

Three additional birds from the “*Voyage de La Coquille*” (1822-1825)

Michael Lee & Murray D. Bruce

COPYRIGHT: © 2019 Lee & Bruce. 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: To the review of the ornithology of the voyage of *La Coquille* by Dickinson *et al.* (2015) we add three birds named as new species, overlooked for different reasons: 1. *Diomedea epomophora*, the current name of the Southern Royal Albatross; 2. *Todiramphus sacer*, a synonym of the Chattering Kingfisher *Todiramphus tutus*; 3. *Dromiceius novaezelandiae*, the second name applied to a kiwi and evidently an available senior synonym of the North Island Brown Kiwi *Apteryx mantelli*. The *La Coquille* expedition introduced the indigenous name ‘kiwi’ to ornithology; it is now the common name applied to birds of the family Apterygidae.

KEYWORDS: *La Coquille*, R.P. Lesson, *Diomedea epomophora*, *Todiramphus sacer*, *Todiramphus tutus*, *Apteryx*, kiwi, New Zealand, Society Islands.

INTRODUCTION

The objective of *A review of the authorship and dates of publication of birds newly described from the voyage of La Coquille (1822-25)* by Dickinson *et al.* (2015) was to provide the first complete representation of authorship and dates of ornithological publications between 1825 and 1831 arising from the scientific expedition of the French naval corvette *La Coquille* under the command of Louis Isidore Duperrey (1786-1865) which circumnavigated the globe during 1822-1825. The review enabled the correction of various long-standing errors in publication chronologies and other details, affecting 83 bird taxa. All but four of these birds were named and described either by René Primevère Lesson (1794-1849), or by his naval surgeon colleague Prosper Garnot (1794-1838), or by the two as co-authors.¹

We offer here a supplement identifying three names not included in the 2015 review, all three by Lesson; two from the New Zealand region (albatross and kiwi), and one from the Society Islands of Eastern Polynesia (kingfisher). Of these three additions only the kingfisher name was based on collected specimens. The albatross description was evidently based on observations. The kiwi details were based on a partial specimen shown to Lesson with no other diagnostic parts such as a head or feet being attached. Lesson later linked this with the original description and plates of *Apteryx australis* published by Shaw (1813).

Within the extensive collections of botanical, mineralogical and zoological specimens of the *La Coquille* expedition, at least 254 bird species were identified, some 46 of which were apparently new to science (Cuvier, 1825). The scientific effort of the voyage of *La Coquille* was on a truly heroic scale. Understanding its ornithological results, as Dickinson *et al.* (2015) made clear, provides certain challenges to the modern-day researcher. Given the multiplicity

¹ Dickinson *et al.* (2015) attribute the authorship of four taxa to Anselme-Gaëtan Desmarest (1784-1838).

of names and publications covered by the 2015 review, some oversights were probably inevitable. However, the omission of the kiwi name is perhaps the most interesting.

We follow the format of Dickinson *et al.* (2015), including the abbreviated reference to the numbering system of the *Howard & Moore checklist* (Dickinson & Remsen, 2013), “H&M 4” followed by the volume number and page, at the beginning of each entry; which if followed by “[Syn.]” indicates that the name is in synonymy. We also follow them in using “b.d.” for best date and in the dating of the publication of the livraisons of the voyage *Zoologie* volumes from Cretella (2010).

A. NAME CURRENTLY IN USE

Diomedea epomophora Lesson, 1825

H&M 4: 1: 173

Diomedæa epomophora Lesson, 1825, *Annales des Science Naturelles*, 6: 95, (Lesson, 1825) – b.d. 31 December, 1825.

Synonymy:

“*diomedæa epomophora* ?” Lesson, 1828, *Manuel d’Ornithologie*, 2: 351 (Lesson, 1828b) – b.d. 14 June, 1828.

“*Diomedæa epomophora* NoB.”² Lesson, 1836, *Histoire Naturelle Général et Particulière Des Mammifères et Des Oiseaux Découverts Depuis la Mort de Buffon*, 10: 149. (Lesson, 1836) – b.d. [December] 1836.

“*Diomedæa epomophora* NoB.” Lesson, 1838, *Compléments de Buffon*, 2: 95. (Lesson, 1838) – b.d. [December] 1838.

The albatross, ‘*L’albatros à epaulettes*,’ now the Southern Royal Albatross (Gill *et al.* 2010), was named and described by Lesson (1825)³ in what was his earliest publication on birds, soon after *La Coquille* returned to France, in a paper otherwise linked to names of various seabirds already in use, “observed during the course of our voyage”.

This albatross, while a breeding endemic of the New Zealand region, ranges widely throughout the Southern Ocean (Heather & Robertson, 2015). As there is no record of any specimen taken, (there is no mention of any albatross in Lesson’s list of specimens lodged with the Muséum national Histoire naturelle (MNHN MS 354), Lesson’s name is assumed to be based on descriptive notes of shipboard observations.⁴ The lack of a specimen was probably due, as he explained, to the practical difficulty of shooting and recovering these birds at sea (Lesson, 1825: 89). No specific locality was given, probably because the species is likely to have been observed from the time *La Coquille* entered the Southern Ocean in the early stages of the voyage and thereafter periodically throughout the circumnavigation. (Observations of ‘albatros’ were noted by Lesson on 76 days out of the 872 days at sea in the abstract of the deck log (Duperrey, 1829)). Lesson in his 1825 paper noted: “We have seen

² The term ‘NoB’ or ‘Nobis’, meaning “of us” signifying the author, in this case Lesson.

³ In the same 1825 volume of the *Annales*, Georges Cuvier (1769-1832) on behalf of the Académie des Sciences published a preliminary announcement of the return of the voyage, detailing the size of its natural history collections and their excellent state of preservation, which, he reported, were under examination by he and his colleagues at the ‘Paris Muséum’ (Muséum national d’Histoire naturelle or MNHN).

⁴ Though undocumented, there is an outside possibility that a specimen was among the collection from the first part of the voyage which was dispatched from Sydney with Garnot but lost in a shipwreck off South Africa in July 1824 (Lee, 2018).

albatrosses in the 26th degree latitude south but the parallels which they like preferentially are between 35 to 40°." ⁵

B. NAMES IN SYNONYMY

Todiramphus sacer Lesson, 1827

H&M 4; 1: 345 [Syn]

Todiramphus sacer Lesson, 1827, *Mémoires de la Société d'Histoire naturelle de Paris*, Ser. 2, 3: 421-422, pl.11, (Lesson, 1827a) – b.d. 31 October, 1827.

Synonymy:

Todiramphus sacer Lesson, 1827, *Bulletin des Sciences naturelles et de géologie* [a.k.a. *Bulletin Férussac*], 12 (2): 269 (Lesson, 1827b) – b.d. 31 October, 1827. ⁶

Todiramphus sacer Lesson, 1828, *Dictionnaire des Sciences naturelles*, 54: 478 (Lesson, 1828a) – b.d. 25 April, 1828.

Todiramphus sacer Less., 1828, *Manuel d'Ornithologie*, 2: 101 (Lesson, 1828b) – b.d. 14 June, 1828.

Todiramphus sacer Less., 1828, *Voyage*, livr. 8: 318 (Lesson, 1828c) – b.d. 29 November, 1828.

Todiramphus sacer Lesson, 1830, *Voyage*, livr. 15: 687 (Lesson, 1830a) – b.d. 3 April, 1830.

Todiramphus sacer 'Lesson', Drapiez, 1830, *Dictionnaire classique d'Histoire naturelle*, 16: 280 (Drapiez, 1830) – b.d. 31 October, 1830.

Lesson (1827a) erected the genus *Todiramphus* for the two Society Islands kingfisher species, *T. divinus* and *T. sacer* as the nomenclature for Oceanic kingfishers had up until that time been confused (Lee & Holyoak, 2017). Lesson's *Todiramphus sacer* [= Chattering Kingfisher *T. tutus* (Gmelin, 1788)] (for which he provided the Tahitian name, 'otatare), was based on two specimens he collected, which are extant and designated syntypes of the species (Voisin & Voisin, 2008: 5). Lesson's *Todiramphus sacer* has been interpreted as a use of Gmelin's *Alcedo sacra* in a masculine genus – as Lesson noted Gmelin's name in his original paper – but as he associated it with specimens of *T. tutus*, it can be recognised as a new name from 1827, as recently interpreted by Voisin & Voisin (2008: 5). ⁷

⁵ We can find no evidence to support the suggestion by Oliver (1955: 188) that a specimen was "taken at sea off the north coast of New Zealand by Duperrey's expedition in 1822" [sic]. *La Coquille* was in this region in July 1823 and in March - April 1824 (Duperrey, 1829). Gill *et al.* (2010: 67) stated "no locality" but added: "probably Australian waters" with reference to Hellmayr & Conover (1948: 42), but this source provides no evidence of a specimen taken either.

⁶ Dickinson *et al.* (2015: 122) acted as First Revisers in selecting the *Mémoires* (here Lesson, 1827a) over the *Bulletin Férussac* (here Lesson, 1827b) for date precedence, and we accept that. In the latter, volume XII (for September to December), issue 2 (the October issue – although the pages of each issue lack month dates) would normally close at the month end. Dickinson *et al.* (2011: 188-189) suggested publication would occur next month but had no proof and thus recommended dating the volume to the implicit month – in this case October although very possibly published early November (clarification by E.C. Dickinson, pers. comm., 07 July 2018).

⁷ As a consequence, it also is a secondary homonym of *Todiramphus chloris sacer* (Gmelin, 1788), of Tonga (del Hoyo & Collar 2014: 604)

Dromiceius novaezelandiae* Lesson, 1828*H&M 4: 1: 6 [Syn]**

“dromiceius Novæ-Zelandiæ” Lesson, 1828, *Manuel d’Ornithologie*, 2: 210 (Lesson, 1828b) – b.d. 14 June, 1828.

Synonymy:

Dromiceius Novæ-Zelandiæ Lesson, 1830, *Traité d’Ornithologie*, livr. 1: 12 (Lesson, 1830b) – b.d. 13 February, 1830.

Shaw (1813) described the first kiwi specimen collected in New Zealand and named it *Apteryx australis*. Shaw’s specimen, given to him by a Mr W. Evans, on behalf of Captain Barclay (or Barclay) of the *Providence*, was evidently from Dusky Sound in Fiordland at the remote southwestern corner of the South Island of New Zealand, the accepted type locality (Andrews, 1986:70; Gill *et al.*, 2010: 21).

Lesson’s description and name were based on a feathered skin which Lesson described as “grisâtre” (“greyish”), the feathers intended for use as part of a cloak or cape and shown to him by Māori during the stay of *La Coquille* at the Bay of Islands at the north of the North Island, from 3-17 April, 1824.⁸ During this time the ship was moored at the entrance to Manawaora Bay, near the Russell peninsula, today the site of a remnant kiwi population cluster (Craig *et al.*, 2010). Lesson was known to have gone ashore on at least two occasions, the first was for a day-long survey of the Orokawa peninsula and hinterland on 6 April and the second was a visit to a fortified village or pā called Kahuwera, on the nearby Paroa peninsula on 10 April (Lee 2018). It was here that Lesson was most likely shown the skin in question.

Lesson was told that the bird from which the skin was taken was flightless and common in the forest where it was hunted with dogs and was called “kivi kivi” (kiwi kiwi).⁹ Lesson, unaware at the time of Shaw’s discovery, considered this bird to be a new and smaller species of the emu that he had seen in New South Wales a few weeks previously and which he later listed in his *Manuel d’Ornithologie* (Lesson, 1828b: 210) as “L’EMOU PAREMBANG *dromiceius Novæ-Hollandiæ*. *Casuarius Novæ-Hollandiæ*, Lath”, followed immediately by:

“EMOU KIVIKIVI, *dromiceius Novæ-Zelandiæ*. Less.”

*“Cet é mou est de moitié plus petit que le précédent; son plumage est grisâtre, suivant ce que me dirent les naturels, car je n’en ai vu qu’une peau à moitié détruite et informe. Les habitants en estiment la chair et le chassent avec des chiens. Ils le nomment kivi-kivi. Il est très commun dans les forêts de la Nouvelle – Zélande.”*¹⁰

It was only after the publication of the *Manuel* in 1828 that Lesson became aware of the *Apteryx* first announced by Shaw (1813). After this Lesson always connected his discovery

⁸ Kiwi feathers woven onto fine flax cloaks called *kākahu* were prestige garments worn by the Māori chiefly or *rangatira* class (Harwood 2011; Hartnup *et al.* 2011).

⁹ We note the interesting linguistic similarity of the name to that of the *kivi*, the Bristle-thighed Curlew (*Numenius tahitiensis*) of Eastern Polynesia, and the *i’iwi*, the Scarlet Honeycreeper (*Vestiaria coccinea*) of Hawai’i. All three birds distinguished by long tapering bills.

¹⁰ “This emu is half the size of the preceding species [*dromiceius Novae-Hollandiæ*; now *Dromaius novaezelandiæ*]; its plumage is greyish, following what the natives said to me, for I have seen only a half-destroyed and shapeless skin. The inhabitants esteem the flesh and chase it with dogs. They call it kivi kivi. It is very common in the forests of New Zealand.” [All translations from the French were supplied by the authors and have been checked by referees.]

with Shaw's description, which he cited in his next publication, a livraison from part 2 of the *Zoologie* volume 1 of the voyage (Lesson, 1829: 418):

*"Les naturels nous parlèrent fort souvent d'un oiseau sans ailes dont ils apportèrent des débris, qui nous parurent être ceux d'un émiou ; M. Kendall nous confirma dans cette pensée, en nous affirmant l'existence de casoars analogues à ceux de l'Australie dans les bois de la Nouvelle Zélande. ...Nous ne doutons point aujourd'hui que ce ne soit l'apterix [sic] australis de Shaw figuré pl. MLVII et MLVIII, du 24^e volume de ses Mélanges."*¹¹

Further to the above, Lesson also provided in a footnote a description obviously based on a translation of Shaw's (1813: text to pl. 1057-1058) '*Character Genericus*' and '*Character Specificus*':

*"Le genre apterix [sic] est ainsi caractérisé : Bec, long, grêle, très-droit, recouvert à la base d'une cire, marqué de chaque côté par une longue rainure longitudinale, est souvent renflé et légèrement recourbé; narines? linéaires, peu apparentes, situées près la pointe du bec, ailes rudimentaires, ne consistant qu'en une seule articulation ou doigt, long d'un pouce et terminé par un petit ongle; tarsi, courts, robustes, forts, gallinacés, et tétradactyles; le pouce interne, très-court; queue nulle. Apterix australis, griseo-ferruginea; rostro pedibusque fusco-flavescentibus. Le seule espèce connue du genre."*¹²

Lesson (1830b: 12) expanded the initial description (again based on Shaw) and placed his name as a junior synonym of Shaw's name:¹³

"L'Apteryx Austral; Apterix australis, Shaw.

Dromiceius Novae-Zelandiae, Less, Man., t. II, p. 210 " :

"De la taille d'une oie, à plumage brun-ferrugineux, cet oiseau a de grands rapports, dit Shaw, avec l'autruche, et a les jambes des gallinacées. Ses plumes sont de même nature que celles de l'émiou noir, et son port droit, ainsi que ses pieds déjetés en arrière, le font ressembler aux manchots. L'ongle du doigt médius a jusqu'à un pouce de longueur.

¹¹ "The natives often spoke to us of a bird without wings, of which they brought us remains, which seemed to us to be those of an emu. Mr. Kendall confirms this belief by asserting the existence of cassowaries analogous to those of Australia in the woods of New Zealand. We do not doubt today that it must be the *Apterix [sic] australis* of Shaw figured on pl. 1057 and 1058, of the 24th volume of his *Miscellany*." Thomas Kendall (1778-1832), the English Missionary whom Lesson met at the Bay of Islands. Kendall's *Grammar* (Kendall & Lee, 1820: 164) lists the words: "Kiwi, s. Name of a certain bird and name of a person." and "Kiwi kiwi, s. Feather of a bird called *Kiwi*". According to Dumont d'Urville, 1st lieutenant and botanist/entomologist of *La Coquille*, Kendall told him "kiwi" was the name of a "cassowary emu" that existed in New Zealand (Legge, 1989: 272 referring to unpublished notes dated 1825 written by Dumont d'Urville).

¹² "The genus *Apterix* is thus characterised: Beak long, slender, very straight, covered at the base by a cere marked on each side by a long tubular furrow, slightly swelled and bent at the tip; nostrils? Linear, inconspicuous, near the tip of the bill, wings rudimentary, consisting only of a single joint or finger, about an inch long and terminating in a small claw; tarsi, robust, strong, gallinaceous, and tetradactyl; the internal toe very short; no tail." The penultimate sentence in Latin: "*Apterix [sic]*, of the south, greyish brown; brownish-yellow beak and feet." followed by "The only species known of this genus."

¹³ Lesson's association of his name with Shaw's has been long misinterpreted in the literature to mean the names applied to the same species, and indeed to the point that both names were associated with the same South Island locality, e.g. Bonaparte (1856), Giebel (1872), Rothschild (1899), Dubois (1913), Mathews & Iredale (1913).

L'apteryx n'a été apporté qu'une fois de la Nouvelle-Zélande, sa patrie où les naturels le connaissent sous le nom de kivi-kivi. " ¹⁴

Lesson (1838b: 71) again dealt with the Apteryx in his *Compléments de Buffon*, vol. 2 revealing he was shown the skin by a Māori chief. ¹⁵

"C'est de cet oiseau, sans aucun doute, qu'un chef zélandois de la baie des Îles nous montra un peau mutilée, et qu'il nous décrivit d'une manière assez complète pour que nous l'ayons pris pour un casoar, dont on trouve l'indication dans notre Manuel d'ornithologie sous le nom d' emou-kivikivi." ¹⁶

Lesson (1839: 348) referred briefly to his discovery again using the name "*l'aptéryx*" in the 2nd volume of his popular book *Voyage Autour du Monde*. ¹⁷ Lesson's name *Dromiceius novaeseelandiae* was cited under the entry 'Apteryx' in a number of encyclopedias (e.g., Anon., 1838: 352; Heck, 1838: 339; Glaire & Walsh, 1840: 581). Lesson's last recorded reference to his name was in *L'Écho du Monde Savant*, 26 May 1844, under the heading 'Sciences Naturelles - Notice sur l'aptéryx' (Lesson, 1844). In this essay Lesson reviewed all the published work on the Apteryx mainly by British scientists, including that of Richard Owen (1804-1892), as well as noting Owen's announcement the previous year of the second New Zealand ratite, the giant moa *Dinornis novaeseelandiae*. Lesson praised Shaw, revealing that French scientists for many years had ignored his discovery and that he himself had only become aware of Shaw's work in 1829 while preparing his *Complément de Buffon*. Lesson also recalled his erroneous initial impression that the partial specimen he saw was of a new emu.

"Pour la première fois en France il a été question de l'apteryx austral, que l'on trouve décrit au tome 2, p.210 de notre Manuel d'Ornithologie, publié en 1828, sous le nom D'EMOU KIVI-KIVI dromiceius Novæ-Zelandiæ, Lesson. Dans cet ouvrage, nous avons parlé (p.211), de l'apteryx d'une manière fort erronée, mais l'espèce que nous pensions être nouvelle d'emou, est décrite d'après des notes que nous avons prises dans la Nouvelle-Zélande même, sur un peau mutilée, privée de tête, de pattes et d'ailes, qui servent de manteau à un chef zélandais." ¹⁸

Lesson also reported that in recent years "well-preserved" kiwi specimens had been received in London and at the "Muséum de Paris", (MNHN), noting two magnificent

¹⁴ "Of the size of a goose, has brown-ferruginous plumage, this bird has a strong relationship says Shaw, with the ostrich, and has the legs of the Gallinaceae. Its feathers are of the same nature to those of the black emu, and its upright stance, as well as its feet racked backwards, make it resemble the penguins. The claw medius is up to an inch in length. The apteryx has been brought only once from New Zealand, its homeland where the natives know it under the name kivi-kivi."

¹⁵ The Māori chief with whom Lesson and his fellow officers had the most contact was the Ngare Raumatī leader Tui (1797?-1824) who was their host and interpreter. During the visit of *La Coquille* Tui lived on board the ship, but as noted on 10 April hosted Lesson and other crew members, including Dumont d'Urville, at his fortified village or pā where Lesson reported he observed women sewing garments (Lee 2018).

¹⁶ "It is from this bird, no doubt, that a New Zealand chief from the Bay of the Islands showed us a mutilated skin, and that he described to us in a complete enough manner that we took it for a cassowary, which can be found in our *Manuel d'Ornithologie* under the name of *emu-kivikivi*." (Lesson, 1838b).

¹⁷ Both the *Voyage autour du Monde* and the *Complément du Buffon* featured a composite plate of R.P. Nodder's illustrations of *Apteryx australis* from Shaw (1813).

¹⁸ "For the first time in France, there was discussion of the Southern Apteryx, which is described in Volume 2, p. 210 of our *Manuel d'Ornithologie*, published in 1828, under the name D'EMOU KIVI-KIVI *dromiceius Novæ-Zelandiæ*, Lesson. In this work, we have spoken (p. 211), of apteryx in a very erroneous way, but the species that we thought was a new emu, was described from notes we had taken in New Zealand itself, on a mutilated skin, deprived of head, legs and wings, which served as a cloak for a New Zealand chief."

individuals obtained at the Bay of Islands in May 1840 by his former shipmate Jules-Sébastien-César Dumont d'Urville (1790-1842), then in command of *La Coquille*, renamed *L'Astrolabe*. Lesson referred to these Paris Muséum specimens as "precious ornaments in the galleries."¹⁹

In our opinion Lesson's Bay of Islands kiwi is identifiable. Its description was based on specimen material, a skin with feathers attached, although evidently uncollected, supported by physical and behavioral descriptions from local informants who provided for the first time the local name 'kivi kivi' or 'kiwi kiwi', with a specified locality of origin, the inner Bay of Islands. Furthermore, the name has been used as valid since 1899 as per Article 23.9 of ICZN (1999); see Mathews (1935, 1937, 1946). These findings and others relevant to Lesson's *D. novaeseelandiae* are reviewed elsewhere (Lee & Bruce in prep.).

Finally, in regard to the *La Coquille* ornithological effort recent research has found evidence of birds never previously recognised which were described by Lesson along with their indigenous names, and locality, making them clearly identifiable. Examples include several New Zealand birds: Grey Warbler *Gerygone igata*, North Island Fernbird *Bowdleria punctata*, and North Island Fantail *Rhipidura fuliginosa* (Lee, 2016); and from Bora Bora the Raiatea Fruit Dove *Ptilinopus chrysogaster* (Lee, 2018). Specimens of the first three of these, at least, were lodged with the rest of the *La Coquille* collection with the MNHN. (See Lesson MS 354). Perhaps because of the press of work unfortunately the nomenclature of these birds was overlooked and they were left for later naturalists to name – unlike the three birds identified in this paper.

ACKNOWLEDGEMENTS

Thanks to Edward Dickinson for advice and assistance, throughout this paper; and also to Brian Gill, Auckland War Memorial Museum, Patrick Boussès, Muséum national d'Histoire naturelle, Paris and to Ricardo Palma, Museum of New Zealand - Te Papa Tongarewa and David Lambert of Griffiths University, Gold Coast, Queensland for assistance with enquiries. Further thanks to Brian Gill, Alice Cibois, Muséum d'histoire naturelle, Geneva, and Paul Scofield Canterbury Museum, Christchurch for refereeing the paper and contributing helpful suggestions and advice.

REFERENCES

- Andrews, J.R.H. (1986). *The Southern Ark: Zoological Discovery in New Zealand 1769-1900*. [i]-[xii], 1-237. – Auckland: Century Hutchinson.
- Anon., (1838). *Encyclopédie du dix-neuvième Siècle – des Sciences – des Lettres et des Arts*. Vol. 3: 1-800. – Bureau de L'Encyclopédie du XIXe Siècle, Paris.
- Bonaparte, C.L. (1856). *Conspectus Ineptorum et Struthionum. Aves. – Comptes rendus hebdomadaires des séances de l'Académie des sciences*. 43 (18): 840-841.
- Craig, E., C. Gardiner, N. Renwick & W. Sporle (2010). *Taxon plan for Northland brown kiwi (Apteryx mantelli): Strategic plan for Northland brown kiwi 2010-2019 and beyond*. [i]-[ii], 1-56. – Department of Conservation, Whangarei, New Zealand.
- Cretella, M. (2010). The complete collation and dating of the section *Zoologie* of the *Coquille* voyage. – *Bolletino Malacologico*, 46: 83-103.

¹⁹ Dumont d'Urville (1846: 183-184). These were illustrated on plates 24 and 25 of the *Atlas d'Histoire Naturelle Zoologie* (Hombron & Jacquinot, 1843), and were captioned "Apteryx austral" which was a vernacular name as used for the other bird portraits in the atlas, not an incorrect subsequent spelling of Shaw's name.

Cuvier, G. (1825). 'Rapport sur la partie zoologique de l'Expedition Duperrey'. – *Annales de sciences naturelles*, 6: 5-20.

Del Hoyo, J. & N.J. Collar (2014). *HBW and Bird Life International Illustrated Checklist of the Birds of the World*. Volume 1: Non-passerines. 1-903. – Lynx Edicions, Barcelona.

Dickinson, E.C., M.D. Bruce & N. David (2015). 'A review of the authorship and dates of publication of birds newly described from the "Voyage de la Coquille" (1822–1825) with comments on some spellings'. – *Zoological Bibliography*, 3(5): 69-162.

Dickinson, E.C., L.K. Overstreet, R.J. Dowsett & M.D. Bruce (2011). *Priority! The dating of scientific names in ornithology*. 1-319 + CD content. – Aves Press, Northampton.

Dickinson, E.C. & J.V. Remsen, Jr., eds. (2013). *The Howard and Moore complete checklist of birds of the world*. 1. Non-passerines. 4th. Edition. i-1, 1-461 + CD content – Aves Press, Eastbourne.

Drapiez, P.A.J. (1830). 'Todiramphe'. P. 280. In: Bory St. Vincent et al., [eds.] *Dictionnaire classique d'Histoire naturelle*, 16 (TAB-ZYZ): 1-748. – Rey & Gravier, Paris; Amable Gabon et Cie., Paris.

Dubois, A. (1913). 'Coup d'œil sur les oiseaux Ratites'. – *Bulletin de la Société Zoologique de France*. 38 (1): 104-115.

Dumont d'Urville, J.-S.-C. (1846). *Voyage au Pole Sud et dans l'Océanie sur les corvettes l'Astrolabe et La Zélée, exécuté par ordre du roi pendant les années 1837-1838-1839-1840 sous le commandement de M. J. Dumont d'Urville, Capitaine de vaisseau; publié par ordonnance de sa Majesté, sous la direction supérieure de M. Jacquinot, Capitaine de vaisseau, Commandant de La Zélée. Histoire du Voyage*. 9: [i]-[ii], 1-362. – Gide et J. Baudry, Paris.

Duperrey, L.I. (1829). *Voyage autour du Monde exécuté par Ordre du Roi, sur la Corvette de Sa Majesté La Coquille, etc., Hydrographie et Physique*. 1-164. – A. Bertrand, Paris.

Giebel, C.G. (1872). *Thesaurus Ornithologiae: Repetorium der gesammten ornithologischen Literatur und Nomenclator Sämmtlicher Gattungen und Arten der Vögel, nebst Synonymen und geographischer Verbreitung*. Vol. 1: [i]-[viii], 1-868 + 193-212. – F.A. Brockhaus, Leipzig.

Gill, B.J., B.D. Bell, G.K. Chambers, D.G. Medway, R.L. Palma, R.P. Scofield, A.J.D. Tennyson & T.H. Worthy (2010). *Checklist of the birds of New Zealand, Norfolk and Macquarie Islands, and the Ross Dependency, Antarctica*. 4th ed. [i]-[x], 1-500. – Ornithological Society of New Zealand and Te Papa Press, Wellington.

Glaire, J.-B. & J.-A. Walsh (1840). *Encyclopédie Catholique. Répertoire universel et raisonné, des Sciences, des Lettres, des Arts et des Métiers, avec la Biographie des hommes célèbres depuis l'Origine du Monde jusqu'à nos Jours, et des Gravures dans le Texte; formant la Bibliothèque la plus universelle qui ait été publiée jusqu'à ce jour, contenant la matière de plus de 500 volumes in-8^e, résumé de plus de 10,000 ouvrages, et comprenant, avec des traités particuliers sur chaque matière*. Tome 2: 1-769. – Parent-Desbarres, Paris.

Hartnup, K, L. Huynen, R. Te Kanawa, I.D. Shepherd, C.D. Millar & D.M. Lambert. (2011). Ancient DNA recovers the origins of Māori feather cloaks. – *Molecular Biology and Evolution* 28(10): 2741-2750.

Harwood, H.P. (2011). Identification and description of feathers in Te Papa's Māori cloaks. – *Tuhinga* 22: 125-147.

Heather, B.D. & H.A. Robertson (2015). *The field guide to the birds of New Zealand* (2nd ed.). 1-464. – Penguin Random House, Auckland.

Heck, G. (1838) *Dictionnaire géographique, biographique et d'Histoire naturelle complet, avec un Atlas de 100 cartes ...* (A – AUX) 1-480. ²⁰ – V. Tapié, Paris.

²⁰ Page 480 appearing as the last page on the Gallica website demonstrates an incomplete volume or scan.

Hellmayr, C.E. & H.B. Conover (1948). 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. *Zoological Series, Field Museum of Natural History* 13(1) No. 2: 1-434.

Hombron, J.B. & H. Jacquinot (1843). *Atlas d'Histoire naturelle, Zoologie, par MM. Hombron et Jacquinot, chirurgiens de l'expédition*. In: *Voyage au pôle sud et dans l'Océanie sur les corvettes l'Astrolabe et la Zélée exécuté par Ordre du Roi pendant les années 1837-1838-1839-1840 sous le Commandement de M. Dumont-D'Urville Capitaine de vaisseau publié sous les auspices du Département de la Marine*. Huitième livraison [d'Atlas]. Mammifères pl. 18; Oiseaux pll. 1re, 8, 24, 25. – Gide, Paris.

ICZN [International Commission on Zoological Nomenclature] (1999). *International Code of Zoological Nomenclature*. 4th edition. i-xxix, 1-306. – The International Trust for Zoological Nomenclature, London.

Kendall, T. & S. Lee (1820). *A grammar and vocabulary of the language of New Zealand*, [i]-[viii], 1-230. – Church Missionary Society, London.

Lee, M. (2016). A previously un-noticed record of the grey warbler (*Gerygone igata*) by R.-P. Lesson in the Bay of Islands, April 1824. – *Notornis*, 63: 173-175.

Lee, M. (2018). *Navigators & Naturalists – French exploration of New Zealand and the South Seas 1769-1824*. 1-480. – Bateman Books, Auckland.

Lee, M. & D.T. Holyoak (2017). “The chequered history of Chattering Kingfisher *Todiramphus tutus* on Tahiti” 1 & 2: a response’. – *Bulletin of the British Ornithologists' Club*, 137 (3): 211-217.

Legge, C. (1989). *A Transcription of Dumont D'Urville's Manuscript 'Les Zélandais Histoire Australienne' and the Accompanying Notes, Followed by a Study of some Literary and Historical Aspects of the Text*. A Thesis in fulfilment of the requirements for the degree of Doctor of Philosophy in French. [i-xi], 1-746. – Victoria University, Wellington. Unpublished.

Lesson, R.P. (1825). Distribution géographique de quelques Oiseaux marins observés dans le Voyage autour du Monde de la corvette *La Coquille*. – *Annales de sciences naturelles*, 6: 88-97.

Lesson [R.P.] (“1825”). Unpublished manuscript MS 354. Manuscrits et Archives scientifiques du Muséum national d'Histoire naturelle. Collection R.P. Lesson. ‘Voyage autour du Monde Années 1823, 1824, 1825. Animaux Conservés dans L'alcool, Mollusques et Crustacés, Ornithologie.’ 21 feuillets. – Muséum national d'Histoire naturelle, Paris.

Lesson, R.P. (1827a). Description du Genre *Todiramphus* et de deux espèces d'Oiseaux qui le composent. – *Mémoires de la Société d'histoire naturelle de Paris*, (2) 3: 419-421, pll 11-12.

Lesson, R.P. (1827b). Description d'un nouveau Genre d'Oiseau. *Todiramphus*, *Todiramphus*. – *Bulletin des Sciences naturelles et de géologie* [a.k.a. *Bulletin Férussac*], 12 (2): 268-271.

Lesson, R.P. (1828a). *Todiramphus*. Pp. 476-479. *Dictionnaire des Sciences naturelles* 54 (THE-TOR): 1-557. – F.G. Levrault, Paris.

Lesson, R.P. (1828b). *Manuel d'ornithologie, ou Description des Genres et des principales Espèces d'Oiseaux*. 2: [i]-[ii], 1-448. – Roret Libraire, Paris.

Lesson, R.P. (1828c) *Voyage autour du Monde, exécuté par Ordre du Roi, sur la Corvette de Sa Majesté La Coquille, pendant les années 1822, 1823, 1824 et 1825, sous le Ministère et conformément aux instructions de S.E.M. le Marquis de Clermont-Tonnerre, Ministre de la Marine; et publié sous les auspices de Son Excellence MGR Le CTE de Chabrol, Ministre de la Marine et des Colonies*. Zoologie. 1 (1), livr. 8: 297-352. – Arthus Bertrand. Paris. ²¹

²¹ Volumes of the *La Coquille* voyage are collectively cited under L.I. Duperrey, but where appropriate we follow Dickinson *et al.* (2015) in citing individual livraisons to their given authors.

Lesson, R.P. (1829) *Voyage autour du Monde exécuté par Ordre du Roi, sur la Corvette de Sa Majesté, La Coquille, pendant les années 1822, 1823, 1824 et 1825, sous le Ministère et conformément aux instructions de S.E.M. le Marquis de Clermont-Tonnerre, Ministre de la Marine; et publié sous les auspices de Son Excellence MGR Le CTE de Chabrol, Ministre de la Marine et des Colonies.* Zoologie. 1 (2), livr.10: 409-456. – Arthus Bertrand. Paris.

Lesson, R.P. (1830a) *Voyage autour du Monde exécuté par Ordre du Roi, sur la Corvette de Sa Majesté La Coquille, pendant les années 1822, 1823, 1824 et 1825, sous le Ministère et conformément aux instructions de S.E.M. le Marquis de Clermont-Tonnerre, Ministre de la Marine; et publié sous les auspices de Son Excellence MGR Le CTE de Chabrol, Ministre de la Marine et des Colonies.* Zoologie. 1 (2), livr. 15: 649-696. – Arthus Bertrand. Paris.

Lesson, R.P. (1830b). *Traité d'Ornithologie, ou, Tableau méthodique des Ordres, Sous-Ordres, Familles, Tribus, Genres, Sous-Genres et Races d'Oiseaux. Ouvrage entièrement neuf, formant le Catalogue le plus complet des Espèces réunies dans les Collections publiques de la France.* 1, livr. 1: 1-80. – F.G. Levrault, Paris Strasbourg & Bruxelles.

Lesson, R.P. (1836). *Histoire naturelle générale et particulière des Mammifères et des Oiseaux découverts depuis la Mort de Buffon.* 10: 1-414. – P. Pourrat Frères, Paris.

Lesson, R.P. (1838). *Complément de Buffon - Races humaines et Mammifères.* Deuxième édition. 2. Histoire naturelle des Oiseaux: [i]-[iv], 1-733. – P. Pourrat Frères, Paris.

Lesson, R.P. (1839). *Voyage autour du Monde sur la Corvette La Coquille.* 2: 1-547 – P. Pourrat Frères, Paris.

Lesson, R.P. (1844). Sciences naturelles. Notice sur l'apterix. *L'Echo du Monde Savant – Travaux des Savants de tous les Pays dans toutes les Sciences.* (11) 41 [26 May 1844]: 969-972.

Mathews, G.M. (1935). Remarks on *Apteryx australis* and *Stictapteryx owenii* with necessary changes of nomenclature. – *Bulletin of the British Ornithologists' Club*, 55 (9): 179-180.

Mathews, G.M. (1937). Some changes in the names of New Zealand birds. – *Emu*, 36 (3): 221-223.

Mathews, G.M. (1946). *A working list of Australian birds, including the Australian Quadrant and New Zealand.* [i]-[vi] + 1-150 + 1-26 + 177-190. – Shepherd & Newman, Sydney.

Mathews, G.M. & T. Iredale (1913). A reference list of the birds of New Zealand. Part I. – *Ibis*, (10) 1 (2): 201-263.

Oliver, W.R.B. (1955). *New Zealand birds.* (2nd edition). 1-661. – A.H. & A.W. Reed. Wellington.

Rothschild, W. (1899). The genus *Apteryx*. – *Novitates Zoologicae*. 6 (3): 361-402, pll. IX-XVI.

Shaw, G. (1813). *Vivarium naturæ, or The Naturalist's Miscellany.* 24 (286): [209]-[216]: pll. 1057-1060 (plates, drawn, engraved and published by R.Nodder) + unpaginated text. – E. Nodder & Son, London.

Voisin, C. & J.-F. Voisin (2008). List of type specimens of birds in the collections of the Muséum national d'Histoire naturelle (Paris, France) 18. Coraciiformes. – *Journal of the National Museum (Prague), Natural History Series*. 177 (1): 1–25.

Addresses: Michael Lee, 336 Sea View Road, Onetangi, Waiheke Island, Auckland, 1081, New Zealand.
e-mail: mikeleeauckland@gmail.com; Murray D. Bruce, P.O. Box 180, Turramurra, NSW 2074, Australia.
e-mail: m.d.bruce@hotmail.com.