biol.* 1: 322–323) demonstrated that the name *Macrochelys* Gray has precedence over the name *Macroclmys* Gray (contra Smith, 1955, *Herpetologica* 11: 16). Preliminary mitochondrial and microsatellite data (Roman et al., 1999, *Conserv. Biol.* 13: 135–142; Echelle et al., 2010, *Conserv. Genetics* 11: 1375–1387) had indicated the presence of significant genetic structure across the current range of this formerly monotypic genus. Subsequently, Thomas et al. (2104, *Zootaxa* 3786(2): 1–165) provided further analysis of the mitochondrial data as well as morphological data that supported the recognition of three monophyletic lineages in this genus. They retained the older species name for the western lineage, but those in the Apalachicola and Suwannee River basins were described as full species.

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Malaclemys Gray 1844

M. terrapin (Schoepf 1973) – Diamond-Backed Terrapin

A detailed study of the geographic variation of these turtles would prove highly informative.

M. terrapin centrata (Latreille, in Sonnini and Latreille 1801) – Carolina Diamond-Backed Terrapin

A detailed study of the geographic variation of these turtles would prove highly informative.

M. terrapin littoralis (Hay 1904) – Texas Diamond-Backed Terrapin

A detailed study of the geographic variation of these turtles would prove highly informative.

M. terrapin macrospilota (Hay 1904) – Ornate Diamond-Backed Terrapin

A detailed study of the geographic variation of these turtles would prove highly informative.

M. terrapin pileata (Wied-Neuwied 1865) – Mississippi Diamond-Backed Terrapin

A detailed study of the geographic variation of these turtles would prove highly informative.

M. terrapin rhizophorarum Fowler 1906 – Mangrove Diamond-Backed Terrapin

A detailed study of the geographic variation of these turtles would prove highly informative.

M. terrapin tequesta Schwartz 1955 – Eastern Florida Diamond-backed Terrapin

A detailed study of the geographic variation of these turtles would prove highly informative.

M. terrapin terrapin (Schoepff 1973) – Northern Diamond-Backed Terrapin

A detailed study of the geographic variation of these turtles would prove highly informative.

Palea Meylan 1987

P. steindachneri (Siebenrock 1835) – Wattle-Necked Softshell

Alien Species:

The Wattle-necked Softshell is native to southeastern China and northern Vietnam, has been reported from two states, and is established in Hawaii.

Fred Kraus, 2015-01-19

Pelodiscus Gray 1844

P. sinensis (Weigman 1835) – Chinese Softshell

Alien Species:

The Chinese Softshell is native to eastern Asia, has been reported from three states, and is established in Hawaii.

Fred Kraus, 2015-01-19

Pseudemys Gray 1856

P. alabamensis Baur 1893 – Alabama Red-Bellied Cooter

Notes on genus: Spinks et al. (2013, Mol. Phylogenet. Evol. 68: 269–281) examined variation in mitochondrial and nuclear DNA across all recognized taxa of *Pseudemys*, and revealed almost no support for the currently recognized species groups, species, or subspecies. They concluded that the genus was probably over-split, but offered no explicit taxonomic suggestions. Pending more extensive genetic sampling and phylogenetic analyses, and in the interest of stability, we continue to follow the content recommended by Seidel (1994, Chelonian Conserv. Biol. 1: 117–130).

P. concinna (Leconte 1830) – River Cooter

Only two subspecies are recognized here: *Pseudemys concinna concinna* and *P. c. floridana* Seidel (1994, Chelon. Conserv. Biol. 1: 117–130) demonstrated that *P. c. hieroglyphica* and *P. c. metterii* are not distinct and represent only clinal variation; he elevated *P. c. suwanniensis* to species status (see separate entry); and he relegated *P. floridana* to a subspecies of *P. concinna* (but see comments below). The taxonomy adopted here has recently been followed by Ernst and Lovich (2009, Turtles of the United States and Canada. Second Edition. John Hopkins Univ. Press, Baltimore).

Notes on genus: Spinks et al. (2013, Mol. Phylogenet. Evol. 68: 269–281) examined variation in mitochondrial and nuclear DNA across all recognized taxa of *Pseudemys*, and revealed almost no support for the currently recognized species groups, species, or subspecies. They concluded that the genus was probably over-split, but offered no explicit taxonomic suggestions. Pending more extensive genetic sampling and phylogenetic analyses, and in the interest of stability, we continue to follow the content recommended by Seidel (1994, Chelonian Conserv. Biol. 1: 117–130).

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P. concinna concinna (Leconte 1830) – Eastern River Cooter

Only two subspecies are recognized here: *Pseudemys concinna concinna*, and *P. c. floridana*. Seidel (1994, Chelon. Conserv. Biol. 1: 117–130) demonstrated that *P. c. hieroglyphica* and *P. c. metterii* are not distinct and represent only clinal variation; he elevated *P. c. suwanniensis* to species status; and he relegated *P. floridana* to a subspecies of *P. concinna*. The taxonomy adopted here has recently been followed by Ernst and Lovich (2009, Turtles of the United States and Canada. Second Edition. John Hopkins Univ. Press, Baltimore).

Notes on genus: Spinks et al. (2013, Mol. Phylogenet. Evol. 68: 269–281) examined variation in mitochondrial and nuclear DNA across all recognized taxa of *Pseudemys*, and revealed almost no support for the currently recognized species groups, species, or subspecies. They concluded that the genus was probably over-split, but offered no explicit taxonomic suggestions. Pending more extensive genetic sampling and phylogenetic analyses, and in the interest of stability, we continue to follow the content recommended by Seidel (1994, Chelonian Conserv. Biol. 1: 117–130).

P. concinna floridana Leconte 1830 – Coastal Plain Cooter

This subspecies was formerly recognized as *Pseudemys floridana floridana* but Seidel (1994, Chelon. Conserv. Biol. 1: 117–130) transferred it to *Pseudemys concinna*. Jackson (1995, Chelon. Conserv. Biol. 1: 329–333) objected to this based on observations that *concinna* and *floridana* are sympatric in northern Florida and South Carolina. Seidel (1995, Chelon. Conserv. Biol. 1: 333–336) countered that the two forms may be macrosympatric at some locations, but that they intergrade in other areas. Based on morphometric, osteological, biochemical, and pigmentation studies, Seidel (1994, Chelon. Conserv. Biol. 1: 117–130) found no character which reliably separates the two forms in many transition areas (intergrade zones) between the coastal plain and piedmont of the Atlantic slope. However, the two forms are microsympatric throughout the panhandle of Florida (Meylan, 2006, Chelon. Res. Monogr. 3: 28–36). Jackson (2006, Chelon. Res. Monogr. 3: 325–337), Thomas and Jansen (2006, Chelon. Res. Monogr. 3: 338–347), and Jensen et al. (2008, Amphibians and Reptiles of Georgia. Univ. Georgia Press, Athens) do not follow this taxonomy, and recognize *floridana* and *concinna* as separate species. A thorough, range-wide phylogeographic study of the ecology, morphology, and genetics (mitochondrial and nuclear DNA) is needed to settle the controversies in the taxonomy of this species complex.

Notes on species: Only two subspecies are recognized here: *Pseudemys concinna concinna*, and *P. c. floridana*. Seidel (1994, Chelon. Conserv. Biol. 1: 117–130) demonstrated that *P. c. hieroglyphica* and *P. c. metterii* are not distinct and represent only clinal variation; he elevated *P. c. suwanniensis* to species status; and he relegated *P. floridana* to a subspecies of *P. concinna*. The taxonomy adopted here has recently been followed by Ernst and Lovich (2009, Turtles of the United States and Canada. Second Edition. John Hopkins Univ. Press, Baltimore).

Notes on genus: Spinks et al. (2013, Mol. Phylogenet. Evol. 68: 269–281) examined variation in mitochondrial and nuclear DNA across all recognized taxa of *Pseudemys*, and revealed almost no support for the currently recognized species groups, species, or subspecies. They concluded that the genus was probably over-split, but offered no explicit taxonomic suggestions. Pending more extensive genetic sampling and phylogenetic analyses, and in the interest of stability, we continue to follow the content recommended by Seidel (1994, Chelonian Conserv. Biol. 1: 117–130).

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P. gorzugi Ward 1894 – Rio Grande Cooter

This form was originally described by Ward (1984, Spec. Pub. Mus. Texas Tech. Univ. 21: 1–50) as a subspecies of *P. concinna*, but it was elevated to species status by Ernst (1990, Cat. Am. Amphib. Rept. 461: 1–2). That change is appropriate given its clear allopatry with *Pseudemys concinna* (Ward, 1984, Cat. Am. Amph. Rept. 487: 1–7), its morphological distinctiveness (Seidel, 1994, Chelon. Conserv. Biol. 1: 117–130), and its divergent DNA (Starkey, 1997, Ph.D. dissertation, Texas A&M Univ.; Stephens and Wiens, 2003, Biol. J. Linn. Soc. 79: 577–610).

Notes on genus: Spinks et al. (2013, Mol. Phylogenet. Evol. 68: 269–281) examined variation in mitochondrial and nuclear DNA across all recognized taxa of *Pseudemys*, and revealed almost no support for the currently recognized species groups, species, or subspecies. They concluded that the genus was probably over-split, but offered no explicit taxonomic suggestions. Pending more extensive genetic sampling and phylogenetic analyses, and in the interest of stability, we continue to follow the content recommended by Seidel (1994, Chelonian Conserv. Biol. 1: 117–130).

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P. nelsoni Carr 1938 – Florida Red-Bellied Cooter

Notes on genus: Spinks et al. (2013, Mol. Phylogenet. Evol. 68: 269–281) examined variation in mitochondrial and nuclear DNA across all recognized taxa of *Pseudemys*, and revealed almost no support for the currently recognized species groups, species, or subspecies. They concluded that the genus was probably over-split, but offered no explicit taxonomic suggestions. Pending more extensive genetic sampling and phylogenetic analyses, and in the interest of stability, we continue to follow the content recommended by Seidel (1994, Chelonian Conserv. Biol. 1: 117–130).

P. peninsularis Carr 1938 – Peninsula Cooter

Formerly considered a subspecies of *P. floridana* (Conant and Collins, 1992, A Field Guide to Reptiles and Amphibians: Eastern and Central North America. Houghton Mifflin Co., Boston), Seidel (1994, Chelon. Conserv. Biol. 1: 117–130) elevated this form to a species. He demonstrated that *peninsularis* does not intergrade with *P. c. floridana* in northern Florida, that it is sympatric with *P. suwanniensis*, and that there are morphometric and osteological characters (as well as markings) which consistently distinguish it from *P. concinna*. However, Thomas and Jansen (2006, Chelon. Res. Monogr. 3: 338–347) recommended the recognition of this form as a subspecies of *P. floridana*.

Notes on genus: Spinks et al. (2013, Mol. Phylogenet. Evol. 68: 269–281) examined variation in mitochondrial and nuclear DNA across all recognized taxa of *Pseudemys*, and revealed almost no support for the currently recognized species groups, species, or subspecies. They concluded that the genus was probably over-split, but offered no explicit taxonomic suggestions. Pending more extensive genetic sampling and phylogenetic analyses, and in the interest of stability, we continue to follow the content recommended by Seidel (1994, Chelonian Conserv. Biol. 1: 117–130).

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P. rubriventris (Leconte 1830) – Northern Red-Bellied Cooter

Notes on genus: Spinks et al. (2013, Mol. Phylogenet. Evol. 68: 269–281) examined variation in mitochondrial and nuclear DNA across all recognized taxa of *Pseudemys*, and revealed almost no support for the currently recognized species groups, species, or subspecies. They concluded that the genus was probably over-split, but offered no explicit taxonomic suggestions. Pending more extensive genetic sampling and phylogenetic analyses, and in the interest of stability, we continue to follow the content recommended by Seidel (1994, Chelonian Conserv. Biol. 1: 117–130).

P. suwanniensis Carr 1937 – Suwannee Cooter

Seidel (1994, Chelon. Conserv. Biol. 1: 117–130) elevated this form from a subspecies of *P. concinna* to a species based on his belief that it is allopatric or parapatric with other members of the *concinna* group. However, Jackson (1995, Chelon. Conserv. Biol. 1: 329–333) believed that it may intergrade with *P. c. concinna* in northern Florida and thus does not deserve species status. Recent availability of material from the Gulf Hammock region of northwest Florida is reviewed by Jackson (2006, Chelon. Res Monogr. 3: 325–337), who recommended recognition of this form as a subspecies of *P. concinna*.

Notes on genus: Spinks et al. (2013, Mol. Phylogenet. Evol. 68: 269–281) examined variation in mitochondrial and nuclear DNA across all recognized taxa of *Pseudemys*, and revealed almost no support for the currently recognized species groups, species, or subspecies. They concluded that the genus was probably over-split, but offered no explicit taxonomic suggestions. Pending more extensive genetic sampling and phylogenetic analyses, and in the interest of stability, we continue to follow the content recommended by Seidel (1994, Chelonian Conserv. Biol. 1: 117–130).

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P. texana Baur 1893 – Texas Cooter

Notes on genus: Spinks et al. (2013, Mol. Phylogenet. Evol. 68: 269–281) examined variation in mitochondrial and nuclear DNA across all recognized taxa of Pseudemys, and revealed almost no support for the currently recognized species groups, species, or subspecies. They concluded that the genus was probably over-split, but offered no explicit taxonomic suggestions. Pending more extensive genetic sampling and phylogenetic analyses, and in the interest of stability, we continue to follow the content recommended by Seidel (1994, Chelonian Conserv. Biol. 1: 117–130).

Sternotherus Gray 1825

S. carinatus (Gray 1855) – Razor-backed Musk Turtle

Notes on genus: The monophyly of the genus *Sternotherus* was questioned by Seidel et al. (1986, Copeia 1986: 285–294) and Iverson (1991, Herpetol. Monogr. 5: 1–27); however, Iverson (1998, Chelon. Conserv. Biol. 3: 113–117) and Iverson et al. (2013, Mol. Phylogenet. Evol. 69: 929–939) provided support for its monophyly.

S. depressus Tinkle and Webb 1955 – Flattened Musk Turtle

Notes on genus: The monophyly of the genus *Sternotherus* was questioned by Seidel et al. (1986, Copeia 1986: 285–294) and Iverson (1991, Herpetol. Monogr. 5: 1–27); however, Iverson (1998, Chelon. Conserv. Biol. 3: 113–117) and Iverson et al. (2013, Mol. Phylogenet. Evol. 69: 929–939) provided support for its monophyly.

S. minor (Agassiz 1857) – Loggerhead Musk Turtle

Notes on genus: The monophyly of the genus *Sternotherus* was questioned by Seidel et al. (1986, Copeia 1986: 285–294) and Iverson (1991, Herpetol. Monogr. 5: 1–27); however, Iverson (1998, Chelon. Conserv. Biol. 3: 113–117) and Iverson et al. (2013, Mol. Phylogenet. Evol. 69: 929–939) provided support for its monophyly.

S. minor minor (Agassiz 1857) – Eastern Loggerhead Musk Turtle

Notes on genus: The monophyly of the genus *Sternotherus* was questioned by Seidel et al. (1986, Copeia 1986: 285–294) and Iverson (1991, Herpetol. Monogr. 5: 1–27); however, Iverson (1998, Chelon. Conserv. Biol. 3: 113–117) and Iverson et al. (2013, Mol. Phylogenet. Evol. 69: 929–939) provided support for its monophyly.

S. minor peltifer Smith and Glass 1947 – Stripe-necked Musk Turtle

Notes on genus: The monophyly of the genus *Sternotherus* was questioned by Seidel et al. (1986, Copeia 1986: 285–294) and Iverson (1991, Herpetol. Monogr. 5: 1–27); however, Iverson (1998, Chelon. Conserv. Biol. 3: 113–117) and Iverson et al. (2013, Mol. Phylogenet. Evol. 69: 929–939) provided support for its monophyly.

S. odoratus (Latreille, in Sonnini and Latreille 1801) – Eastern Musk Turtle

We do not refer to this species as the Common Musk Turtle because of the possibility that the word “common” might be misinterpreted to imply abundance rather than to the fact that it has a broad range.

Notes on genus: The monophyly of the genus *Sternotherus* was questioned by Seidel et al. (1986, *Copeia* 1986: 285–294) and Iverson (1991, *Herpetol. Monogr.* 5: 1–27); however, Iverson (1998, *Chelon. Conserv. Biol.* 3: 113–117) and Iverson et al. (2013, *Mol. Phylogenet. Evol.* 69: 929–939) provided support for its monophyly.

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Terrapene Merrem 1820

T. baurii Taylor 1894 – Florida Box Turtle

Based on molecular and morphological evidence, Butler et al. (2011, *Biol. J. Linn. Soc.* 102: 889–901) concluded that the Florida Box Turtle (formerly *T. carolina bauri*) should be elevated to full species status. A review of the variation in this genus appeared in Dodd (2001, *North American Box Turtles*, Univ. Oklahoma Press, Norman).

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T. carolina (Linnaeus 1758) – Eastern Box Turtle

Based on molecular and morphological evidence, Butler et al. (2011, *Biol. J. Linn. Soc.* 102: 889–901) concluded that the Gulf Coast Box Turtle (formerly *T. c. major*) represents an intergrade population between the Eastern Box Turtle *T. c. carolina* and the Pleistocene Box Turtle (formerly *T. c. putnami*). They recommended that the name *T. c. major* only be applied to the Pleistocene form, and that additional study of the Gulf Coast populations is warranted. However, in an analysis of a single mitochondrial gene and a single nuclear gene, Martin et al. (2013, *Mol. Phylogenet. Evol.* 68: 119–134) found support for a western (including *triunguis*, *mexicana*, and *yucatan*) and an eastern group (*carolina*, *baurii*, and *major*, plus *coahuila*) within *T. carolina*. They recommended that the former be elevated to species status (*T. mexicana*, the oldest name) with three subspecies. Because of the lack of concordance between the results and conclusions of Martin et al. and Butler et al., the heavy reliance on mtDNA in both studies, and the value of preserving stability, we refrain from making additional changes until more data are available. A review of the variation in this genus appeared in Dodd (2001, *North American Box Turtles*, Univ. Oklahoma Press, Norman).

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T. carolina carolina Linnaeus 1758 – Woodland Box Turtle

Based on molecular and morphological evidence, Butler et al. (2011, Biol. J. Linn. Soc. 102: 889–901) concluded that the Gulf Coast Box Turtle (formerly *T. c. major*) represents an intergrade population between the Eastern Box Turtle *T. c. carolina* and the Pleistocene Box Turtle (formerly *T. c. putnami*). They recommended that the name *T. c. major* only be applied to the Pleistocene form, and that additional study of the Gulf Coast populations is warranted. However, in an analysis of a single mitochondrial gene and a single nuclear gene, Martin et al. (2013, Mol. Phylogenet. Evol. 68: 119–134) found support for a western (including *triunguis*, *mexicana*, and *yucatan*) and an eastern group (*carolina*, *baurii*, and *major*, plus *coahuila*) within *T. carolina*. They recommended that the former be elevated to species status (*T. mexicana*, the oldest name) with three subspecies. Because of the lack of concordance between the results and conclusions of Martin et al. and Butler et al., the heavy reliance on mtDNA in both studies, and the value of preserving stability, we refrain from making additional changes until more data are available. A review of the variation in this genus appeared in Dodd (2001, North American Box Turtles, Univ. Oklahoma Press, Norman).

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T. carolina triunguis (Agassiz 1857) – Three-toed Box Turtle

Based on molecular and morphological evidence, Butler et al. (2011, Biol. J. Linn. Soc. 102: 889–901) concluded that the Gulf Coast Box Turtle (formerly *T. c. major*) represents an intergrade population between the Eastern Box Turtle *T. c. carolina* and the Pleistocene Box Turtle (formerly *T. c. putnami*). A review of the variation in this genus appeared in Dodd (2001, North American Box Turtles, Univ. Oklahoma Press, Norman).

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T. ornata (Agassiz 1857) – Ornate Box Turtle

A review of the variation in this genus appeared in Dodd (2001, North American Box Turtles, Univ. Oklahoma Press, Norman).

T. ornata luteola Smith and Ramsey 1952 – Desert Box Turtle

Martin et al. (2013, Mol. Phylogenet. Evol. 68: 119–134) found no support for a distinction between *ornata* and *luteola*, and recommended their synonymy. However, because their analysis was based on only one mitochondrial and one nuclear gene, we cautiously retain both subspecies pending further geographic and molecular sampling.

Notes on genus: A review of the variation in this genus appeared in Dodd (2001, North American Box Turtles, Univ. Oklahoma Press, Norman).

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T. ornata ornata (Agassiz 1857) – Plains Box Turtle

Martin et al. (2013, Mol. Phylogenet. Evol. 68: 119–134) found no support for a distinction between *ornata* and *luteola*, and recommended their synonymy. However, because their analysis was based on only one mitochondrial and one nuclear gene, we cautiously retain both subspecies pending further geographic and molecular sampling.

Notes on genus: A review of the variation in this genus appeared in Dodd (2001, North American Box Turtles, Univ. Oklahoma Press, Norman).

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T. gaigeae (Hartweg 1939) – Mexican Plateau Slider

Price and Hillis (1989, First World Congr. Herpetol. Abstract), Seidel et al. (1999, Herpetologica 55: 470–487), and Seidel (2002, J. Herpetol. 36: 285–292) provided evidence for the specific recognition of this form. Reviewed by Stuart and Ernst (2004, Cat. Amer. Amphib. Rept. 787).

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T. gaigeae gaigeae (Hartweg 1939) – Big Bend Slider

Price and Hillis (1989, First World Congr. Herpetol. Abstract), Seidel et al. (1999, Herpetologica 55: 470–487), and Seidel (2002, J. Herpetol. 36: 285–292) provided evidence for the specific recognition of this form. Reviewed by Stuart and Ernst (2004, Cat. Amer. Amphib. Rept. 787).

T. scripta (Schoepff 1792) – Pond Slider

Content of this genus follows Seidel (2002, J. Herpetol. 36: 285–292).

T. scripta elegans (Wied-Neuwied 1838) – Red-Eared Slider

Content of this genus follows Seidel (2002, J. Herpetol. 36: 285–292).

T. scripta scripta (Schoepff 1792) – Yellow-Bellied Slider

Content of this genus follows Seidel (2002, J. Herpetol. 36: 285–292).

T. scripta troostii (Holbrook 1836) – Cumberland Slider

Content of this genus follows Seidel (2002, J. Herpetol. 36: 285–292).