

The correct family-group name for a clade of the Falconidae Leach, 1819, the Caracaras and Spot-winged Falconet

Steven M.S. Gregory

COPYRIGHT: © 2024 Gregory. This is an article distributed under the terms of the Creative Commons Attribution Licence, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

ABSTRACT: The uses of ‘Caracarini’ and ‘Polyborini’ as the name of a tribe of the Falconinae Leach, 1819 in recent literature are not without problems regarding their status. The family-group names based upon genera in the clade encompassing the Caracaras and the Spot-winged Falconet identified by Griffiths *et al.* (2004) are examined and their availability under the ICZN Code (1999) assessed. It is advised that *Polyborus* Vieillot, 1816 and Polyborinae Bonaparte, 1838 should not be used pending a submission to the ICZN to suppress them for the purposes of the Principle of Priority, but not for the Principle of Homonymy. It is recommended that the correct name for the clade be selected using the Principle of Priority from those available, Article 23.1 (ICZN, 1999: 24), which would be Ibycterini Bonaparte, 1854.

KEYWORDS: *Caracara*, *Polyborus*, *Ibycter*, *Daptrius*, *Spizapteryx*, Caracarinae, Polyborinae, Ibycterini, Daptriinae, Spizapteryginae, Merrem, Wetmore, Vieillot, Bonaparte, Hellmayr, Conover, Kaup, Martorelli, International Code of Zoological Nomenclature.

ZOOBANK LSID for publication: 87E63F07-F6D7-4616-9BC5-31EA1E004E44

INTRODUCTION

Using a phylogenetic analysis of the nuclear gene RAG-1, the Caracaras, a closely related group of genera from the southern Nearctic and Neotropical regions, were shown to be a tribe of the nominotypical subfamily, Falconinae Leach, 1819, together with the Spot-winged Falconet in the monotypic *Spizapteryx* Kaup, 1852, by Griffiths *et al.* (2004). This was labelled ‘Caracarini’, without author or date, throughout their paper, but this name was identified by Bock (1994: 129, 133) as having been replaced under Article 40 (a) of the then current (third) edition of the ICZN Code (ICZN, 1985: 81), although this would appear to be a typographical error for ‘Article 40 (b)’. The name Bock had presumed to have ‘won general acceptance’ was ‘Polyborini’, but the generic name upon which it is based had by then been shown to be a *nomen dubium* by Banks and Dove (1992).

The family-group names based upon the genera included in the taxon ‘Caracarini’ identified by Griffiths *et al.* (2004) are here examined in detail, and their availability assessed:

CARACARA MERREM, 1826

The use of ‘Caracaridae’ by d’Orbigny (1835: 44) was based on the vernacular name ‘Caracara’ Cuvier, 1816 and therefore failed to meet the criteria of availability as required by Article 11.7.1.1 (ICZN, 1999: 12) i.e., ‘formed from the stem of an available name’, nor is it an indication for the purposes of Article 12.2.4 (ICZN, 1999: 16) i.e., ‘formation of a family-group name from an available generic name’. The family names used by d’Orbigny in the tables in *Voyage dans l’Amérique Méridionale* (d’Orbigny, 1835: 14) and *Observations on the Raptorial Birds of South America* (d’Orbigny, 1837: 359) were purely vernacular. d’Orbigny’s use again as

'Caracarideæ' in 1839 (d'Orbigny, 1839: 26) was based on "Caracara" Marcgrave, "Carácará" Azara, and "Caracara" Willughby, vernacular and pre-Linnean names. The use of *Caracara* Merrem, 1826, given as the type genus by Bock (1994: 133), did not occur regularly until Hellmayr and Conover (1949: 281) questioned the validity of *Polyborus* Vieillot, 1816, and used it preferentially.

Caracara Merrem, 1826 was made available by publication in Ersch & Gruber's *Allgemeine Encyclopädie der Wissenschaften und Künste* (Merrem, 1826: 159) with originally included nominal species, from which the type was selected by Hellmayr and Conover (1949: 281) — *Falco plancus* J.F. Miller, 1777 by subsequent designation, Article 69.1 (ICZN, 1999: 72), now *Caracara plancus* (J.F. Miller, 1777).

The first author to make the family-group name Caracarinae available was Wetmore (1956: 48), who used the name in conjunction with *Caracara* Merrem, 1826. There was no description. It was made available under Article 13.2.1 (ICZN, 1999: 18) by a valid use before 2000, specifically Wetmore *et al.* (1957: 116) and Griffiths (1999: 124).

POLYBORUS VIEILLOT, 1816

Polyborus Vieillot, 1816 was made available by publication in the *Analyse d'une nouvelle ornithologie élémentaire* (Vieillot, 1816a: 22) with a description, but the included species "Caracara, Buff[on]." was a vernacular name that cannot be an indication, as excluded by Article 12.3 (ICZN, 1999: 17). The species added by Vieillot (1816b: 256–261) are deemed the only originally included species under Article 67.2.2 (ICZN, 1999: 67), from which the type was selected by Vigors (1824: 320) — "*F. brasiliensis* [sic] of Linnaeus [= J.F. Gmelin], the *Caracara* of M. Buffon" by subsequent designation, Article 69.1 (ICZN, 1999: 72). Banks and Dove (1992: 424) concluded that *Falco brasiliensis* J.F. Gmelin, 1788 'cannot definitely be identified' and that it 'can have no standing as a primary name or synonym in ornithological nomenclature'. They went on to say 'Vieillot's genus *Polyborus*, based on an unidentifiable species, can have no standing and we accept *Caracara* Merrem'. Smith (2017) attempted to identify Marcgrave's "Caracara" upon which Buffon's "Caracara" was based, and concluded that it was probably *Polyborus chimachima* Vieillot, 1816 (Vieillot, 1816b: 259) which would make *Polyborus* Vieillot, 1816 an unused senior synonym (and *nomen oblitum*) of *Milvago* von Spix, 1824. Smith recommended that, despite being available, *Polyborus* Vieillot, 1816 be suppressed, and that there was 'no valid argument for upsetting current stable usage by imposing priority. *Falco brasiliensis* Gmelin, 1788 should thus also be suppressed as a *nomen oblitum*'. Neither Banks and Dove (1992) nor Smith (2017) discussed the implications of their findings on any family-group names involved.

A family-group name based on *Polyborus* Vieillot, 1816 was introduced by Bonaparte in his *A geographical and comparative list of the birds of Europe and North America* — Polyborinae Bonaparte, 1838 (Bonaparte, 1838: 2) — and made available under Article 12.2.4 (ICZN, 1999: 16). *Polyborus* Vieillot, 1816 has not been used as a valid generic name in any major work since Banks and Dove (1992) and while some authors have used 'Polyborinae', any use should be depreciated until such time as an application can be presented to the ICZN to suppress *Polyborus* Vieillot, 1816 and Polyborinae Bonaparte, 1838 for the purposes of the Principle of Priority, but not for the purposes of the Principle of Homonymy.

IBYCTER VIEILLOT, 1816

Ibycter Vieillot, 1816 was made available by publication in the *Analyse d'une nouvelle ornithologie élémentaire* (Vieillot, 1816a: 22) with a description, but the included species "Petit

aigle de l’Amerique, Buff[on].” was a vernacular name and so cannot be an indication as they are excluded by Article 12.3 (ICZN, 1999: 17). The single species added by Vieillot (1819: 9) is deemed the only originally included species under Article 67.2.2 (ICZN, 1999: 67). *Ibycter leucogaster* Vieillot, 1819 [= *Falco americanus* Boddaert, 1783] and is the type species by subsequent monotypy, Article 69.3 (ICZN, 1999: 73), now *Ibycter americanus* (Boddaert, 1783).

A family-group name based on *Ibycter* Vieillot, 1816 was introduced by Bonaparte in his *Conspectus Systematis Ornithologiae – Ibicterea* Bonaparte, 1854 (Bonaparte, 1854: 111) and made available under Article 12.2.4 (ICZN, 1999: 16) at the rank of tribe. The suffix can be corrected under Article 32.5.3.1 (ICZN, 1999: 41) and the stem corrected under Article 32.5.3.3 (ICZN, 1999: 42) to give Ibycterini Bonaparte, 1854.

DAPTRIVUS VIEILLOT, 1816

Daptrivus Vieillot, 1816 was made available by publication in the *Analyse d’une nouvelle ornithologie élémentaire* (Vieillot, 1816a: 22) with a description and a type species by monotypy – *Daptrivus ater* Vieillot, 1816 (Vieillot, 1816a: 68) – under Article 68.3 (ICZN, 1999: 71).

A family-group name based on *Daptrivus* Vieillot, 1816 was introduced by Hellmayr and Conover (1949: 259) – Daptriinae Hellmayr and Conover, 1949. There was no description. It was made available under Article 13.2.1 (ICZN, 1999: 18) by valid use before 2000, notably Stresemann and Stresemann (1960: 398) and Brown in Thomson (ed.), 1964 *A new dictionary of birds* (Brown, 1964: 267).

Gregory and Sangster, in their table I (Gregory & Sangster, 2023: N57), presumed that Daptriinae Hellmayr and Conover, 1949 could take precedence, under Article 40.2 (ICZN, 1999: 46), from Ibycterini Bonaparte, 1854, as being replaced before 1961 due to synonymy of the type genus. It has, however, been pointed out that Hellmayr and Conover (1949: 259) were not the first authors to determine the precedence of *Daptrivus* Vieillot, 1816 and *Ibycter* Vieillot, 1816 by citing both and selecting from them, so satisfying Article 24.2.1 (ICZN, 1999: 30). That honour went to G.R. Gray (1848: 28) who synonymized *Daptrivus* Vieillot, 1816 with *Ibycter* Vieillot, 1816 and used the latter as the valid name, the reverse of the treatment presented by Hellmayr and Conover, when the two genera were combined. That action by Gray, although largely overlooked, cannot be set aside, as the precedence is fixed by the First Reviser as determined by Article 24.2 (ICZN, 1999: 30).

SPIZIAPTERYX KAUP, 1852

Spizapteryx Kaup, 1852 was made available by publication, in the *Proceedings of the Zoological Society of London* (Kaup, 1852: 43) with a description and type species by monotypy, of *Harpagus circumcinctus* Kaup, 1852 (Kaup, 1852: 43), now *Spizapteryx circumcincta* (Kaup, 1852), under Article 68.3 (ICZN, 1999: 71).

A family-group name based on *Spizapteryx* Kaup, 1852 was introduced by Martorelli (1900: 175), Spizapteryxinae Martorelli, 1900, and is available under Article 12.2.4 (ICZN, 1999: 16). The stem can be corrected under Article 29.3.1 (ICZN, 1999: 32) to give Spizapteryginae Martorelli, 1900.

CONCLUSION

The status of *Polyborus* Vieillot, 1816 and the associated family-group name Polyborinae Bonaparte, 1838, will need to be resolved with an application to the ICZN to suppress both for the purposes of the Principle of Priority, but not for the purposes of the Principle of

Homonymy. Pending this, it is advisable that neither be used. Of the remaining family-group names, Caracarinae Wetmore, 1956 and Daptriinae Hellmayr and Conover, 1949 have seen only limited and relatively equal use. The latter cannot derive precedence from Ibycterini Bonaparte, 1854 because of the action by Gray (1848: 28) in giving seniority to *Ibycter* Vieillot, 1816 as First Reviser. It is therefore recommended that the family-group name to be used as valid is decided by the Principle of Priority under Article 23.1 (ICZN, 1999: 24); this would be Ibycterini Bonaparte, 1854.

The following are the available family-group names for the genera included in the clade identified by Griffiths *et al.* (2004). The ranks shown are those used when first proposed, but the names are available for use at any rank within the family-group according to the Principle of Coordination, Article 36.1 (ICZN, 1999: 45), subject to the limitations imposed by their type genera, Article 35.3 (ICZN, 1999: 44):

Ibycterini

Ibictereae Bonaparte, 1854

Ann. Sci. Nat. Zool., Paris, ser. 4, 1, no. 2., p. 111. Suffix corrected, Article 32.5.3.1 (ICZN, 1999: 41), Stem corrected, Article 32.5.3.3 (ICZN, 1999: 42).

Type genus: *Ibycter* Vieillot, 1816.

Contents: *Spizapteryx* Kaup, 1852, *Caracara* Merrem, 1826, *Ibycter*, *Phalcoboenus* d'Orbigny, 1835, *Milvago* von Spix, 1824, *Daptrius* Vieillot, 1816.

ZooBank LSID for Ibycterini: 4B27B9E3-F022-4FD2-8E36-D6FC6CA70A11

Comment: Available by indication; Article 12.2.4 (ICZN, 1999: 16). *Ibycter* Vieillot, 1816 has precedence over *Daptrius* Vieillot, 1816. First Reviser G.R. Gray (1848: 28); Article 24.2.1 (ICZN, 1999: 30).

Spizapteryginae

Spizapteryxinae Martorelli, 1900

Atti della Soc. Ligust. Sci. Nat. Geogr., 10 (1899), p. 175. Stem corrected, Article 29.3.1 (ICZN, 1999: 32).

Type genus: *Spizapteryx* Kaup, 1852.

ZooBank LSID for Spizapteryginae: 624EC212-D5A0-45E2-B977-5F25C56E76C3

Comment: Available by indication; Article 12.2.4 (ICZN, 1999: 16). Available for a taxon that does not contain *Ibycter* Vieillot, 1816.

Daptriinae

Daptriinae Hellmayr & Conover, 1949

Field Mus. Nat. Hist. Publ., Zool. Ser., 13, pt. 1, no. 4, pp. v, 259.

Type genus: *Daptrius* Vieillot, 1816.

ZooBank LSID for Daptriinae: E3632DE2-6D48-4AA9-A324-445333BF97E8

Comment: Available by use as valid before 2000; Article 13.2.1 (ICZN, 1999: 18), Stresemann & Stresemann (1960: 398), and Brown *in* Thomson (ed.) (1964: 267). Available for a taxon that does not contain *Ibycter* Vieillot, 1816 or *Spizapteryx* Kaup, 1852.

Caracarinae

Caracarinae Wetmore, 1956

Smithsonian Miscellaneous Collections, 131, no. 5, p. 48.

Type genus: *Caracara* Merrem, 1826.

ZooBank LSID for Caracarinae: FAC95B25-0E6A-4ECD-BAB0-604B390AEB63

Comment: Available by use as valid before 2000; Article 13.2.1 (ICZN, 1999: 18), Wetmore *et al.* (1957: 116), and Griffiths (1999: 124). Available for a taxon that does not contain *Ibycter* Vieillot, 1816, *Spizapteryx* Kaup, 1852 or *Daptrius* Vieillot, 1816.

ACKNOWLEDGEMENT

Patrice Bouchard is gratefully thanked for his continued constructive advice, especially the finer points of interpretation for the various Articles of the ICZN Code (1999) used here.

REFERENCES

- Banks R.C., & Dove C.J., 1992. The generic name for Crested Caracaras (Aves: Falconidae). – *Proceedings of the Biological Society of Washington*, 105 (3): 420–425.
- Bock W.J., 1994. History and nomenclature of avian family-group names. – *Bulletin of the American Museum of Natural History*, 222: 1–281.
- Boddaert P., 1783. *Table des planches enluminées d'histoire naturelle de M. D'Aubenton: avec les dénominations de M.M. de Buffon, Brisson, Edwards, Linnæus et Latham, précédé d'une notice des principaux ouvrages zoologiques enluminés.* i–xv, 1–58. – Utrecht.
- Bonaparte C.L., 1838. *A geographical and comparative list of the birds of Europe and North America.* i–xvii, 1–67. – John van Voorst, London.
- Bonaparte C.L., 1854. *Conspectus Systematis Ornithologiæ.* – *Annales des Sciences Naturelles (Paris)*, ser. 4, Zoologie 1: 105–152.
- Brown L.H., 1964. FALCON (pp. 267–269). In: Thomson A.L. (ed.). *A new dictionary of birds.* – Nelson, London & New York.
- Cuvier G., 1816 [1817]. *Le règne animal distribué d'après son organisation, pour servir de base à l'histoire naturelle des animaux et d'introduction à l'anatomie comparée.* Vol. 1, i–xxxvii, 1–540. – Deterville, Paris.
- Gmelin J.F., 1788. *Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis.* Vol. 1, pt. 1, 1–500. – G.E. Beer, Lipsiae [Leipzig].
- Gray G.R., 1848. *List of the specimens of birds in the collection of the British Museum.* Part I. Accipitres. Second edition. i–viii, 1–120. – Trustees of the British Museum, London.
- Gregory S.M.S. & Sangster G., 2023. The correct family-group names of two parrot clades (Psittaciformes: Amazonini and Proboscigerini). – *Avian Systematics*, 1 (XII): N55–N66.
- Griffiths C.S., 1999. Phylogeny of the Falconidae inferred from molecular and morphological data. – *Auk*, 116 (1): 116–130.
- Griffiths C.S., Barrowclough G.F., Groth J., & Mertz L., 2004. Phylogeny of the Falconidae (Aves): a comparison of the efficacy of morphological, mitochondrial, and nuclear data. – *Molecular Phylogenetics and Evolution*, 32: 101–109.
- d'Orbigny A., 1835. *Voyage dans l'Amérique Méridionale.* Tome quatrième, 3^e Partie: Oiseaux. Livraison 3, 1–48. – Bertrand, Paris; Levrault, Strasbourg.
- d'Orbigny A., 1837. Observations on the Raptores of South America. – *Magazine of Zoology and Botany*, 1 (4): 357–359.
- d'Orbigny A., 1839. *Historia Fisica Política y Natural de la Isla de Cuba por D. Ramon de la Sagra.* Aves. 1–220. – Arthus Bertrand, Paris.
- Hellmayr C.E. & Conover B., 1949. Catalogue of birds of the Americas and the adjacent Islands in the Field Museum of Natural History including all species and subspecies known to occur in North America, Mexico, Central America, South America, the West Indies, and islands of the Caribbean Sea, the Galapagos Archipelago, and other islands which may be included on account of their faunal affinities. Part 1, No. 4. Cathartidae, Accipitridae, Pandionidae, Falconidae. – *Field Museum of Natural History. Zoology Series*, 13 (1) 4: i–vi, 1–358.

I.C.Z.N. [International Commission on Zoological Nomenclature], 1985. *International Code of Zoological Nomenclature third edition adopted by the XX general assembly of the International Union of Biological Sciences*. i–xx, 1–338. – International Trust for Zoological Nomenclature, London.

I.C.Z.N. [International Commission on Zoological Nomenclature], 1999. *International Code of Zoological Nomenclature*. 4th edition. i–xxix, 1–306. – International Trust for Zoological Nomenclature, London.

Kaup J.J., 1852. Descriptions of some new birds in the museum of the Earl of Derby. – *Proceedings of the Zoological Society of London*. 1851. 19 (221/222): 39–53.

[Leach, W.E.], 1819. Eleventh Room (pp. 63–68). In: *Synopsis of the Contents of the British Museum*. Fifteenth edition. – British Museum, London.

Martorelli G., 1900 [1899]. Nota ornitologica sullo “*Spiziapteryx circumcinctus*” Kaup, (Sub. Gen. “*Spiziapteryx*” Kaup, 1851). – *Atti della Società Ligustica di Scienze Naturali e Geografiche*, 10: 169–175.

Merrem B., 1826. CARACARA (pp. 159–160). In: Ersch J.S. & Gruber J.G. (eds.). *Allgemeine Encyclopädie der Wissenschaften und Künste*. Sect. 1, Theil 15. – Johann Friedrich Gleditsch, Leipzig.

Miller J.F., 1777. *Various subjects of natural history wherein are delineated birds, animals and many curious plants &c.* Part 3, pls. XIII–XVIII. – London.

Smith P., 2017. On the correct application of the generic name *Polyborus* Vieillot, 1816 (Aves: Falconidae). – *Proceedings of the Biological Society of Washington*, 130 (1): 108–112.

Spix J.B. von, 1824. *Avium species novae, quas in itinere per brasiliam annis MDCCCXVII–MDCCCXX*. [1], 1–90. – Franc. Seraph. Hübschmanni, Monachii [Munich].

Stresemann V. & Stresemann E., 1960. Die Handschwingenmauser der Tagraubvögel. – *Journal für Ornithologie*, 101 (4): 373–403.

Vieillot L.P., 1816a. *Analyse d’une nouvelle ornithologie élémentaire*. i–iv, 1–70. – Deterville, Paris.

Vieillot L.P., 1816b. CARACARA (pp. 256–261). In: *Nouveau Dictionnaire d’Histoire Naturelle, appliquée au arts, à l’Agriculture, à l’Économie rurale et domestique, à la Médecine, etc.* Nouvelle Édition. Tome 5. – Deterville, Paris.

Vieillot L.P., 1819. RANCANCA (pp. 8–11). In: *Nouveau Dictionnaire d’Histoire Naturelle, appliquée au arts, à l’Agriculture, à l’Économie rurale et domestique, à la Médecine, etc.* Nouvelle Édition. Tome 29. – Deterville, Paris.

Vigors N.A., 1824. Sketches in ornithology; or, observations on the leading affinities of some of the more extensive groups of birds. – *The Zoological Journal*, 1 (3): 308–346.

Wetmore A., 1956. A check-list of the fossil and prehistoric birds of North America and the West Indies. – *Smithsonian Miscellaneous Collections*, 131 (5): 1–105.

Wetmore A., Friedmann H., Amadon D., Lincoln F.C., Lowery G.H. Jr., Miller A.H., Peters J.L., Pitelka F.A., Rossem A.J. van, Van Tyne J. & Zimmer J.T., 1957. *Check-list of North American birds*. Fifth edition. i–xiii, 1–691. – American Ornithologists’ Union, Baltimore.

Address

Steven M.S. Gregory (✉), 35 Monarch Road, Northampton NN2 6EH, UK.
e-mail: sgregory.avium@ntlworld.com.