

George Bass, an early bird collector in the Pacific (1801–1802), and some notes on early bird collecting on the Pacific Ocean islands

Justin J. F. J. Jansen

c/o Naturalis Biodiversity Center, Postbus 9517, 2300 RA Leiden, Netherlands. E-mail: justin.jansen@naturalis.nl

Abstract. The arrival of two living Samoan Fruit-doves *Ptilinopus fasciatus* on 7 June 1803 in the harbour of Le Havre, France with the return of one of the Baudin expeditionary vessels, the *Naturaliste*, marked the arrival of the first live birds from the tropical Pacific in Europe. More specimens from the tropical Pacific followed on 24 March 1804 when the second Baudin vessel, the *Géographe*, arrived at Lorient, France. The person responsible for collecting these birds was – most likely – George Bass (1771–1803), who donated these specimens to the expedition commanded by Nicolas Baudin at Port Jackson, Australia in November 1802. This paper documents Bass's bird collecting activities, his 1801–02 voyage, the role of the Baudin expedition and the Muséum National d'Histoire naturelle in Paris (e.g., donation, exchanges), and it documents the history of bird collecting in the tropical Pacific – on locations visited by Bass – pre-1823.

Key words. George Bass; Nicolas Baudin; Pacific; Birds; Australia; Cook Expeditions.

INTRODUCTION

George Bass (1771–1803) is a well-known explorer of Australia and to a lesser extent of the Pacific (Bowden 1952, Estensen 2005, 2009). Little has been published on his ornithological activities in Australia (pre-1800), and in the Pacific and New Zealand (1801–02). His connection with the expedition commanded by Nicolas Baudin to Australia (1800–1804) has been published (Bowden 1952: 113, Estensen 2005: 160–161, Starbuck 2009: 105, Jansen 2014, Jansen & van der Vliet 2015), in particular the merchandise he sold to the expedition (e.g., Bass sold pork, salt and other goods to the expedition). In addition, he donated 160 ethnographic artifacts when the expedition was moored in Port Jackson in November 1802 (Hamy 1906, Péron 1994: 159–167, Starbuck 2009: 171, 212). According to Horner (1987: 329), the number of artifacts was 206, however, this was the total number of artifacts collected during the entire Baudin expedition (Muséum d'Histoire naturelle Lé Havre, France, Ms21001; Starbuck 2009: 171). A part of the whaleboat in which Bass discovered Bass Strait was also given to the expedition (Bowden 1952: 68); its current whereabouts, as well as the ethnographical material he donated, are at present unknown. Ethnographical material was confiscated by Napoleon's wife, the Empress Joséphine de Beauharnais and incorporated into her private collection at her Malmaison estate, and subsequently destroyed in 1814 by invading troops during the final months of Napoleon's reign, while the rest was dispersed and sold in 1829 after Josephine's son Eugene de Beauharnais died (cf. Hamy

1906, Horner 1987: 329, Péron 1994: 224, Duyker 2006: 212, 289, Attenbrow 2010: 86, Fornaseiro *et al.* 2010: 355). Bass also donated notes to the Baudin expedition on the vocabulary and grammar of the “savages” at Port Jackson (Starbuck 2009: 171), as well as details regarding Bass Strait. Bass boarded the *Géographe* at least once for a visit, on 14 November 1802, in the company of Governor King and Captain Kent (Starbuck 2009: 102).

Until 1823 expeditions in the Tropical Pacific are few – but included those by Bougainville, Cook, Malaspina, Bruni d'Entrecasteaux, Vancouver, Krusenstern, Freycinet, Kotzebue (Brosse 1983) – but the first to make notable collections after the Cook expeditions was the *Coquille* in 1823 (Holyoak & Thibault 1982). This paper discusses the birds almost certainly collected by Bass during his Pacific travels and documents his early collecting in Australia.

Birds collected by Bass prior to 1801: We find the first evidence of Bass collecting natural history specimens in a letter written to his wife Sarah Bass (1798, State Library NSW, MLMSS 6544 / 6 letter 2). In this letter, he states his plans to accompany Mathew Flinders to Tasmania to collect natural history specimens for Joseph Banks and the Linnean Society in London (Whittell 1954: 40–46).

In a letter to the famed naturalist Joseph Banks (1743–1820) dated 27 May 1799 (State Library NSW, Series 72.005, CY 3682 11–14), Bass mentions, in describing his voyage during which he and Mathew Flinders discovered the Bass Strait: ‘In the course of this expedition I collected at different times some few new subjects, both



Fig. 1. Reconstruction of the journey made by George Bass between 21 November 1801 and 14 November 1802.

animals and plants; but they were from time to time destroyed by rain or by the seas which in bad weather the boat was constantly moving; so that none remained upon my arrival at Port Jackson'. With this letter, Bass also sent to Banks a skull of a Common Wombat *Vombatus ursinus* (Estensen 2005: 120, Pigott & Jessop 2007: 210), most likely collected west of Port Jackson, as well as skins of two birds: a Spotted Quail-thrush *Cincoloma punctatum dovei* (described by Bass as a beautiful "banded runner" that had been chased and caught by a greyhound), collected in early January 1799 along the River Derwent in south-east Tasmania (Bowden 1952: 78, 83), and a Superb Lyrebird *Menura n. novaehollandiae* (described by Bass as a rare and new pheasant) (Bowden 1952: 83). The last is the bird mentioned by Collins (1804: 65) and Olsen (2001: 33) as the specimen collected along the Hawkesbury River near Port Jackson.

Bass regularly went out from Port Jackson in search of new or rare natural history specimens (Bowden 1952: 33). William Paterson, Lieutenant-Governor of New South Wales and a collector of natural history specimens for Banks, probably encouraged Bass's collecting activities, as both men knew each other and notes from Bass's observations on birds can be found in Paterson's diaries (cf. Bowden 1952: 66, 71–75, 78). Bass met Banks when in England in 1800, and presented Banks with some additional information on the items he had sent (it is unknown if Bass sent Banks more than one shipment of specimens). In the entry on Bass in the Australian Dictionary of Biography (<http://adb.anu.edu.au/biography/bass-george-1748>), Bowden mentions natural history publications by Bass, but unfortunately, I have not located them.

While at Port Jackson, Bass was made an associate member of the Society for Promoting Natural History, in

the same decade as Paterson (1755–1810) (who subsequently became a full member), John William Lewin (1747–1795) and botanist Robert Brown (1773–1858). The Society for Promoting Natural History was later merged with the Linnean Society (Neville 2012: 72).

In addition to the sites mentioned below, Bass could also have collected birds at Norfolk Island during visits in September–October 1796 and June–July 1798, New Caledonia and Tuvalu in June 1799, the Gilbert Islands (Abemama, Nonuti, Taputea), Marshall Islands and Mariana Islands in July 1799, Saint Helena in early 1800, as well as some other places visited during his voyages (Bowden 1952, Estensen 2005, 2009).

Pacific Journey: Bass was contracted by Governor Philip Gidley King (1758–1808) to sail to Tahiti and transport salted pork back to Port Jackson, as food was scarce in Port Jackson but pigs were plentiful in Tahiti. From Port Jackson, Bass sailed into the Pacific on 21 November 1801 with Charles Bishop (1765–1810), and didn't return until 14 November 1802 (Bowden 1952: 106–113, Bowden 1980: 86–87, Estensen 2005: 149–161). In quotes below the supposed visits made by Bass (see Fig. 1).

Bass first landed at Dusky Sound, South Island, New Zealand (6–21 December 1801) (Anon. 1908a,b,c, Hamy 1906: 31–32, Péron 1994: 230–231, Bowden 1980, Rusden 2011: 415–416), and then proceeded on to the Austral Islands (Raivavae, Tubai) ('December 1801 or/and January 1802') (Estensen 2005: 150–151), Tahiti (24 January – 6 February 1802, 'July'–19 August 1802) (Anon. 1967, Anon. 1908b: 226, Hamy 1906: 30, Péron 1994: 229, Bowden 1952, Estensen 2005), Moorea ('February 1802') (Estensen 2005: 152), Kiribati ('February or/and March 1802') (Estensen 2005: 154), the Hawaiian Islands (Hawaii, Molokai, Kauai, Oahu) (11 March – July 1802) (see below), Moorea (August 1802) (Anon. 1967), French Polynesia (Huahine, Raiatea, Tahau (August 1802) (Bowden 1952: 112)), the Marquesas (island(s) visited unknown, 'August or/and September 1802') (Estensen 2005: 157), Tonga (island(s) visited unknown, 'September or October 1802') (cf. Hamy 1906: 30, Bowden 1980: 86–87, Péron 1994: 229), Samoa (Tutuila) ('September or/and October 1802') (cf. Hamy 1906: 28–32, Maude 1964: 262, Gilson 1970: 67, Pearson 1970: 140, Bowden 1980: 86–87, Linnekin 1991: 16, Péron 1994: 226–231, Tcherkézoff 2008: 73), (possibly) Fiji ('October 1802') (Bowden 1980: 86–87, Estensen 2005: 159), (possibly) Vanuatu ('October 1802') (cf. Bowden 1980: 86–87) and Cook Islands ('October or/and November 1802') (cf. Hamy 1906: 31, Péron 1994: 230). During Bass's stay in Tahiti, Lewin was also present (Neville 2012: 72–75).

Bass's visit to the Hawaiian Islands is notable. Documentation of his visit includes several letters (see Bowden 1980), including letters from Kealakekua Bay, Hawaii (George Bass to Sarah Bass, 20 May 1802, ZML MSS

6544, ML (Mitchell Library), Sydney) (Bowden 1980: 86–87, Estensen 2009: 154), Oahu (6 letters between Bass and James Innes) (the letters to Innes, who lived in Portsea (Hampshire), England, were sold at Christie's, London on 15 October 2009, then purchased by Hodern House, Sydney (an antique shop) and subsequently re-sold to a private collector (Matthew Fishburn in litt. 18 November 2014); one of the letters, dated 23 May 1802, was written by Bass at Waikiki Bay, Oahu), Kauai (Bowden 1980: 86–87) and Molokai (George Bass to Elisabeth Bass, 20 May 1802, ZML MSS 6544, ML, Sydney) (Estensen 2009: 151–153). Four ethnographic artifacts donated by Bass from the "Îles Sandwich" (= Hawaiian Islands) were listed as no. 74 and nos. 90–92 in the manifest of the ethnographic artifacts that returned with the Baudin expedition written by François Péron, the expedition's surviving zoologist (Hamy 1906: 30, Péron 1994: 229–230). Of special interest is no. 74, which Péron described as a "Grand pièce d'étouffe de plusieurs aunes de longueur en trois doubles, dont l'un noir, l'autre jaune, le 3e jaune strié de noir" ("Large piece of fabric several yards in length in three doubles, one black, the other yellow, the third streaked with black"). The striking colors indicate that this may have been a feather cloak made from the black and yellow feathers of the Hawaii Mamo *Drepanis pacifica* and Hawaii Oo *Moho nobilis*.

MATERIAL & METHODS

As part of an ongoing research into the bird collections made at the Baudin expedition (1800–1804), all known archival material and specimens brought back are researched (Jansen 2014, 2015, 2016, 2017a). For this, specimens were researched at: Università degli Studi di Firenze, Italy (C.G.U.); Muséum d'histoire naturelle Blois, France; Museum-Aquarium de Nancy, France; Muséum d'Histoire Naturelle de La Chaux-De-Fonds, Switzerland (MHNC); Muséum d'histoire naturelle de la Ville de Genève, Switzerland (MHNG); Musée George Sand et de la Vallée Noire, La Châtre, France (MLC); Muséum national d'Histoire naturelle, Paris (MNHN); Naturalis Biodiversity Center, Leiden, Netherlands (Naturalis); National Museum of Scotland, Edinburgh, Scotland (NMS); Naturhistorisches Museum Wien, Austria (NHMW) and Museo di Zoologia, Università di Torino, Italy (MZUT). Additional information was gathered at the MNHN library, the Archives Nationales, Pierrefitte-sur-Seine, France; and in Muséum d'histoire naturelle du Havre, France. I further examined specimens and documents in the Linnean Society, London, UK; Natural History Museum, London, UK; Natural History Museum, Tring, UK; Musée Boucher-de-Perthes, Abbeville, France; Museum für Naturkunde Berlin, Berlin, Germany and Naturhistoriska riksmuseet, Stockholm, Sweden.



Fig. 2. MNHN 2005–2563, Samoan Fruit-dove *Ptilinopus fasciatus*: collected on Samoa, caught in ‘September or October 1802’ and shipped alive on the *Naturaliste*. It arrived alive in France at 7 June 1803, but died soon after. (Photograph by Justin J.F.J. Jansen, February 2015; © Muséum National d’Histoire naturelle, Paris.)

RESULTS

Arrival in Europe and dispersal of specimens

Donation. When supplying the Baudin expedition (that visited Tenerife, Australia, Timor, Mauritius and South Africa), Bass donated to the expedition ethnographical items (see above), and the presence of birds from the same locations link them. These items were all shipped back later at the *Géographe*, but at least two live birds, a pair of Samoan Fruit-doves *Ptilinopus fasciatus* (Fig. 2) – most likely – collected by Bass, arrived with the *Naturaliste* (Jangoux *et al.* 2010). In addition to a variety of other live birds and mammals, the *Naturaliste* brought back 599 bird specimens according to Louis Dufresne, taxidermist at the Muséum national d’Histoire naturelle, Paris, France (2 August 1803, Archives Nationales AJ/15/590). Possibly because all the specimens that returned on the *Naturaliste* had already been packed (by Péron and Charles-Alexan-

dre Lesueur) when Bass arrived back in Port Jackson only the two Samoan Fruit-doves arrived in France on the *Naturaliste* which sailed directly from Sydney to Le Havre with short stops only at King Island and Mauritius. The *Géographe* arrived in France in March 1804 with 422 bird skin specimens and 34 live birds (Dufresne inventory of 28 April 1804, *Collections Mammifères et Oiseaux* MNHN).

Documentation. Several lists of the ornithological contents from both ships were compiled after the *Géographe* specimens arrived at the MNHN on 18 July 1804, joining the material shipped back on the *Naturaliste* that had arrived there in July 1803 (Burkhardt 1997: 505, Starbuck 2009: 213). Dufresne compiled three incomplete lists, one now in the *Collections Mammifères et Oiseaux* in the MNHN (undated), one at the Muséum d’Histoire naturelle, le Havre (Ms 21036) (dd. 26 June 1804) and one in the Archives Nationales, Paris (AJ/15/592) (dd. 27 June 1804)



Fig. 3. MNHN 2014–432, Tui *Prosthemadera n. novaeseelandiae*, collected at Dusky Sound, South Island, New Zealand, 6–21 December 1801, arrived at 18 July 1804 in France aboard the *Géographe*. (Photograph by Phil Koken, February 2015; © Muséum National d’Histoire naturelle, Paris.)

while a fourth list (undated), also in the *Collections Mammifères et Oiseaux* MNHN, is probably a transcription by an unknown author (Jansen 2016). All four lists only identify the specimens by family and by the number of species and specimens, but do not identify the individual species

within each family listed; moreover, they include only ten annotations of collecting localities. Even so, we find on these lists the collecting locality “d’otaiti”, i.e., “from Tahiti”, mentioned twice, first in the entry for “Grive nouveau” (“new thrush”), possibly the Society Island Flycatcher *Po-*



Fig. 4. MNHN A.C. 9818, Polynesian Triller *Lalage maculosa* ssp., collected in 1801–02 in the Pacific, arrived at 18 July 1804 in France on-board of *Géographe*. (Photograph by Justin J.F.J. Jansen, February 2015; © Muséum National d’Histoire naturelle, Paris.)

marea nigra (two specimens listed, both no longer present in the MNHN), annotated as “tres beau d’otaiti” (“very beautiful from Tahiti”). Tahiti is mentioned again in the entry for “Mycteria – Jabiru”, probably referring to the Black-necked Stork *Ephippiorhynchus asiaticus australis* of Australia (one specimen), annotated with “et un bec d’otaiti” (“and one beak from Tahiti”), the origin of the latter species apparently misidentified (list in *Collections Mammifères et Oiseaux* MNHN). Included in the list of live animals brought back on the *Naturaliste* were “Tourterelles des îles des Navigateurs” (“Turtledoves from the Navigator Islands”) (cf. Jangoux *et al.* 2010: 271, 281). Both turtledoves and fruit-doves were referred to as “tourterelles” at that time (cf. Buffon 1765–1783: plate 142). The only pigeon present to date in MNHN (Fig. 2) from the ‘îles des Navigateurs’ (= Samoa) is a single Samoan Fruit-dove, the pedestal underside confirms its origin (arrived in An XI = via the *Naturaliste* according to Louis Dufresne on the pedestal underside). These specimens, of the “Grive nouveau” and the “Tourterelles des îles des Navigateurs”, almost certainly came from Bass, as the Baudin expedition did neither visit Tahiti nor Samoa. However, crew-member Hyacinthe de Bougainville, mentioned as origin the Sandwich Islands (de Bougainville, Archives nationales de France, 155 AP6).

The Birds. Bass most likely collected four specimens of birds presently in the MNHN; however, as all four lack their original labels (which applies as well to all specimens (1000’s) in the MNHN acquired prior to 1850), their origin remains speculative. The four specimens are: two Tui *Prothemadera novaeseelandiae* (only one, registered as

MNHN-ZO-2014-431, is still present (Fig. 3); the other has not been located by me but it is noted in the acquisition books and was present in 1856), most likely collected by Bass at Facile Harbour, Dusky Sound, New Zealand between 7–21 December 1801 (its origin is documented in the pedestal underside that mentions “Nouvelle Zélande / La Découverte an 12 / Peron et Lesueur / No 80 / 10116 / *Prothemadera novaeseelandiae* / Gm); Samoan Fruit-dove (MNHN-ZO-2005-2563, Fig. 2), collected by Bass in Samoa in ‘September or October 1802’ (this is one of the two captive Samoan Fruit-doves noted above that arrived on the *Naturaliste* in 1803; the other is no longer present in the MNHN) (Jangoux *et al.* 2010: 271, 281)); and Polynesian Triller *Lalage maculosa* (MNHN-ZO-2016-523, Fig. 4, a skin that was mounted before) (its new label mentions “Exp Baudin / Ex. Peron et Lesueur / “*Lalage Pacifica*”), was collected on an unspecified Pacific locality. Also, on 27 March 1805 a parakeet from Tahiti was ‘sold’ to Dufresne, for his private collection (Archives Nationales AJ/15/593).

The notes at the Pigeon and Tui are from Louis Dufresne’s hand, who mounted birds that arrived in the museum to be used for the galleries almost directly after arrival in the museum (Archives Nationales AJ/15/592 & 593, Jansen 2016). This makes these specimens amongst the best-documented birds from the tropical Pacific collected pre-1823 (Medway 2004). All other Pacific birds in European collections lack their original label, and only very few are proven to be collected from the Tropical Pacific before 1823 (Burton 1968, Medway 2004, Steinheimer 2005).

Exchanges

Only half of the 1.055 specimens (all skins) that arrived with the Baudin expedition were mounted for exhibition in the MNHN galleries and about 397 are still present in European collections (Jansen 2017a). The remainder – especially those birds that arrived on the *Géographe* – were used for exchanges and donations (Jansen 2014, 2016, Jansen & van der Vliet 2015). It is uncertain how many bird specimens were in good condition upon the expedition's return, considering that the ships were probably infested with swarms of cockroaches and rats (Laurent 1997), or how many deteriorated soon after their arrival in France, noted is that some had to be thrown away (Louis Dufresne, 7 May 1811, Laboratory MNHN).

No less than 178 birds were disposed of Empress Josephine (Geoffroy at 23 September 1804, Archives Nationales AJ/15/593) (93 birds from the *Naturaliste* and 85 birds from the *Géographe*, most likely donated in two shipments). Donations were made to schools in Rouen and Moulins (Jansen 2014, 2016, 2017a) and to Vienna in 1815 as partial repayment or material looted during the Napoleonic Wars (Bauer & Wagner 2012; Archives Nationales France, AJ/15/840). Baudin specimens were also probably amongst the 847 birds donated to the Netherlands for the same reason (Archives Nationales France, AJ/15/840) (Jansen 2016: 104).

Most specimens that arrived on the *Géographe* were purchased by or donated to the Baudin expedition, as estimated by 93 specimens from *Géographe* still at the MNHN; only 23 birds of which were collected in Australia, a large portion originated from countries not visited by the Baudin expedition, for example: Sumatra, Java, Celebes, Madagascar and India. It is unknown how many birds, from the total number that arrived on the *Géographe*, originated with Bass. That all these precious specimens left the MNHN was primarily due to the lack of an ornithologist as curator of the bird collection. At that time a visitor, the clerk of *Bulletin des Lois*, Louis Vieillot, described a portion of the birds brought back as new birds (cf. Mearns & Mearns 1998: 133–134).

The speed with which new specimens were dispersed is shown by the purchase of 30 skins in 1806 by Leopold von Fichtel from John Latham; these birds, currently in Naturhistorisches Museum Wien, Vienna, Austria, were collected at Dalrymple Bay, Tasmania in April 1802 (Autogr. 21/35 L.v. Fichel, Österreichische Nationalbibliothek, Vienna, Austria) (Bauernfeind 2004: 557), an area visited by the Baudin expedition in March–April 1802 (*Naturaliste*). The area was also visited by Robert Brown on 1–17 January 1804 (cf. Vallance *et al.* 2001; Jansen 2014), who collected two bird specimens there (NHMUK London, Brown, M.S. Descriptions Animals HMS *Investigator* 1801–1805. Aves). From these two specimens for one its whereabouts remain unknown (one was donated to Lin-

nean Society in 1818 (list in Linnean Society (S.P. 156) and a typed version of the BM donation in NHM, London (NHM London, Brown, M.S. Descriptions Animals HMS *Investigator* 1801–1805. Aves)). So, part of these Dalrymple Bay specimens have (if the rumoured date is correct) – most likely – originated from the Baudin expedition (visited by the *Naturaliste* in April 1802), the other from William Paterson who resided here for a few years between 1804 and 1809.

Other specimens ended up in the private collection of Coenraad Jacob Temminck, then a private collector, and later his collection formed the nucleus of the collection we now know as Naturalis Biodiversity Center, Leiden. In his collection six Pacific specimens arrived between 1803–04 and 1807 and was enlarged to 22 specimens (Jansen 2017b: 353), and amongst them is a Tonga Fruit-dove *Ptilinopus porphyraceus* (RMNH.AVES.213951) (maybe this is the other 'Samoan Fruit-dove' shipped alive on the ship *Naturaliste*). But a fair number ended up in numerous other collections in Europe (see for more details Jansen 2017a).

Some specimens from the Baudin expedition may also have been among specimens from MNHN that entered the Lever Museum in London (Jansen & van der Vliet 2015).

DISCUSSION

We find various bird specimens from the tropical Pacific and New Zealand collected prior to 1823 (appendix 1) in older collections (e.g., Berlin, Cambridge (USA), Edinburgh, Göttingen, Hannover, Leiden, LIVCM, MNHN, Stockholm, NHM, Turin, Vienna) that are still in good condition, probably due to their having been treated with arsenic soap either when they were collected or upon their arrival in Europe (the recipe for arsenic soap was known to the French and a few others like C.J. Temminck and François Levaillant (cf. Steinheimer 2003, Jansen & Roe 2013, Jansen & van der Vliet 2015)). Few expeditions and/or collectors are known to have been active in the locations visited by George Bass (see appendix 1).

In this paper, it has been shown that: 1) George Bass has been neglected as a natural history collector; 2) There is evidence that he had direct links with the Baudin expedition, as for ethnographical material (proven) also ornithological material could be donated to the expedition and eventually ended up in the MNHN; 3) Few, if any, extant pre-1823 bird skins are unambiguously attributable to specific collectors, due to inadequate labelling; 4) However, locality information and known routes of Baudin and of Bass suggest Bass probably collected some skins that were taken to France; 5) The fate of Bass's now poorly-documented specimens illustrates the problem of determining the provenance of tropical Pacific specimens that were circulating in Europe in the early 19th century.

I encourage further research to find missing documents and to locate additional information of tropical Pacific and Australian specimens collected by George Bass.

Acknowledgements. I thank Erik Åhlander (Swedish Museum of Natural History, Stockholm, Sweden), Lynda Brooks (Linnean Society London), Donna Campbell (State Library of New South Wales), Alice Cibois, Mariane Estensen, Matthew Fishburn (Modern House, Sydney), Paul Martyn Cooper (NHMUK, London), Hein van Grouw (NHMUK, Tring), Alison Harding (NHMUK, Tring), Ulf Johansson (Swedish Museum of Natural History, Stockholm, Sweden), Adrienne Kaeppler, Murray Lord, David Moore, Tony Parker (LIVCM), Laurent Raty, Roger Safford, Jean-Claude Thibault, Benjamin Thomas (Trinity College, Melbourne, Australia) and Roland E. van der Vliet, for providing additional information. Patrick Boussès, Anne Préviateo and Claire Voisin for hosting my visits to MNHN. Andrew Black, Storrs L. Olson and Bert Theunissen reviewed an earlier manuscript and made many useful additions. André van Loon made the figure in this article. Richard S. Roe found time to discuss the structure and content of the first editions and to read and comment on these editions. I received support from the SYNTHESIS Project <http://www.synthesis.info/> that is financed by European Community Research Infrastructure Action under the FP7 “Capacities” Program.

REFERENCES

- Anonymous (1908a) George Bass to Captain Waterhouse, 30 January 1802. *Historical Records of New Zealand* 1: 226
- Anonymous (1908b) Governor King to Sir Joseph Banks, 5 June 1802. *Historical Records of New Zealand* 1: 237–240
- Anonymous (1908c) George Bass to Captain Waterhouse, 2 February 1803. *Historical Records of New Zealand* 1: 245–246
- Anonymous (1967) Mysteries of the Bass Islands. *Pacific Island Monthly* 38 (1): 95–96
- Annemaat L (2014) *Natural Curiosity. Unseen art of the First fleet.* NewSouth Publishing, Sydney
- Attenbrow V (2010) *Sydney's Aboriginal Past: Investigating the Archaeological and Historical Records.* Royal Zoological Society of New South Wales, Sydney
- Bauer AM, Wagner P (2012) Previously unrecognized types from the Baudin expedition (1800–1804) in the Naturhistorischen Museum Wien. *Herpetozoa* 24 (4): 135–147
- Bauernfeind E (2004) Bird specimens from the Leverian Museum: documentation and present holdings at the NMW. *Denisia* 13: 555–565
- Beechey FW (1839) *The Zoology of Captain Beechey's Voyage; Compiled from the Collections and Notes Made by Captain Beechey, the Officers and Naturalist of the Expedition, During a Voyage to the Pacific and Behring's Straits Performed in His Majesty's Ship Blossom, Under the Command of Captain F.W. Beechey, in the Years 1825, 26, 27, and 28.* H.G. Bohn, London
- Bowden KM (1952) *George Bass 1771–1803. His discoveries Romantic Life and Tragic Disappearance.* Oxford University Press, London
- Bowden KM (1980) Annual Post-Graduate Oration: George Bass, 1771–1803, Surgeon and Sailor. *The Bulletin of the Post-Graduate Committee in Medicine, University of Sydney* 36 (4): 69–92
- Brosse J (1983) *Great Voyages of Discovery. Circumnavigators and Scientist, 1764–1843.* Facts on File Publications, New York
- Buffon GLL (1765–1783) *Planches enluminées d'histoire naturelle.* Volume 2. Paris
- Burkhard RWjr (1997) Unpacking Baudin: Models of scientific practice in the age of Lamarck. Pp 497–514: in Laurent, G. (ed.). *Jean-Baptiste Lamarck, 1774–1829.* CTHS, Paris
- Burton PJK (1969) Two bird specimens probably from Cook's voyages. *Ibis* 111: 388–390
- Callcott M, Bloxham RR, Byron GA (1826) *Voyage of H.M.S. Blonde to the Sandwich Islands in the years 1824–1825, Captain the Right Hon. Lord Byron, Commander. John Murray,* London
- Chalmers-Hunt JM (1976) *Natural History Auctions 1799–1972. A register of Sales in the British Isles.* Sotheby Parke Bernet, London
- Chisholm AH (1960) *The romance of the Lyrebird.* Angus & Robertson, Sydney
- Collins D (1804) *An account of the English colony in New South Wales from its first settlement in January 1788 to August 1801. Volume II.* Cadell & Davies, London
- Currey JEB (1966) *Reflections on the colony of New South Wales.* Georg Caley, Explorer and Natural History collector for Sir Joseph Banks. Lansdowne Press, Melbourne
- Dixon G (1789) *Voyage around the world: but more Particularly to the North-West Coast of America: Performed in 1785, 1786, 1787, and 1788, in The King George and Queen Charlotte, Captains Portlock and Dixon.* John Stockdale, London
- Duyker E (2006) *François Péron: An Impetuous Life: Naturalist and Voyager.* The Miegunyah Press, Melbourne
- Estensen M (2005) *The life of George Bass. Surgeon and sailor of the Enlightenment.* National Maritime Museum, London
- Estensen M (2009) *The letters of George & Elisabeth Bass.* Allen & Unwin, Crows Nest
- Finney CM (1984) *To sail Beyond the Sunset. Natural History in Australia 1699–1829.* Rigby Publishers, Adelaide
- Fornasiero FJ, Monteath P, West-Sooby J (2010) *Encountering Terra Australis: The Australian Voyages of Nicolas Baudin and Matthew Flinders.* Wakefield Press, Adelaide
- Gammage B (2009) Galahs. *Australian Historical Studies* 40 (3): 275–293
- Hamy E-T (1906) *Les collections anthropologiques et ethnographiques du voyage de découvertes aux terres-australes (1801–1804).* *Bulletin de géographie historique et descriptive* 1: 24–34
- Gilson RP (1970) *Samoa, 1830–1900: the politics of a multicultural community.* Oxford University Press, Melbourne
- Hartert E (1916) On the Birds figured in the atlas of Krusenstern's voyage round the World. *Novitates Zoologicae* 23: 94–95
- Horner F (1987) *The French Reconnaissance: Baudin in Australia, 1801–1803.* Melbourne University Press, Melbourne
- Holyoak DT, Thibault J-C (1982) *L'exploration ornithologique de la Polynésie orientale.* *Journal de la Société des océanistes* 38 (74–75): 259–273
- Jansen JJFJ (2014) Towards the resolution of long-standing issues regarding the birds collected during the Baudin expedition to Australia and Timor (1800–1804): a review of original documents reveal new details about collectors, donors, numbers and disbursement. *Journal of the National Museum (Prague). Natural History Series* 183 (1): 5–18
- Jansen JJFJ (2015) The bird collection of the Muséum national d'Histoire naturelle, Paris, France: the first years (1793–1825). *Journal of the National Museum (Prague). Natural History Series* 184: 81–111

- Jansen JFJ (2016) Towards the resolution of long-standing issues regarding the birds collected during the Baudin expedition to Australia and Timor (1800–1804): the discrepancy in the number of birds collected and their subsequent handling. *Journal of the National Museum (Prague). Natural History Series* 185 (2): 7–19
- Jansen JFJ (2017a) Towards the resolution of long-standing issues regarding the birds collected during the Baudin expedition to Australia and Timor (1800–1804): specimens still present and their importance to Australian ornithology. *Journal of the National Museum (Prague). Natural History Series* 186: 51–84
- Jansen JFJ (2017b) An unpublished “Catalogue de Cabinet de C. J. Temminck” (c. 1803–1804). *Archives of Natural History* (2): 352–355
- Jansen JFJ, Roe RS (2013) Tracking Cook’s third voyage (1776–79) Hawaiian Rails *Porzana sandwichensis*, with some comments on their type status. *Bulletin of the British Ornithologists’ Club* 133: 59–67
- Jansen JFJ, van der Vliet RE (2015) The chequered history of the Chattering Kingfisher *Todiramphus tutus* in Tahiti. I: type specimens. *Bulletin of the British Ornithologists’ Club* 135: 108–120
- Jangoux M, Jouanin C, Métivier B (2010) Les animaux embarqués vivants sur les vaisseaux du voyage de découvertes aux Terres australes. Actes du colloque Portés par l’air du temps: les voyages du capitaine Baudin, Bruxelles, septembre 2009, *Etudes sur le XVIIIe Siècle* 38: 265–282
- King PP (1827) Narrative of a Survey of the Intertropical and Western Coasts of Australia: Performed between the years 1818 and 1822. Volume 2. John Murray, London
- Laurent G (ed.) 1997. Jean-Baptiste Lamarck, 1744–1829. Éditions du Comité des travaux historiques et scientifiques (CTHS), Paris
- Laissus Y (1978) Catalogue des manuscrits de Philibert Commerçon (1727–1773) conservés à la Bibliothèque Centrale de Museum National d’Histoire Naturelle (Paris). *Revue d’histoire des sciences* 3: 131–162
- Linnekin J (1991) Ignoble savages and other European visions: the La Pérouse affair in Samoan history. *Journal of Pacific History* 26 (1): 3–26
- Lysaght A (1959) Some eighteenth century bird paintings in the Library of Sir Joseph Banks (1743–1820). *Bulletin of the British Museum (Natural History), historical series* 1 (6): 251–371
- Maude HE (1964) Beachcombers and castaways. *The Journal of the Polynesian Society* 73 (3): 254–293
- Mearns B, Mearns R (1998) *The Bird Collectors*. Academic Press, San Diego
- Medway DG (1979) Some ornithological results of Cook’s third voyage. *Journal of the Society for the Bibliography of Natural History* 9: 315–351
- Medway DG (2004) The extant type specimens of birds from New Zealand and the Society Islands collected on Cook’s second voyage and described by Anders Sparrman in *Museum Carlsonianum* (1786–1789). *Notornis* 51: 131–135
- Medway DG (2011) The contribution of Thomas Pennant (1726–1798) Welsh naturalist, to the Australian ornithology of Cook’s first voyage (1768–1771). *Archives of Natural History* 38 (2): 278–286
- Neville R (2012) Mr J.W. Lewin. Painter & Naturalist. Sydney: NewSouth Publishing
- Norst MJ (1989) Ferdinand Bauer. The Australian Natural History Drawings. British Museum, London
- Olsen P (2001) Feather and brush. Three centuries of Australian bird art. CSIRO Publishing, Collingwood
- Olson SL (1986) An early account of some birds from Mauke, Cook Islands, and the origin of the ‘Mysterious Starling’ *Aplornis mavornata* Buller. *Notornis* 33: 197–208
- Olson SL (2006) Birds, including extinct species, encountered by the Malaspina Expedition on Vava’u, Tonga, in 1793. *Archives of Natural History* 33 (1): 42–52
- Olson SL, James HF (1994) A chronology of ornithological exploration in the Hawaiian Islands, from Cook to Perkins. *Studies in Avian Biology* 15: 91–102
- Pearson WH (1970) The reception of European voyagers on Polynesian islands, 1568–1797. *Journal de la Société des océanistes* 26 (27): 121–154
- Péron F (1994) ‘Inventaire général de tous les objets relatifs à l’histoire de l’homme recueillis pendant le cours de l’expédition ou remis à M. Péron, naturaliste zoologiste du Gouvernement dans cette expédition, et présentés par M. Geoffroy et lui à Sa Majesté l’Impératrice Joséphine le 9 prairial an XII’. Pp 195–203. in Copans J, Jamin J. (eds.) *Aux origines de l’anthropologie Française: Les Mémoires de la Société des Observateurs de l’Homme en l’an VIII*. Le Sycamore, Paris
- Piggott LJ, Jessop L (2007) The governor’s wombat: early history of an Australian marsupial. *Archives of Natural History* 43 (2): 207–218
- Salvadori T (1895) Catalogue of the *Chenomorphae* (*Palamedeae*, *Phoenicopteri*, *Anseres*), *Crypturi*, and *Ratitae* in the collection of the British Museum. Catalogue of the Birds in the British Museum. Volume XXVII. The trustees, London
- Schifter H (1992) Die Vögel aus dem Nachlass Ferdinand Lucas Bauer im Naturhistorischen Museum Wien und die darunter befindlichen Typen. *Annalen des Naturhistorischen Museums in Wien* 93: 41–57
- Sharpe RB (1906) Birds. Pp. 79–515 in Günther ACL (ed.). The history of the collections of the natural history departments of the British Museum. British Museum, London
- Starbuck N (2009) Constructing the “Perfect” Voyage. Nicolas Baudin at Port Jackson. The University of Adelaide, Adelaide
- Steinheimer FD (2003) Darwin, Rüppell, Landbeck & Co. – Important Historical Collections at The Natural History Museum, Tring. *Bonner zoologische Beiträge* 51 (2/3): 175–188
- Steinheimer FD (2005) Wissenschaftliche Fundgruben: Historische Vogelsammlungen in Deutschland. *Der Falke* 52: 272–276
- Stresemann E (1951) Type Localities of Australian Birds collected by the “Expedition Baudin” (1801–1803). *The Emu* 51: 65–70
- Stresemann E (1953) Vögel, gesammelt von Labillardiere während der “Voyage à la Recherche de Lapérouse” (1791–1794). *Mitteilungen aus dem Zoologischen Museum in Berlin* 29 (1): 75–106
- Tcherkézoff S (2008) First Contacts in Polynesia – the Samoan Case (1722–1848): Western Misunderstandings about Sexuality and Divinity. The Australian National University, Canberra
- Vallance TG, Moore DT, Groves EW (2001) Nature’s Investigator. The Diary of Robert Brown in Australia 1801–1805. ABRS, Canberra
- Webb J (1995) George Caley: Nineteenth Century Naturalist. Surrey Beatty & Sons, Chipping Norton
- Whittell HM (1954) The literature of Australian Birds. Paterson Brokensha, Perth
- Whitehead PJP (1978) A guide to the dispersal of zoological material from Captain Cook’s Voyages. *Pacific Studies* 2 (1): 52–93

APPENDICES

PREVIOUS COLLECTING IN LOCATIONS VISITED BY BASS (1766–1823)

To establish the importance of the collecting carried out by Bass, I analysed ornithological collecting activity up to the early 1800s in the order of the countries visited by Bass. Up to 1823 expeditions in the Tropical Pacific are few and the first large expedition was the *Coquille* in 1823 that visited the region (Holyoak & Thibault 1982).

Australia: See Jansen (2017a).

New Zealand: Cook landed at New Zealand during all three expeditions (cf. Lysaght 1959; Whitehead 1978), and 8 specimens from New Zealand are known from Banks's private collection (Medway 1979). Although few Cook specimens are still extant (Burton 1968; Medway 2004), specimens known or alleged to have been collected in New Zealand during the Cook expeditions are (or were) still present in Cambridge (USA) (Paradise Shelduck *Tadorna variegata* (1788 collected) not present anymore, according to <http://mczbase.mcz.harvard.edu/SpecimenSearch.cfm>, accessed 6 June 2015), NHM (three birds), Leiden (three birds) and Liverpool Museum (hereafter LIVCM), (four birds) (cf. Steinheimer 2003). The next expedition to New Zealand was with the *Recherché* and *Espérance* (apparently, no birds collected in New Zealand, cf. Stresemann 1953b). Captain A. Malaspina landed in 1793 in New Zealand, but none of his specimens entered museums and none have survived (Olson 2006). The *Coquille* visited New Zealand in April/May 1825 and approximately 50 birds were collected (MNHN Library, Ms 354). The *Astrolabe* took 11 New Zealand birds back to France.

Raiivavae: Although Cook sighted this island on his third expedition; he did not land there (Brosse 1983).

Tubai: Cook also sighted this island on the third expedition, but did not land there either (Brosse 1983).

Kiribati: Cook described this island after a possible visit on 24 December 1777, during the third expedition (Brosse 1983).

Tahiti: Cook visited Tahiti during all three expeditions (Brosse 1983); at least 15 birds from Tahiti were recorded in Banks's private collection (Medway 1979). It is unknown if birds are brought back to Europe/Russia by the frigates *Boudeuse* and *L'etoile* (captained by L.A. de Bougainville, 1766–69, cf. Laissus 1978) and the ships *Predpriyatiye* (captained by O. von Kotzebue, 1823–26), *Blossom* (captained by F.W. Beechey, 1825–1828, cf. Beechey 1839, no Pacific specimens are reported in here), *Vostok* and *Mirny* (captained by F. Bellinghausen, 1819–1821) and *Senyavin* (captained by F.P. Litke, 1826–1829). At least 36 birds collected in Tahiti during the visit of the *Coquille* arrived in the MNHN in 1829.

Moorea: Cook visited Moorea on the third expedition (Brosse 1983).

Hawaiian Islands: Visited by Cook during the third expedition; at least 53 birds collected in Kauai and Hawaii ended up in Banks's private collection (Medway 1979) and were subsequently dispersed, as were Hawaiian birds from the Cook expedition deposited in other collections (cf. Steinheimer 2003; Jansen & Roe 2013). The ship *King George* (captained by N. Portlock) was

mainly at Oahu from 26 May to 13 June 1786, that resulted in an unknown number of specimens arrived in England (cf. Dixon 1789; Olson & James 1994). From the *Uranie* voyage, 9+ birds were collected in August 1819 (Hawaii, Oahu) (archives MNHN). The ship HMS *Blonde* (captained by G.A. Byron) visited various islands in May–July 1825 and collected 21 bird species (Callcott *et al.* 1826: 248–252). The ships *Nadezhda* and *Neva* (captained by A.J.R. von Krusenstern) the brig *Rurik* (captained by O. von Kotzebue, 1815–1818) expeditions visited the islands, but apparently, no birds made their way back (maybe from the later via J.J. Dussemier to the MNHN). Birds may have been collected when the *Blossom* visited Oahu in 1826 (Brosse 1983), but no Hawaiian specimens are mentioned in Beechey (1839).

Huahine: Visited by all three Cook expeditions (Brosse 1983).

Raiatea: Visited by the second and third Cook expeditions (Medway 1979); at least eight birds from these expeditions were in Banks's private collection (Medway 1979).

The Marquesas: Visited by the second Cook expedition (Brosse 1983). A lone bird was brought back by *Nadezhda* and *Neva* (Holyoak & Thibault 1982).

Tonga: Visited by the second and third Cook expeditions (Brosse 1983). No less than 40 birds from Tonga are known from Banks's private collection (Medway 1979). In 1793, *Recherché* and *Espérance* (1791–1794) brought some birds back to France (at least five birds, Stresemann 1953). Commander Malaspina landed in Tonga in 1793; some birds were collected, but they were neglected and have vanished (Olson 2006: 43). The *Astrolabe* expedition collected 51 birds in Tonga in 1827 (inventory of 520 birds that arrived back from the whole expedition from 25 May 1829, MNHN Ms 2223).

Notable is the description from at least one living Tonga Fruitdove by Robert Brown brought back on the HMS *Investigator* in 1805 to England, however it “Died from cold on the HMS *Investigator* on crossing from New Wales to England” as mentioned by Brown (NHM London, Brown, M.S. Descriptions Animals HMS *Investigator* 1801–1805. Aves. No 196). This bird is not on the list of donations of his 78 specimens in both the British Museum as to the Linnean Society of London, so it's whereabouts are unknown. Its source is unknown, it is not George Bass, as both men did not meet in Bass's stint in Sydney after returning between November 1802 and February 1803 from the Pacific (Brown returned at 9 June 1803 to Sydney).

Samoa: The islands were visited by the ships *Predpriyatiye* (1823–26) and *Uranie* (1819) but no known birds were brought back (Brosse 1983).

Fiji: Visited by the second Cook expedition (Brosse 1983). One bird was collected on the *Astrolabe* expedition (inventory of 520 birds from 25 May 1829, MNHN Ms 2223).

Vanuatu: Visit at the second Cook expedition, *Recherché* and *Espérance* as the *Astrolabe* (1826–1829) expeditions, but no known specimens were brought back (cf. Brosse 1983).

Cook Islands: Apparently, a single bird was collected here in 1798 by HMS *Discovery* (captained by G. Vancouver, cf. Holyoak & Thibault 1982). HMS *Blonde* visited Mauke in August 1825, and collected were a kingfisher, a pigeon and a starling (Olson 1986).