

NOMENCLATURAL NOTE

***Strigops habroptilus* Gray, 1845 is the valid scientific name of the kākāpō (Aves, STRIGOPIDAE).**

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Abstract. The kākāpō was named *Strigops habroptilus* by G.R. Gray in 1845. However, in recent decades authorities have begun to recommend *habroptila* as the correct species name through mistaken interpretation of gender agreement rules. Here, we explain that *habroptilus* remains the valid species name through correct application of the articles in the International Code of Zoological Nomenclature.

Keywords. Nomenclature; taxonomy; Aves; Psittaciformes; STRIGOPIDAE; *Strigops habroptilus*; kākāpō; New Zealand.

The kākāpō (Aves, Strigopidae) is a large, flightless, critically endangered parrot native to New Zealand. The common name is of Māori origin, derived from kākā “parrot” and pō “night”, reflecting its nocturnal habits, and the species is regarded as an iconic and treasured example of New Zealand’s threatened avifauna. Formerly common throughout North Island / Te Ika-a-Māui, South Island / Te Waipounamu, and Stewart Island / Rakiura, the range of the kākāpō shrank after 1300 CE following permanent Polynesian settlement and the introduction of Pacific rats (*Rattus exulans*). This decline accelerated after European introductions of mammals in the 19th century, and by 1980 only two small and rapidly declining populations remained in Fiordland National Park and Stewart Island / Rakiura. Between 1974 and 1997 all remaining birds were transferred to predator-free islands by the New Zealand Department of Conservation (DOC) (Clout & Merton, 1998). A formal Kākāpō Recovery Programme was established by DOC in 1995, and under its stewardship the managed population has since grown to over 250 mature individuals in 2023.

The scientific name of the kākāpō was established as *Strigops habroptilus* by G.R. Gray in 1845. This name is of Ancient Greek origin: *Strigops* is derived from στρίξ (strīx: “owl”) and ὄψ (óps: “eye”, “face”), and *habroptilus* from ἁβρός (habrós: “graceful”,

“delicate”) and πῖλον (ptilon: “feather”, “down”) (Liddell & Scott, 1996). However, as of 2023 the species name is predominantly given as *habroptila* in published checklists, reference books, and online databases and species guides. Notable examples include the HBW and BirdLife Taxonomic Checklist v7 (2022); eBird/Clements Checklist v2022 (2022); Avibase taxonomic concepts v. 08 (2021); International Ornithological Congress World Bird Names, version 12.2 (Gill et al., 2022); and the Integrated Taxonomic Information System website (n.d.).

The dominance of *habroptila* in reference sources reflects a gradual shift over recent decades. For example, the Howard and Moore checklist moved from *habroptilus* to *habroptila* between second edition (1991) and third edition (Dickinson, 2003). Clements fifth edition (2000) used *habroptilus*, but adopted *habroptila* for its sixth edition in 2007. Most recently, the Ornithological Society of New Zealand (OSNZ) switched from *habroptilus* to *habroptila* between the fourth and fifth edition of its checklist (OSNZ, 2022).

Despite the increasing prevalence of *habroptila* in reference sources, *habroptilus* remains more common in the primary scientific literature. Google Scholar provides an approximate quantification: on 26 January 2023, searching a date range of 2012–present returns 281 results for “*Strigops habroptila*” and 1120 results for “*Strigops habroptilus*”. A trend among recent articles is for those focusing on kākāpō to use *habroptilus* (e.g., Gartrell et al., 2021; Holdaway, 2021; Savage et al., 2021; Dussex et al., 2022; Mudge et al., 2022), while those with a broader scope prefer *habroptila* (e.g., Early et al., 2020; Cornejo et al., 2021).

The present disagreement over the species arose from confusion over the International Commission on Zoological Nomenclature (ICZN) gender agreement rules. In particular, *Strigops* was previously determined to be feminine by ICZN (1955: 262), *habroptilus* has a masculine latinised ending, and Article 34.2 of the current International Code of Zoological Nomenclature (hereafter ‘the Code’) (ICZN, 1999) requires gender agreement between genus and species names in specific cases: “The ending of a Latin or latinised adjectival or participial species-group name must agree in gender with the generic name with which it is at any time combined [Art. 31.2]; if the gender ending is incorrect it must be changed accordingly”. However, under correct application of the Code, *habroptilus* remains the valid name for two separate reasons.

Firstly, *Strigops* is masculine under the Code per Art. 30.1.4.3: “A compound genus-group name ending in -ops is to be treated as masculine, regardless of its derivation or of its treatment by its author”. This supersedes the 1955 determination of gender.

Secondly, while *habroptilus* (“graceful feather”) is latinised, it is a compound noun not an adjectival or participial name. Hence, Art. 34.2 does not apply, and no gender agreement is required. Moreover, Art. 31.2.1 directs that *habroptilus* must not be changed to agree in gender with *Strigops*: “A species-group name that is a simple or compound noun (or noun phrase) in apposition need not agree in gender with the generic name with which it is combined (the original spelling is to be retained, with gender ending unchanged; see Article 34.2.1).” This is reinforced by Art. 31.22, which outlines that original names are to be retained in cases of ambiguity, “[w]here the author of a species-group name did not indicate whether he or she regarded it as a noun or as an adjective, and where it may be regarded as either and the evidence of usage is not decisive, it is to be treated as a noun in apposition to the name of its genus (the original spelling is to be retained, with gender ending unchanged)”. In short, the Code is clear that the compound

noun species name *habroptilus* should be retained regardless of the gender of *Strigops*.

To summarise, the original spelling of the scientific name of the kākāpō, *Strigops habroptilus*, remains correct. Changing the spelling to *habroptila* is unjustified under the *Code*, and we urge all authorities that have switched to using *habroptila* to revert to the original, valid spelling for the kākāpō.

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