EXTANT TYPES OF NEW ZEALAND BIRDS FROM COOK'S VOYAGES

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[Part I: Historical, and the type paintings]

ABSTRACT

Recent research has shown that there are 19 extant types of New Zealand birds collected on Captain James Cook's three voyages of circumnavigation. Of these 9 are type paintings, the species concerned being Tadorna variegata, Anas superciliosa superciliosa, Aythya novaeseelandiae, Sterna striata, Chalcites lucidus lucidus, Xenicus longipes longipes, Anthus novaeseelandnovaeseelandiae, Finschia novaseelandiae and Mohoua ocrocephala. The remaining 10 are type specimens, the species concerned being Stictocarbo punctatus punctatus, Falco novae-seelandiae, Nestor meridionalis meridionalis, Cyanoramphus novaezelandiae novaezelandiae, Prosthemadera novaeseelandiae novaeseelandiae, Callaeas cinerea cinerea and Turnagra capensis capensis.

The type paintings are preserved in the Zoology Library of the British Museum (Natural History) and the type specimens in the Merseyside County Museum at Liverpool, the Natur-historiska riksmuseet at Stockholm, and the Naturhistorisches

Museum at Vienna.

A brief account is given of some aspects of the history of bird specimens collected on the voyages and the history of the New Zealand type specimens is more specifically traced. Appropriate references are made to J. R. Forster's as yet unpublished Journal kept by him on the Resolution on Cook's second voyage, and other relevant literature is referred to.

INTRODUCTION

In the course of research on the South Pacific and Hawaiian ornithology of Cook's voyages a number of extant types of species first described from specimens collected, or paintings executed, on such voyages were located and identified. I believe, as did Pelzeln in 1873, that it is of importance to science that the existence of type specimens and the place where they are deposited should be known (Pelzeln 1873: 14-15). For this reason it has been decided to contribute this paper on the known extant types of New Zealand birds from the voyages.

A number of the extant types described in this paper are paintings executed on the second and third voyages by George Forster and William Ellis. These paintings are now in the Zoology Library of the British Museum (Natural History). In several cases the noted 18th century English ornithologist, John Latham, in his monumental General Synopsis of Birds (1781-1785), based his descriptions of certain species from Cook's voyages on paintings of such species, which paintings were at that time in the library of Sir Joseph Banks. In this work Latham gave English names to the species described. J. F. Gmelin shortly afterwards, in his edition of the *Systema Naturae* (1788-93), gave scientific binomials to a great number of the new species described by Latham. Where Latham's descriptions were based on paintings, those paintings became, by virtue of Gmelin's latinisations, the types of the species depicted therein. The bird paintings once in the library of Sir Joseph Banks have been fully described by Lysaght (1959) who identified the types among them.

In addition to the type paintings there are a number of extant type specimens of New Zealand birds collected on Cook's voyages, which specimens are in the Merseyside County Museum at Liverpool, the Naturhistoriska riksmuseet at Stockholm and the Naturhistorisches Museum at Vienna. Some of these specimens were first validly described by Anders Sparrman in his Museum Carlsonianum (1786-1789) and others by Gmelin on the basis of Latham's descriptions as already mentioned. The existence of the majority of the type specimens dealt with in this paper has previously been noted from time to time. But the existence of some type specimens from Cook's voyages, particularly those in the Merseyside County Museum at Liverpool, appears to have been overlooked at least in literature. However this default is partly remedied in this paper and will, it is hoped, be fully remedied in other papers at present in preparation.

Some appropriate observations are warranted here about the New Zealand species represented by the extant types. Such observations are based principally on the as yet unpublished holograph 'Journal' kept by J. R. Forster in English as naturalist on the *Resolution* on Cook's second voyage. This very important Journal is in the Staatsbibliothek, Preussischer Kulturbesitz, Archivstrasse 12-14, Dahlem, West Berlin (see Hoare 1972: 171-173). It is at present being edited by Dr Michael E. Hoare for publication by the Hakluyt Society. The references to such Journal in this paper are to the volumes of the typescript copy in the General Library of the British Museum (Natural History).

SOME ASPECTS OF THE HISTORY OF BIRD SPECIMENS COLLECTED ON COOK'S VOYAGES

A considerable number of the new species of birds described by Latham (1781-1785) in the three volumes of his *General Synopsis* of *Birds* were based on specimens then in the Leverian Museum, Latham's own collection and the collection of Sir Joseph Banks. Because of the dates in question many of the species so described could only have been based on specimens collected on Cook's voyages. Although Whitehead (1969) has recently given a detailed and valuable general account of the history and fate of zoological specimens from such voyages, it seems appropriate to place on record here a somewhat

more detailed account of how so many birds from the voyages came to be in the possession of Banks, Lever, and Latham at the period referred to.

It is certain that Sir Joseph Banks was by far the principal recipient of the ornithological specimens collected on all three of Cook's voyages. Banks had, of course, accompanied Cook on the first voyage, and on 6 December 1771, he wrote to Count Lauraguais that "the Number of Natural productions discover'd in this Voyage is incredible: about 1000 Species of Plants that have not been at all describ'd by any Botanical author; 500 fish, as many Birds, and insects Sea and Land innumerable." (Cameron 1952, App.G.: 319; Wilkins 1955: 79; Beaglehole 1963, II: 328; Whitehead 1969: 185).

It should be particularly noted that Banks, in the extract quoted, is talking only about the number of bird species discovered on the voyage and that the letter does not, in fact, give any indication of the number of bird specimens which were actually preserved and taken back to England. Banks was primarily interested in botany. Writing of the botany of Tierra del Fuego in January 1769 he said that "probably No botanist has ever enjoyed more pleasure in the contemplation of his Favourite pursuit than Dr Solander and myself among these plants," and in 1782 he wrote, "Botany has been my favourite Science since my childhood" (Cameron 1952: 74; Beaglehole 1963, I: 120, 226). It is quite clear from many entries in Banks's Journal that at the various landfalls botanical collecting took precedence and that great care was taken to preserve the botanical specimens collected (see, e.g. Beaglehole 1963, I: 225; II: 58, 59, 84, 87). A large botanical collection was taken back to England by him.

Nonetheless it is beyond doubt that many bird specimens were also collected during the course of the voyage. One has only to read Banks's Journal to realise just how many (probably several hundred) oceanic birds were collected. For example, on one day alone, 3 March 1769, Banks records having killed 69 oceanic birds of seven species (Beaglehole 1963, I: 236). Iredale (1913: 133) has suggested that because no studies in botanical science were possible at sea, full attention was at those times given to zoological items. This seems to be correct. Of the 54 species of birds described by Solander (see Lysaght 1959: 359-362) all but five of the descriptions were of oceanic species and of these five one was of a duck (Anas flavirostris) from Tierra del Fuego and three were based on land birds (Volatinia jacarina, Motacilla flava and Oenanthe oenanthe) which were collected when they flew aboard the Endeavour at sea. Furthermore, Banks, in his Journal, gave Solander's scientific names to the oceanic species shot by him but no scientific names appear in the Journal for any of the new land birds collected probably because such birds were neither described nor given scientific names by Solander. Parkinson's extant zoological drawings include 35 bird paintings, 23 of which are of oceanic species (Lysaght 1959: 272-80). It has been suggested (Beaglehole 1963, I: 416n) that a folio of bird sketches by Parkinson may have been mislaid on the voyage but Parkinson was employed by Banks primarily as a botanical draughtsman and a very considerable number of plants were illustrated by him in such capacity. It is not surprising that Parkinson found little time to illustrate birds, in particular land birds, for, as Banks records on 12 May 1770, "This evening we finished Drawing the plants got in the last harbour, which had been kept fresh till this time by means of tin chests and wet cloths. In 14 days just, one draughtsman has made 94 sketch drawings, so quick a hand has he acquird by use" (Beaglehole 1963, II: 62).

But it is beyond doubt that many land birds were also collected during the voyage. For example, in New Zealand "some most beautiful birds" were shot at Anaura Bay and more birds were later shot at Tolaga Bay and Queen Charlotte Sound. In Australia, many land birds were killed at Botany Bay, Thirsty Sound and at the Endeavour river (see e.g., Beaglehole 1963, I: 416, 419; II: 83, 118).

Although there were on the Endeavour "many bottles with ground stoppers, of several sizes, to preserve animals in spirits" (Cameron 1952: 15; Beaglehole 1963, I: 30), it is most doubtful that many of the birds collected actually went into such bottles. On 5 February 1769, Banks wrote that he was "a little better than vesterday, well enough to eat part of the Albatrosses shot on the third, which were so good that every body commended and Eat heartily of them tho there was fresh pork upon the table." The Gannets shot near the Three Kings Islands on 24 December 1769 were made into a "Goose pye" for Christmas dinner; birds shot at Botany Bay and the Endeavour River were eaten and the Plain Turkey (Ardeotis australis) taken at Bustard Bay — the only Australian land bird described by Solander — was eaten (see Beaglehole 1963, I: 233, 449; II: 67; Parkinson 1784: 136, 144-5). In addition we find Banks writing on 10 November 1769 at Mercury Bay — "Hunger is certainly most excellent sauce, but since our fowls and ducks have been gone we find ourselves able to eat any kind of Birds (for indeed we throw away none) without even that kind of seasoning" and, in August 1770 when writing of New South Wales, "Birds, fish &c. I shall say no more than that we had some time ago learned to eat every identical species which came in our way: a hawk or a crow was to us as delicate and perhaps a better relished meal than a partridge or Pheasant to those who have plenty of dainties: we wanted nothing to reccomend any food but its not being salt, that alone was sufficient to make it a delicacy. Shaggs, Sea gulls and all that tribe of sea fowl which are reccond bad for their trainy or fishy taste were to us an agreeable food, we did not at all taste the rankness, which no doubt has been and possibly will again be highly nauseous to us whenever we have plenty of Beef and mutton &c." (Beaglehole 1963, I: 430: II: 116).

Although Banks considered the first specimens of *Puffinus assimilis* and *Puffinus griseus* collected by him on 15 February 1769 to be "a great acquisition to our bird collection" (Beaglehole 1963, I: 234) this does not confirm that a bird collection as such was intentionally being made by him. In view of the foregoing these *Puffinus* specimens, having (as they were in this case) been described by Solander and drawn by Parkinson, were probably also, to quote Iredale's (1913: 133) words, "consigned to the pot."

Despite all of this there is, however, some evidence that Parkinson, at the time of his death on 26th January 1771, had a collection of birds preserved in spirits (Parkinson 1784, preface: x-xi) but we do not know what ultimately became of any such collection. Neither do we know whether any of the birds preserved in spirits which were seen by Sheffield at Banks's house in London in late 1772 included any specimens from the voyage (Lysaght 1971: 255). But we do know that some bird specimens did find their way to England. "Some beautiful birds from the South Sea Islands" were presented to King George III by Banks and Solander in August 1771 (Rauschenberg 1968: 41), and although Iredale (1913: 132) has said that "no specimen can be traced, even in literature, which can honestly be said to have been procured on this first voyage," some such specimens can in fact be so traced and a careful search of the literature might reveal a few more. At the present time I know of five species which were represented by first voyage specimens which reached England and, as all are Australian and New Zealand species, it does seem appropriate to place the evidence on record here (see Appendix). Unfortunately none of these first voyage bird specimens now exists. Historical evidence indicates that it is extremely unlikely that the much discussed White Gallinule at Liverpool, said to have been collected in New Zealand by Banks (see e.g. Forbes 1901: 62; Oliver 1955: 18, 371), was, in fact, collected in New Zealand on any of Cook's voyages, let alone by Banks (Greenway 1967: 251 and Medway in prep.). Furthermore William Bullock's claim that he had in his Museum the entire collection of birds made by Banks and Cook on the first voyage (Bullock 1817: 32) is clearly quite erroneous, and it is also impossible to substantiate his later claims (Bullock 1819) that he had in his collection at the time of its sale various first voyage specimens collected by Banks (Medway in prep).

The majority of bird specimens from the second voyage, which were not eaten (see e.g. Forster 1777, II: 451) and reached Europe, almost certainly went to Banks. On 1 August 1775 Solander wrote advising Banks that Cook had some birds in spirits of vinum for him (Beaglehole 1963, I: 105; 1961: 957). On 22 August 1775, he wrote further that "Several of the Resolution's Men have called at Your house, to offer you their curiosities:— Tyrrell was here this Morning . . . Capt Cook has sent all his curiosities to my apartments at the Museum. All his Shells is to go to Lord Bristol — 4 Casks

have your name on them and I understand they contain Birds & fish &c . . ." (Smith 1911: 45; Dance 1971: 368; Beaglehole 1963, I: 108n; 1961: 960-1; Whitehead 1969: 163). John Marra, Gunner's mate, wrote to Banks from on board the Resolution in 1775 to say that ". . . from many strange Isles I have procured your Honour a few curiosities as good as could be expected from a person of my capacity. Together with a small assortment of shells," and some bird specimens may well have been included (Smith 1911: 45; Whitehead 1969: 192; Dance 1966: 99; Dance 1971: 368). Banks also received a number of second voyage bird specimens from Furneaux (Banks r d.).

According to Beaglehole (1963, I: 110) the Forsters were, after the return of the second voyage ships, given the run of Banks's library and collections. But Hoare has said, in his recent biography of the elder Forster (1976), that "Nothing in this research has shown conclusively that the Forsters ever had access to Banks's and Solander's collections and manuscripts after the voyage. No such hint or statement appears in even the most private correspondence." However, in September 1775 Banks seems to have received some of Forster's insects (Whitehead 1969: 163) and in August 1776 he bought George Forster's paintings for 400 guineas (Dawson 1958: 339). In October 1777 the elder Forster advised Banks that as soon as his son returned from Paris "he shall wait on you with my whole collection, which is not yet searched, and you may have whatever you shall want of it" (Beaglehole 1963, I: 109n). It was no doubt further to this promise that, in January 1778, the Forsters presented Banks with a large collection of plants. Probably at the same time they also presented him with a considerable collection of animals (no doubt including birds) for it is stated in a memorandum by Banks that "on their [the Forsters] return they did me the favour to present me with very many specimens, both of plants and animals which they had collected in the different countries they had visited" (Britten 1885: 363). In just the month following, February 1778, Forster is writing to Banks appealing for financial assistance and mentioning that he is negotiating the sale of his collections to a foreign sovereign (Dawson 1958: 339). The collections referred to would no doubt have been what remained after the presentation to Banks (and probably presentations to others also) but I do not know that any such sale ever took place as, for example, in September 1778 Banks appears to have refused a "presentation" by Forster of shells collected by him on the voyage (Dawson 1958: 339; Whitehead 1969: 186; Beaglehole 1963, I: 110-111). From this brief summary it seems probable that Banks received the bulk of the Forster crnithological specimens from the voyage.

Banks clearly received most of the bird specimens collected on the third voyage. On 16 June 1780 Barrington wrote to Lord Sandwich informing him "that the specimens of Natural History collected in this last voyage were destin'd both by Capt. Cook & the late Capt. Clerke for Sr Ashton Lever's Museum" and begged that Captains Gore and King be directed to give such specimens at least as were collected during the lives of Captain Cook and Captain Clerke to that museum. On 3 October 1780 Barrington renewed his plea that the curiosities from the voyage may go to Sir Ashton Lever (Beaglehole 1967: 1558-9).

Barrington, however, was mistaken, at least so far as Clerke's collections were concerned, for Clerke in his final letter of 10 August 1779 to Banks wrote that "I have made you the best collections of all kinds of matter I could that have fallen in our way in the course of the voyage, but they are by no means so compleat as they would have been had my health enabled me to pay more attention to them; I hope however you will find many among them worthy of your attention and acceptance, in my will I have bequeathed you the whole of every kind, there are great abundance so that you will have ample choice," and, further, "I must beg leave to recommend to your notice Mr. Will. Ellis one of the Surgeon's mates who will furnish you with some drawings & accounts of the various birds which will come to your possession" (Beaglehole 1967: 1543).

William Anderson also left his collections to Banks. Samwell, in his Journal under date 3 August 1778, wrote that Anderson "left his Collection of Plants & other Curiosities which he had procured this Voyage both natural and artificial to Mr. Banks" (Beaglehole 1967: 1130).

In October 1780, after the return of the ships, some natural curiosities were purchased for Miss Anna Blackburne who had a natural history museum at Fairfield, near Warrington. We do not know what such "natural curiosities" were nor do we know what ultimately became of them or, indeed, of Blackburne's collection (Wystrach 1974: 89). Sir Ashton Lever apparently received some birds — we do not know what — from William Bayly ("who had saved a few tolerable good articles") of whose collection he had the first choice. The balance of Bayly's collection seems to have been disposed of by sale advertised in the newspaper (Beaglehole 1967: 1560-1). Daniel Bculter, proprietor of a museum at Great Yarmouth, is said to have spent a day on Cock's ship and purchased many articles, which may have included some birds (Southwell 1908: 116). unknown officer of the Discovery sold a collection of 248 lots from the South Seas by public auction in London in June 1781, but the only birds included in such sale were Lots 40 and 245 consisting of nine birds from the Sandwich Islands (Anon 1781).

Of those on the ships of the last voyage Anderson and Clerke are most likely to have had the largest collections of natural history specimens and, as we have seen, these all went to Banks. Although Samwell wrote on 1 November 1780 that "very few Natural Curiosities have been brought home in our two Ships" (Beaglehole 1967: 1561),

the number of birds so obtained was, nonetheless, significant for Banks is recorded as having received from the voyage some 220 specimens representative of some 159 species (Dryander n.d.). Included were a considerable number of specimens from the Hawaiian Islands which almost certainly came principally from Clerke as Anderson had died in 1778 and no substantial collecting took place at the Hawaiian Islands until the second visit there in 1779. The Dryander manuscript list just referred to provides the only comprehensive account of bird specimens received by Banks from any one of the three voyages. Such other manuscript lists as exist (Banks n.d.) seem to be incomplete for there is some evidence that Banks had, in fact, disposed of many bird specimens from the voyages before such lists were compiled (Medway in prep.).

The birds which Banks received were widely dispersed by him. For example, some may have been included in his donations to Alstromer (Ryden 1965) and, as will be seen, many appear to have passed, by sale or gift, to Lever and Latham. His friend Marmaduke Tunstall received at least a few of his first voyage birds (see Appendix). In 1792 Banks divided a great portion of his then remaining collection between Sir John Hunter and the British Museum (Whitehead 1969: 165-7; Burton 1969; Medway in prep.). He may also later have given a few remaining voyage birds to William Bullock (Medway in prep.).

Lever's collection, the history of which has been well documented (see e.g., Mullens 1915; Whitehead 1969: 167-169), was of outstanding ornithological importance, containing as it did a great many bird specimens including many from Ccok's voyages which became types by virtue of Latham's and Gmelin's descriptions. Lever's collection was subsequently sold by public auction in London in 1806 and the specimens were widely dispersed, most of the types having now been lost forever and the few known remaining ones (largely New Zealand and Hawaiian) being almost exclusively in the Naturhistorisches Museum at Vienna and the Merseyside County Museum at Liverpool.

Since Sir Ashton Lever did not move his museum to London until 1775, it is unlikely that he received any Cook voyage specimens before then and it further seems that the second voyage material which came into his possession did so indirectly. For example, through Solander in September 1775 he seems to have received some of Forster's insects (Whitehead 1969: 163) and his much discussed Imperial Sun Shell (Astraea heliotropium, from New Zealand) was purchased by him from dealer George Humphrey (who bought the bulk of the second voyage shell specimens) who, in turn, had earlier purchased it from an officer of the Adventure (Dance 1966: 99, 110). As we have seen, the amount of third voyage ornithological material received by Lever from William Bayly was probably insignificant. However, we know that a considerable number of ornithological specimens which

must have been collected on Cook's second and third voyages were in Lever's Museum at the time Latham wrote the three volumes of his *Synopsis*. It seems that the majority of these were probably presented or sold to Lever by Sir Joseph Banks who, as we have seen, had been by far the principal recipient of ornithological specimens from the voyages.

At the time Latham wrote his *Synopsis* he had in his own collection a number of specimens (e.g. from New Zealand and Hawaii) which could only at those dates have been collected on Cook's voyages. Latham in 1785 (preface, i-ii) drew attention to the specimens in his own collection but their presence seems to have been overlooked since (see e.g., Stresemann 1949, 1950, 1953; Lysaght 1959; Whitehead 1969). Such specimens were of considerable importance for Latham based his descriptions of the species to which they related at least partly on them. Of the species mentioned in this paper the Kaka, Kokako and Tui were represented by specimens in Latham's collection.

Latham was permitted by the elder Forster shortly before the latter's departure from England in 1780 to see and to copy his drawings of birds and he was supplied some notes by Forster (Forster 1790: 2; and, e.g., Latham 1781: 365). The drawings were presumably those intended for presentation to King George III as the younger Forster's paintings had been sold to Sir Joseph Banks in 1776. However, there is no evidence that Latham received any of the Forsters' birds direct from them and, in all probability, Latham obtained his specimens principally, if not entirely, from Sir Joseph Banks to whom he acknowledged his indebtedness (Latham 1781: preface, iv). But he may have obtained a few such specimens from Lever (who probably, as we have seen, obtained his principally from Banks) to whom Latham also acknowledged his indebtedness (Latham 1781: preface, iv) and with whom he had been exchanging specimens as early as 1773 (Mathews 1931: 467).

The ultimate fate of Latham's specimens is not known. He himself wrote in 1831 that his birds were, in general, dispersed when he left Kent in 1796 (Mathews 1931: 473) but he retained some specimens at that time. In 1806 he purchased at the sale of the Leverian Museum, including Lots 2790 and 3070 which were specimens of *Drepanis pacifica* and *Vestiaria coccinea* from Hawaii. The latter species was represented in Latham's collection at the time he originally described it in 1781 under the name Hook-billed Red Creeper (Latham 1781: 704). His acquisition of further specimens in 1806 might indicate, perhaps, that he had, by then, disposed of his earlier specimen. The Earl of Derby (then Lord Stanley) purchased a number of specimens from Latham between 1811 and 1815 but none of these appear to have been from Cook's voyages (Derby Ms. lists). Latham's collection of British birds was purchased by Edward Donovan (1817: 6) whose own collection was sold by public auction in London in 1818 (Mullens & Swann 1917: 172-174).

Several extant type specimens of birds collected on Cook's second voyage are in the Naturhistoriska riksmuseet at Stockholm. These had been obtained by Anders Sparrman who joined the *Resolution* at Cape Town in November 1772 as a paid assistant to the elder Forster, an assistant who was to receive, as Sparrman himself later wrote (1786, I: 84), "part of such natural curiosities as they (the Forsters) might chance to collect." Sparrman left the *Resolution* in April 1775 on its return to Cape Town to continue his interrupted African studies, arriving back in Sweden in July 1776.

On his return to Sweden at least some of the bird specimens which he had obtained found their way into the private museum of Johan Gustaf von Carlson where they were when Sparrman published the four fascicules of his *Museum Carlsonianum* between 1786 and 1789. In this work he described in Latin (and illustrated) a number of birds from the voyages, of which eight species had been collected in New Zealand. All of the New Zealand species so described by Sparrman had previously been described in English and given English names by Latham in his *Synopsis*. However, Sparrman gave them scientific binomials which, thus, have priority over the scientific binomials shortly afterwards given to the same species by Gmelin on the basis of Latham's descriptions. The specimens on which Sparrman based his descriptions are, therefore, the types of the species concerned.

The subsequent history and fate of Sparrman's type specimens can be traced through extant manuscript lists in the Naturhistoriska riksmuseet and in the Kungl.Svenska Vetenskapsakademiens at Stockholm. On Carlson's death in 1801 about one hundred bird specimens from his collection went to the Vetenskapsakademiens while the remainder went to the private museums of A. U. Grill and Gustaf Paykull and to the University of Uppsala. Many of such specimens which survived subsequently went to the Naturhistoriska riksmuseet where Sparrman's remaining types were identified by Sundevall in 1857 and Gyldenstolpe in 1926. Several of Sparrman's types from Cook's second voyage (including the types of three New Zealand species) are still in that museum. The New Zealand types are dealt with in this paper. The writer hopes in due course to publish an account of Sparrman's total contribution to the ornithology of Cook's second voyage for, as has been said, "posterity has not yet given him the place he deserves" (Rutter 1953: xx).

THE EXTANT TYPE PAINTINGS

PARADISE DUCK Tadorna variegata (Gmelin, 1789)

The Paradise Duck was first seen at Duck Cove, Dusky Sound, on 6 April 1773, where the elder Forster recorded "a large Duck and Drake blackish white Covers of the wings & one of them had a white head; but they were so shy, that we could get none of them" (Forster 1772-1775: I, 98). On 7 April 1773 he described the species in his Journal under the name *Anas cheneros* (later formally published

in 1844: 92-93, No. 97). Further specimens were taken at Dusky Sound where the species was also noted by Cook and Wales, the latter writing that one of the duck species met with there "on account of its varigated plumage, we called the painted Duck was the most beautiful bird I ever saw" (Beaglehole 1961: 136, 786).

Forster recorded that "one kind of Duck, namely the large Painted Duck" was seen at Queen Charlotte Sound in May - June 1773 (Forster 1772-1775: II, 32) and the "Shel-drakes" found there by Bayly in April - May 1773 may well have been Paradise Ducks (McNab 1914: 207).

Latham (1785: 441-2: No. 6) based his 1785 description of the Variegated Goose on George Forster's painting of a female specimen executed at Dusky Bay in April 1773 (Folio 67; Lysaght 1959: 288). Latham wrote that the species was found at Dusky Bay. Gmelin (1789, I: 505) based his description of *Anas variegata* on Latham's account. Forster's painting is, therefore, the type and the type locality is Dusky Sound. The type painting has been reproduced by the Beggs (1966, 1968, 1975: Plate 48).

GREY DUCK Anas superciliosa superciliosa (Gmelin, 1789)

The first Grey Ducks known to have been collected by Europeans were taken in 1773 on the second voyage at Dusky Sound where they were noted by both the younger Forster and Cook (Forster 1777, II: 156; Beaglehole, 1961: 136). The elder Forster's undated description (1844: 93-4, No. 98) of *Anas leucophrys* recorded that the species inhabited the southern island of New Zealand, being found both at Dusky Bay and Queen Charlotte Sound. His son's painting (Folio 77) was drawn at Dusky Bay (Lysaght 1959: 290).

Latham (1785: 497: No. 45) based his description of the Supercilious Duck on Forster's painting and said that the species inhabited New Zealand where it was found both in Queen Charlotte Sound and Dusky Bay. Gmelin's (1789, I: 537) description of *Anas superciliosa* was based on Latham's description. Forster's painting is therefore the type. The type painting has recently been reproduced by the Beggs (1966, 1968, 1975, Plate 48; 1969: Plate 135). The type locality is Dusky Sound.

NEW ZEALAND SCAUP Aythya novaeseelandiae (Gmelin, 1789)

On 20 April 1773, about a mile up the Seaforth River from Supper Cove in Dusky Sound, the elder Forster's party found and shot the first specimens of the New Zealand Scaup known to have been collected by Europeans (Forster 1772-1775, I: 118-9; Forster 1777, I: 168; Beaglehole 1961: 136). One of the birds taken on this occasion, a male, was painted by George Forster (Folio 79; Lysaght 1959: 290) and his father described the species as *Anas atricilla* from Dusky Sound (Forster 1844: 95-96: 100).

Latham (1785: 543: No. 80) founded his description of the New Zealand Duck on Forster's painting, giving the habitat as Dusky Bay. Gmelin (1789, I: 541) based his Anas novae Seelandiae on Latham's description. Forster's painting is, therefore, the type and the type locality is Dusky Sound. The painting has not yet been published.

WHITE-FRONTED TERN Sterna striata (Gmelin, 1789)

Oliver (1955: 338) was not correct when he said that "Sir Joseph Banks collected an immature specimen of the White-fronted Tern in New Zealand during Cook's first voyage, and from a drawing made by Parkinson, Latham described his Striated Tern." Latham, in fact, described his Striated Tern from a painting by William Ellis of a bird said to have been collected between New Zealand and the Cook Islands on the third voyage (Ellis folio 57: Latham 1785: 358: No. 10, Plate 98; Lysaght 1959: 331). However, Ellis's painting was undoubtedly of the bird collected close to the south-east coast of the North Island on 28 February 1777, an incident described by Anderson as follows "... in the evening an Eggbird or Tern which lighted on the ship was caught but differ'd from all any of us had seen before. It was about the size of the common Tern or sea swallow with the head, back and coverts of the wings finely variegated with black and white, the rest of the body nearly white and the Bill and feet black" (Beaglehole 1967: 819). Anderson, himself, elsewhere described this bird as Sterna variegata (Anderson 1776-1777: 9).

Gmelin (1789, I: 609) based his description of *Sterna striata* on Latham's Striated Tern. Latham's Plate 98 (original Latham drawing 953, still surviving) was based on Ellis's painting. The type painting is here reproduced as Fig. 1.

SHINING CUCKOO Chalcites lucidus lucidus (Gmelin, 1788)

"A fine green new Cuckoo with a white belly, barred transversally with green" shot by Omai, the native from Tahiti, at Queen Charlotte Sound on 5 November 1773 formed the subject of George Forster's painting (Folio 57; Lysaght 1959: 286) and his father's description of *Cuculus nitens* (Forster, 1844: 151: No. 139), both dated 5 November 1773.

This is the only record of the Shining Cuckoo from Cook's second voyage and, although the species was met with again at Queen Charlotte Sound in February 1777 on the third voyage (Beaglehole 1967: 806), no specimens seem to have been taken back to England. Latham's (1782, 528: No. 24, Plate 23) Shining Cuckow was based on the Forster painting and Gmelin's (1788, 1: 421) Cuculus lucidus was based on Latham's description. Latham's plate 23 (original Latham drawing No. 279, still surviving) was based on Forster's painting. Another Forster painting of the Shining Cuckoo has been twice reproduced recently (Kunst 1969; Steiner & Baege 1971: Plate 2) but it is not the type, which is his above folio 57. The type locality is Queen Charlotte Sound.

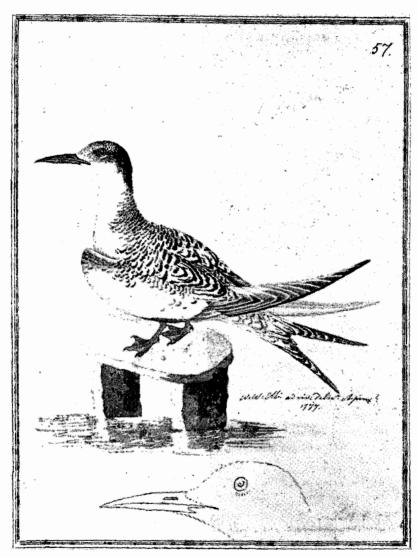


FIGURE 1 — Type painting of White-fronted Tern (Sterna striata) by W. Ellis, 1777. By permission of the Trustees of the British Museum (Natural History).

SOUTH ISLAND BUSH WREN Xenicus longipes longipes (Gmelin, 1789)

The Bush Wren is not specifically mentioned in Forster's Journal but the elder Forster's description (1844, 88-89: No. 92) of *Motacilla longipes* is dated 21 April 1773 when the *Resolution* was at Dusky Sound and he gave the habitat as the southern island of New Zealand. His son's painting (Folio 165; see Lysaght 1959: 309) is undated but was executed at Dusky Sound.

Latham's (1783, 456: No. 74) description of the Long-legged Warbler was based on the Forster painting and he said that the species inhabited Dusky Bay. His previously unpublished drawing (original Latham drawing no. 657, still surviving) is also based on such painting. Latham's drawing is here reproduced as Fig. 2.

Gmelin's (1789, I: 979) Motacilla longipes was founded on Latham's Long-legged Warbler. The Forster painting is, therefore, the type, the type locality being Dusky Sound. Oliver (1955: 453) said that Forster's painting was later reproduced in the report of the Erebus and Terror (Richardson & Gray 1844-75). But the plate to which Oliver referred (Plate 3, fig. 1) is not a reproduction of Forster's painting, although based on it. The Forster painting has recently been published for the first time by the Beggs (1973: Plate 28).

NEW ZEALAND PIPIT Anthus novaeseelandiae novaeseelandiae (Gmelin, 1789)

Under date 21 May 1773 Forster described as Alauda littorea "a new lark" which had been collected in Queen Charlotte Sound (1844: 90-91: 95; 1772-1775, II: 13) and on 30 May 1773 George Forster shot "two sand-larks" on Long Island (Forster 1772-1775, II: 20). One of these specimens formed the basis of George Forster's folio 143 (Lysaght 1959: 305). The species was also recorded on the second voyage by Anderson (1772-1775: 10) under the name Alauda littorea.

The pipit was met with again at Queen Charlotte Sound in February 1777 on the third voyage (Beaglehole, 1967: 807) but Latham's (1783: 384) description of the New Zealand Lark which he said inhabited Charlotte Sound was based on the Forster drawing itself executed at Queen Charlotte Sound. Latham's plate 51 (original Latham drawing No. 621, still surviving) was based on Forster's painting. Gmelin (1789, I: 799) founded his Alauda novae Seelandiae on Latham's description. Forster's painting is, therefore, the type and the type locality is Queen Charlotte Sound.

BROWN CREEPER Finschia novaeseelandiae (Gmelin, 1789)

The Brown Creeper is not specifically mentioned in Forster's Journal and his description of *Parus urostigma* (1844: 90: No. 94) is undated. He gave the habitat as the southern island of New Zealand. George Forster's painting (folio 166; Lysaght 1959: 310) was done



FIGURE 2 — Latham drawing (1783) of South Island Bush Wren (Xenicus longipes longipes) based on type painting by Forster. By permission of the Trustees of the British Museum (Natural History).

at Dusky Sound and is, undoubtedly, of the specimen on which his father founded his description.

There is no evidence that any specimens found their way to England from the voyages and Latham's (1783: 558: No. 26) description of the New Zealand Titmouse (in which he gave the locality as Dusky Bay), and Gmelin's (1789, 1: 1013) Parus novae Seelandiae were based on Forster's drawing which is, therefore, the type with the type locality as Dusky Sound. Forster's painting has been reproduced by the Beggs (1966, 1968, 1975: Plate 48) who originally mistakenly thought it represented the Long-tailed Cuckoo (Eudynamis taitensis). But Forster's Folio 56 is of the Long-tailed Cuckoo and was based on a specimen collected at Tahiti in 1773 (Lysaght 1959: 286).

YELLOWHEAD Mohoua ochrocephala (Gmelin, 1789)

The Beggs (1966, 1968, 1975: 161) stated that Cook's party did not mention Yellowheads at Dusky Sound in 1773. But Forster's (1844: 87-88: No. 91) description of *Muscicapa chloris* was dated 4 April 1773 (while the *Resolution* was at Dusky Sound) and must have been based on "some new Yellow Headed flycatchers" which had been shot at Cascade Cove on 2 April 1773 (Forster 1772-1775, I: 95).

The species was also met with at Queen Charlotte Sound in June 1773 (Forster 1772-1775, II: 32) but it was a specimen shot at Grass Cove (now Whareunga Bay), Queen Charlotte Sound on 2 November 1774 (Forster 1772-1775, V: 51) which formed the basis of George Forster's painting of 3 November 1774 (Folio 157; Lysaght 1959: 308).

There is no evidence that any specimens of Yellowheads found their way to England from Cook's voyages. Latham's (1783: 342: No. 37) description of the Yellow-headed Flycatcher was based on the Forster painting and the habitat was given as Queen Charlotte Sound. Gmelin (1789, I: 944) founded his *Muscicapa ochrocephala* on Latham's description. Forster's painting is, therefore, the type of the species and the type locality is Queen Charlotte Sound. Forster's type painting is here reproduced as Fig. 3.

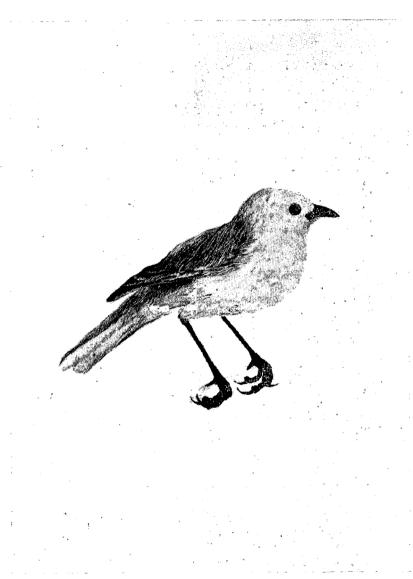


FIGURE 3 — Type painting of Yellowhead (Mohoua ochrocephala) by G. Forster, 1774. By permission of the Trustees of the British Museum (Natural History).