Short Articles

Neotropical Primate Family-group Names Replaced by Groves (2001) in Contravention of Article 40 of the International Code of Zoological Nomenclature

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Before 1961, it was customary to regard the validity of a family-group name as determined by the recognizability of its type genus. If the type genus was relegated to the synonymy of another genus, a family-group name with a stem derived from the senior generic synonym was substituted. The *International Code of Zoological Nomenclature* was then amended to protect the stability of family-group names from the potential effects of generic lumping. The rationale appears to be that, by 1960, most family-group names were well established, and most genus-group junior synonyms had been identified as such and, where appropriate, replaced. Groves (2001, p.126) correctly stated that the valid family-group name is now the earliest one applied, but failed to appreciate that Article 40 of the *International Code of Zoological Nomenclature* was expressly introduced to prevent this amendment from disrupting stability of scientific nomenclature. Article 40.2.1 not only allows, but insists that a family-group name "in prevailing usage", replaced before 1961 because its type genus was considered a junior synonym, should be maintained. This paper contends that, under the provisions of Article 40.2.1, Alouattinae Trouessart, 1897 (1825) and Aotidae Poche, 1908 (1865) are the correct family-group names for their type genera, *Alouatta* Lacépède, 1799 and *Aotus* Illiger, 1811. We urge the retention of Saimiridae Miller, 1912 (1900) to maintain its prevailing usage as the family-group name for its type genus *Saimiri* Voigt, 1831 but note that, in this instance, the provisions of Article 40.2.1 do not automatically ensure this preferred outcome. We reason that Callitrichidae Gray, 1821 is the correct family-group name for its type genus *Callithrix* Erxleben, 1777.

In his book, *Primate Taxonomy*, Groves (2001) replaced the family-group name Callitrichidae Thomas, 1903 with Hapalinae Gray, 1821 for the marmosets and tamarins (as a subfamily of the Cebidae). He replaced the family-group name Alouattinae Elliot, 1904 with Mycetinae Gray, 1825 for the howler monkeys; the family-group name Aotidae Poche, 1908 with Nyctipithecidae Gray, 1870 for the douroucoulis, night monkeys or owl monkeys; and the family-group name Saimirinae Miller, 1924 with Chrysotrichinae Cabrera, 1900 for the squirrel monkeys (Table 1).

Groves (2001) stated he was quoting Article 40 from the current (Fourth) edition of the *International Code of Zoological Nomenclature* (2000), and Rylands (2002, p.122) unfortunately omitted the key word "not" from section (a), which should have read, "…that family-group name is not to be replaced…" The Fourth edition, however, was not finalized when the manuscript of Groves' book was completed and, unaware that the wording had changed, Groves (2001) was therefore quoting from the previous (Third) edition of the Code (1985). Although its message remains essentially the same, to set the record straight, this is how Article 40 now reads in the current (Fourth) edition of the Code:

Article 40. Synonymy of the type genus.

40.1. **Validity of family-group names not affected**. When the name of a type genus of a nominal family-group taxon is considered to be a junior synonym of the name of another nominal genus, the family-group name is not to be replaced on that account alone.

40.2. **Names replaced before 1961**. If, however, a family-group name was replaced before 1961 because of the synonymy of the type genus, the substitute name is to be maintained if it is in prevailing usage.

40.2.1. A name maintained by virtue of this Article retains its own author but takes the priority of the replaced name, of which it is deemed to be the senior synonym.

Recommendation 40A. Citation of author and date. If the author and date are cited, a family-group name maintained under the provisions of Article 40.2.1 should be cited with its original author and date…followed by the date of its priority as determined by this Article; the date of priority should be enclosed in parentheses.

Groves (2001) contravened Article 40 in replacing at least two of the above four family-group names, in that Simpson (1945) had already replaced Nyctipithecinae by Aotinae and Mycetinae by Alouattinae, and these names had come into "prevailing usage".

Table 1. Platyrrhine family-group names employed by Groves (2001).

Family/Subfamily	Genera
Cebidae Bonaparte, 1831	
Hapalinae Gray, 1825	*Cebuella, Mico, Callithrix, Callimico, Leontopithecus, Saguinus*
Chrysotrichinae Cabrera, 1900	*Saimiri*
Cebinae Bonaparte, 1831	*Cebus*
Nyctipithecidae Gray, 1870	*Aotus*
Pitheciidae Mivart, 1865	
Pitheciinae Mivart, 1865	*Pithecia, Cacajao, Chiropotes*
Callicebinae Pocock, 1925	*Callicebus*
Atelidae Gray, 1825	
Atelinae Gray, 1825	*Ateles, Lagothrix, Oreonax, Brachyteles*
Mycetinae Gray, 1825	*Alouatta*

Simpson (1945, p.65) cited Mycetina Gray, 1825 and Alouatinae Trouessart, 1897 as synonyms of Alouattinae Elliot, 1904; and *Mycetes* Illiger, 1811 as a synonym of *Alouatta* Lacépède, 1799. Article 32.5.3.3 states that a family-group name formed from an incorrect subsequent spelling of a generic name is an incorrect original spelling and must be corrected. Cited as it was from Lacépède, "*Alouata*" is a misspelling, not a new name. Even though he misspelt it, Trouessart (1897, p.32) therefore should be cited as the author of Alouattinae. Simpson (1945, p.64) cited Nyctipithecinae Mivart, 1865 as a synonym of Aotinae Elliot, 1913; and *Nyctipithecus* Spix, 1823 and *Aotus* "Humboldt, 1811" as synonyms of *Aotes* "Humboldt, 1811". He was therefore well aware of the earlier family-group names, and his reason for replacing them is self-evident.

Using the recommended citation of author and date, Alouattinae Trouessart, 1897 (1825), and Aotidae Poche, 1908 (1865), both unequivocally "in prevailing usage", are thus the correct family-group names for their type genera, and take priority over all other family-group names based on those type genera and their synonyms. Groves (2001) should not have used Mycetinae and Nyctipithecidae, because in so doing he contravened Article 40. His precedent should not be followed.

Simpson (1945, p.65) cited Callitricidae Gray, 1821, Callithricina Gray, 1825, Harpaladae Gray, 1821 and Hapalidae Wagner, 1840 as synonyms of Callitrichidae Thomas, 1903; and *Hapale* Illiger, 1811 as a synonym of *Callithrix* Erxleben, 1777. Thomas (1903) discovered that *Callithrix* was based on a marmoset and not (as previously thought) on a titi monkey. He instigated the generic name *Callicebus* for the titis, and replaced the then prevalent *Hapale* with *Callithrix* for the marmosets, and the family-group name Hapalidae with Callitrichidae. The family-group name Callitricidae Gray, 1821, although misspelt, is clearly the same family-group name as Callitrichina Gray, 1825. Commencing with its vernacular name and ending with his concept of the type species, Gray (1821, p.298) specified the type genus as "Saimiri, Callitrix. Geoff. Simia sciurea. Lin". Groves' (2001, p.127) inference that "Callitrichinae/-idae Thomas 1903, for the marmosets and tamarins is preoccupied by the same name of Gray, 1825, for the titis" is accurate only if it can be demonstrated that *Callithrix* Geoffroy Saint-Hilaire, 1812 is a junior homonym of *Callithrix* Erxleben, 1777, rather than the same genus. Geoffroy (1812, p.112) did not cite the authorship of *Callithrix* and it is internally unclear whether he intended it as a new genus. Geoffroy and Cuvier (1795, p.461), however, do cite Erxleben as the author, precluding *Callithrix* Geoffroy, 1812 from being construed as a new name. That Gray (1821) misidentified the type genus is immaterial as ultimately the identity of a family-group name rests on the identity of the holotype, lectotype or neotype of the type species of the type genus of that family-group name. If the holotype, etc. is a marmoset then the family-group name belongs to marmosets, regardless of whether Gray (1821) applied it to the squirrel monkeys.

The type genus of Callitricidae Gray, 1821 was misidentified, but Thomas (1903) rectified that mistake, and the family-group name Callitrichidae is now "in prevailing usage" for the marmosets. The use of Hapalidae in W. C. O. Hill's influential monograph series *Primates: Comparative Anatomy and Taxonomy*" (Groves, 2001, p.127) does not alone constitute "prevailing usage". Hill (1957, pp.vii, 281) himself subscribed to the view that the priority of the type genus determines that of the family-group name, and indeed later abandoned Hapalidae. Hill (1972, pp.56, 76, 79, 164) initially repeatedly cited the two family-group names in tandem, but then formally recognized "Callithricidae" (p.164). Article 40.2.1 can be invoked to confirm the priority of Callitrichidae Gray, 1821 over Harpalidae Gray, 1821 or alternatively a First Reviser, such as Elliot (1913, p.xvii) can be sought. Callitrichidae Gray, 1821 is thus, after all, unequivocally the correct family-group name for the marmosets. This spelling, not Gray's (1821) original, accords with Article 29.3.1 (see *International Code of Zoological Nomenclature*, Third edition, 1985, Appendix D VII, Table 2, Part B, Greek noun genitive stem 24).

The case of Saimirinae is a little different. This name is at least twelve years older than Groves (2001, p.156) stated, and can be attributed as Saimiridae to Miller (1912, p.379). It is unlikely to significantly predate Miller (1912), as the priority of *Saimiri* Voigt, 1831 over *Chrysothrix* Kaup, 1835 was acknowledged only fifteen years earlier (Palmer, 1897). It cannot readily be conserved under the provisions of Article 40.2.1 because, before 1961, few authors recognized it. Fewer still (perhaps none, other than Cabrera, himself) seemed aware of the earlier name, Chrysothrichinae Cabrera, 1900. We have found no author before 1961 who specified or implied that he or she was replacing Chrysotrichinae (the correct spelling) because its type genus had become a junior synonym. But then again, as such replacement was standard practice, most might have felt no compulsion to justify their action. If Miller's (1912, 1924) awareness of the earlier name could be demonstrated, such replacement could be taken as read because, although including *Saimiri* in the subfamily Nyctipithecinae, Miller and Rehn (1901, p.297) simultaneously commented: "This name [Nyctipithecinae] is untenable since *Nyctipithecus* has been replaced by *Aotus*". Should a senior synonym of *Saimiri* Voigt, 1831 be discovered, *Saimiri* can be maintained under the provisions of Article 23.9. The only foreseeable threat to the stability of Saimiridae Miller, 1912 therefore is the strict application of the Law of Priority. Strictly interpreted, Article 40.2.1 demands a formal statement before 1961 of replacement of a family-group name because its type genus has become a junior synonym, but the overriding aim of the Code is stability of scientific nomenclature. If deemed necessary, this case could be referred to the Commission for a ruling, but the axiom "maintain prevailing usage" should suffice. Cabrera (1900), Anthony and Coupin (1931) and Groves (2001) are probably the only authors to employ Chrysotrichinae, so the approbation of "prevailing usage" rests indisputably with Saimiridae. We strongly advocate rejecting Chrysotrichinae as the family-

group name for the squirrel monkeys in favour of Saimiridae Miller, 1912 (1900).

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The Muriqui Population of the Estação Biológica de Caratinga, Minas Gerais, Brazil: Updates

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Introduction

The northern muriqui, *Brachyteles arachnoides hypoxanthus*, or *B. hypoxanthus*, is considered to be one of the 25 most critically-endangered primate taxa in the world (CI/IPS/PSG, 2002). Fewer than 500 northern muriquis are thought to survive today, distributed in small populations in the states of Minas Gerais and Espírito Santo. Although several new populations have been discovered in recent years, the 890 ha forest at the Estação Biológica de Caratinga (EBC), in Minas Gerais is still the largest population known, and the only one that is considered to be viable (Rylands *et al.*, 1998; Strier, 2000). In 2001, the EBC was transformed from a privately-owned forest into a federally-protected reserve, known as the RPPN Feliciano Miguel Abdala (Castro, 2001). Yet, despite the forest's new protected status, continued monitoring of the muriqui population there remains an urgent conservation priority. Long-term behavioral, ecological, reproductive, and demographic studies of the largest muriqui group at the EBC, known as the Matão group, have been underway since 1982 (Strier, 1999a). During the past 20 years, this group has more than tripled in size, increasing from 22 to 70 members as a result of low mortality among all age-sex classes, high fertility among females, which give birth at 3-year intervals, and a female-biased infant sex ratio. Males in this population remain in their natal groups for life, but females