

## SHORT NOTE

### The type localities of Cook's petrel (*Pterodroma cookii*), reef heron (*Egretta sacra sacra*) and wandering tattler (*Tringa incana*)

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Article 76.1 of the *International Code of Zoological Nomenclature* (4th ed. 1999) provides, inter alia, that the type locality of a nominal species-group taxon is the geographical place of capture, collection or observation of the name-bearing type. Evidence relating to the geographical place of collection of the type specimens of Cook's petrel (*Pterodroma cookii*), the nominate race of reef heron (*Egretta sacra sacra*), and wandering tattler (*Tringa incana*), shows that statements of their type localities should be corrected as suggested here.

**Cook's petrel *Pterodroma cookii* (G.R.Gray, 1843)**  
G.R.Gray's original description of *Procellaria cookii* (in Dieffenbach 1843:II: 199-200) was based upon the only "*Procellaria*" among the 37 birds collected by Ernst Dieffenbach that were presented by the New Zealand Company to the British Museum (now The Natural History Museum, London) in 1842. This specimen, registered as 1842.9.29.14, is described in the accessions register simply as "*Procellaria*". However, the register also includes an entry on the next page titled "Numbers and remarks from Dr Dieffenbach's List" in which the notation "14. E-Titi. Iris Golden Yellow" refers to the "*Procellaria*" specimen. Gray cited Dieffenbach as the authority for his statement that *Procellaria cookii* was the "Titi of the natives". Dieffenbach's list must have been the source of this information. Gray later published a virtually identical description of *Procellaria cookii* and an illustration of the specimen on which it was based. Gray did not mention Dieffenbach on this occasion, but he did note that "The natives are acquainted with this bird by the name of E-titi" (Gray 1844-1845: 17-18, Pl. 35). The holotype of Cook's petrel *Pterodroma cookii* (G.R.Gray, 1843), a relaxed mount, is still in the bird

collections of The Natural History Museum at Tring (Warren & Harrison 1966-1973: I: 69).

It follows from the foregoing that there can be no reasonable doubt that the "titi: this bird, a *Procellaria*, or mutton-bird as it is commonly called", which Dieffenbach's Maori guide dug out of the steep banks of the Mangaoraka Stream on the lower northern slopes of Mount Egmont on 8 December 1839 (Dieffenbach 1843:I: 148), was actually a Cook's petrel, and not a black petrel (*Procellaria parkinsoni*), that has the Maori name of *taiko*, as Imber (1987) thought it was.

In neither 1843 nor 1844-1845 did Gray say where the specimen he described as *Procellaria cookii* had been collected, but several years later he gave its habitat as New Zealand (Gray 1862). Buller (1875) said the type specimen of *Procellaria cookii* had been obtained "off the New Zealand coast", but he did not indicate the source of this information. Fleming (1982) noted that Cook's petrel had been described by Gray from a specimen obtained by Dieffenbach in New Zealand, and said that "This was not otherwise localised, but was later reported to have been obtained from off the coast". Turbott (1990) and Marchant & Higgins (1990) give the type locality as New Zealand.

The only specimen of *Pterodroma cookii* known to have been obtained by Dieffenbach during the two years (1839-1841) he spent travelling in New Zealand was the one taken from its burrow in the banks of the Mangaoraka Stream on the lower northern slopes of Mount Egmont. Therefore, in the absence of evidence to the contrary, it can be accepted that it was this specimen that went to the British Museum in 1842, and became the holotype of Gray's *Procellaria cookii*. It is not possible now to determine precisely where on the Mangaoraka Stream the type specimen was taken, but consideration of Dieffenbach's account indicates that the type locality is probably close to Kaimiro through which the Mangaoraka Stream flows from the northern slopes of Mount Egmont. Accordingly, the type locality of *Pterodroma cookii* (G.R.Gray, 1843) should be emended to the Mangaoraka Stream near Kaimiro, north Taranaki, New Zealand.

The type locality of Cook's petrel is now pasture-land that is farmed intensively for dairying, and has been for about the last century. However, it is not surprising that Dieffenbach was able to collect an adult Cook's petrel from a burrow there. Dieffenbach himself said that, in December, the *titi* came from the sea to the mountains inland, "especially to the fore-hills of Mount Egmont" (Dieffenbach 1843: I: 148). In 1839, those fore-hills, including the type locality of Cook's petrel, were covered with dense indigenous forest.

**Reef heron *Egretta sacra sacra* (Gmelin, 1789)**

Most of the bird specimens collected on James Cook's third voyage of circumnavigation (1776-1780) went to Sir Joseph Banks (Medway 1979, 1981). Two of those specimens were described as "*sacra Ardea*, alba, capite laevi, tectricibus interioribus alarum reetricibus(ue) nigro lineatis, pennis dorsalibus laceris albis. Sol. cat. 89. frdly Islds", and "*religiosa Ardea*, capite laevi, corpore albo, nigro variegato pennis dorsalibus laceris nigris. Sol. cat. 89. frdly Islds" under entries nos. 96 and 97 in Manuscript Lists 2 and 3 that were compiled by Jonas Dryander, who was Banks's librarian at the time (Medway 1979). The "Friendly Islands" are the Tonga Islands. Banks also received the bird paintings done by William Ellis on the voyage (Lysaght 1959; Medway 1981). One of them, folio 58, is an unsigned painting of a white phase reef heron, with a pen and ink sketch of its head, and bears the notation "At the Friendly Islands" (Lysaght 1959). The two Banks specimens and the Ellis painting are referred to as "2. Ellis. *Ardea sacra*. Friendly Isls" under entry no. 89 in the Solander Catalogue that was also compiled by Dryander (Medway 1979). The locality information with the Ellis painting and the two Banks specimens shows that they originated from Cook's visit to the southern Tonga Islands between April and July 1777 (Beaglehole 1967: I: 97-160). Manuscript Lists 2 and 3, the Ellis bird paintings, and the Solander Catalogue are now in The Natural History Museum, London.

Latham's description in English of the "Sacred Heron" appeared in 1785 in his *General Synopsis of Birds* (Latham 1781-1785: 3(1): 92-93, no. 62) as follows:

Size of the little *Egret*? length two feet three inches. General colour of the plumage white: bill four inches long, dusky brown: on the middle of the crown a few obscure dusky streaks down the shafts of some of the feathers: several of those of the back, wing, and tail coverts, marked in the same manner: scapulars dashed with black: greater quills more or less dusky at the tips: the tail feathers marked with dusky down the shafts, from the tip, an inch and a half upwards; except the outer feather, which is plain: legs yellow.

Inhabits *Otaheite*, and the neighbouring isles, where it is held sacred.

In the collection of Sir *Joseph Banks*.

Var. A. With the above is one not far different. The crown of a plain white: scapulars some white, some black: on the fore part of the neck some loose long feathers, black and white mixed, hanging over the breast; and some others of the same loose texture, and mixed colours, falling on the tail: the wing coverts have likewise some black feathers intermixed: the quills plain white; and the tail the same, except one feather wholly black: legs black.

The birds described by Latham are white phase reef herons. Latham indicated that his description was based on material in the collection of Sir Joseph Banks. Latham certainly saw the Ellis bird paintings when preparing his *General Synopsis of Birds* (Medway 1981), but there is no evidence that he used Ellis folio 58 when compiling his description of the "Sacred Heron". Therefore, there can be no reasonable doubt that it was based solely on the two third voyage specimens from the "Friendly Islands" that bear the names *Ardea sacra* and *Ardea religiosa* in the above-quoted entries in Manuscript Lists 2 and 3. They are the only specimens of the white phase of the reef heron that are known to have been in Banks's possession at any time. Latham's description of the "Sacred Heron" is the sole basis of Gmelin's 1789 description in Latin of *Ardea sacra* (Gmelin 1788-1793: I(2): 640-641, no. 61). Therefore, the specimens described by Latham are the types of the nominate race of the species. They no longer exist. Nearly all the bird specimens that were part of Banks's large zoological collection almost certainly did not survive beyond about the mid-19th Century (Medway 1981). A neotype of *Egretta s. sacra* has never been designated.

Latham said his "Sacred Heron" inhabited Tahiti and the neighbouring islands where it was held sacred. Latham does not mention the source of this information, but he could have obtained it, for example, from George Forster's account of his voyage with Cook in 1772-1775 that was published in London in 1777. In that work Forster, when writing of the religion of the Society Islanders, recorded that "Some birds, such as a species of heron, king's-fisher, and cuckoo, are also consecrated to the deity" (Forster in Kahn 1968: 428). Because Gmelin, following Latham, gave the habitat of *Ardea sacra* as Tahiti and the neighbouring islands, Tahiti has always been accepted as the type locality of the nominate race of the reef heron (e.g., Mayr & Amadon 1941; Hancock & Elliott 1978; Turbott 1990; Marchant & Higgins 1990). However, the foregoing discussion shows that the type specimens were actually collected in the southern Tonga Islands. Therefore, the southern Tonga Islands is the correct type locality of *Egretta sacra sacra* (Gmelin, 1789).

**Wandering tattler *Tringa incana* (Gmelin, 1789)**

Another bird specimen that Banks received from Cook's third voyage was described as "*Sc(olopax)* rostro recto, corpore supra fuliginoso, subtus albido, gula cinerea, pedibus flavis. Sol. cat. 91. Eimeo. 1" under entry no. 105 in Manuscript Lists 2 and 3. "Eimeo" is an early name for Moorea in the Society Islands. There is no reason to doubt that this specimen was collected while Cook's ships were anchored in Opunohu Bay at Moorea from

30 September - 11 October 1777. Banks also received the bird paintings done by John Webber on the voyage. They are now in the British Library, London (Lysaght 1959; Medway 1981). One of them, folio 117, is signed "John Webber/1777" and bears the locality "Palmerstons Ile" in an unknown hand. "Palmerstons Ile" is Palmerston Atoll in the Cook Islands which was visited from 14-17 April 1777. The painting depicts a wandering tattler in immature or non-breeding plumage. It has been published in monochrome on a reduced scale (Pearse 1968). Both the Banks specimen and the Webber painting are referred to as "1. Webber. *Scolopax*. Eimeo. Palmerston Isle" under entry no. 91 in the Solander Catalogue. The locality "Palmerston Isle" would have been available from the notation on the Webber painting.

Latham's description in English of the "Ash-coloured Snipe" appeared in 1785 in his *General Synopsis of Birds* (Latham 1781-1785: 3(1): 154-155, no. 29) as follows:

Length eleven inches. Bill more than an inch and a half long, strait, except at the tip, where it is a trifle bent; colour black: upper part of the head, neck, and body, ash-colour: between the bill and eye a whitish mark: chin and fore part of the neck white, mottled a little with brown on the throat: breast and sides of the body ash-colour: middle of the belly white: legs yellowish green.

Inhabits *Eimeo* and *Palmerston* Isles. In the collection of Sir Joseph Banks.

The bird described by Latham is a wandering tattler in immature or non-breeding plumage. Latham indicated that his description was based on material in the collection of Sir Joseph Banks. There is no evidence that he used Webber folio 117 when compiling it. Indeed, Latham may not have seen the Webber bird paintings when preparing his *General Synopsis of Birds* (Medway 1981). He probably obtained the locality of "Palmerston Isles" from the Solander Catalogue. Therefore, there can be no reasonable doubt that Latham's description of the "Ash-coloured Snipe" was based solely on the specimen of *Scolopax* from "Eimeo" that is described in Manuscript Lists 2 and 3. It is the only specimen of the wandering tattler that is known to have been in Banks's possession at any time. Latham's description of the "Ash-coloured Snipe" was the sole basis of Gmelin's 1789 description in Latin of *Scolopax incana* (Gmelin 1788-1793:1(2): 658, no. 26). Therefore, the specimen described by Latham is the type of the species. It no longer exists. Like the Banksian type specimens of *Egretta s. sacra*, it almost certainly did not survive beyond about the mid-19th Century. A neotype of *Tringa incana* has never been designated.

Turbott (1990), and Higgins & Davies (1996), give the type locality of the wandering tattler as

"Moorea Island, Society Group and Palmerston Island, Pacific Ocean". They are the localities given for *Scolopax incana* by Gmelin, following Latham. However, the foregoing discussion shows that the type locality of *Tringa incana* (Gmelin, 1789) should be restricted to Moorea, Society Islands where the specimen that Gmelin described and named as *Scolopax incana* was collected.

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