Date of Publication: 28 Feb.2013 © National University of Singapore

WALLACE'S MYSTERY FLYCATCHER

John van Wyhe

Department of Biological Sciences, and Tembusu College, National University of Singapore, Kent Ridge, Singapore 117600 Email: dbsjmvw@nus.edu.sg

Kees Rookmaaker

Department of Biological Sciences, National University of Singapore, Kent Ridge, Singapore 117600 Email: dbsrlc@nus.edu.sg

ABSTRACT. — The Raffles Museum of Biodiversity Research has one specimen associated with the famous naturalist Alfred Russel Wallace (1823–1913), an Asian brown flycatcher (*Muscicapa dauurica* Pallas, 1811). One of the labels states that the specimen was collected by Wallace in Malacca in 1862. It has long been assumed that Wallace gave the specimen to the Raffles Museum. However, historical records reveal that Wallace never visited Malacca in 1862 and did not give specimens to museums. Therefore the Raffles' Flycatcher specimen presents something of a mystery. Was it in fact collected by Wallace and how did it come to the Raffles collection? This article reveals the provenance and meandering international journey of Wallace's Flycatcher from 1862 to the 1930s.

KEY WORDS. — Alfred Russel Wallace, Asian brown flycatcher, Southeast Asia, natural history

INTRODUCTION

The great Victorian naturalist Alfred Russel Wallace (1823–1913) spent eight years collecting natural history specimens throughout Malaysia, Singapore, and Indonesia from 1854–1862. His collection amounted to 125,660 specimens of birds, mammals, reptiles, insects, and shells (Wallace, 1869, I: xiv; Baker, 2001). He discovered hundreds of new species, including the world's largest bee, *Chalicodoma pluto* (Smith, 1861) and the rarest cat, *Pardofelis badia* (Gray, 1874). He first delineated a sharp boundary between the Asiatic and Australian faunas still known as the Wallace Line. And, most famously of all, Wallace independently formulated a theory of evolution by natural selection in 1858.

During his historic voyage, Wallace used Singapore as his base where his name is still comparatively well remembered. He is featured at the visitor centre of the Bukit Timah Nature Reserve. There is a splendid Wallace Education Centre located at Bukit Timah. One half is devoted to the Wallace Environmental Learning Lab (WELL) and nearby there is a "Wallace trail" through the forest where he once collected. There is even a small street, Wallace Way, named after him. The Singapore Science Centre is planning a year-long exhibition (guided by the first author) on Wallace to open in 2013. The Raffles Museum of Biodiversity Research (RMBR) has a series of "Wallace Lectures" and there are plans to house a permanent Wallace exhibition in Singapore's new Natural History Museum to be built by 2014.

In light of the fact that Wallace is such an important figure both in the history of science and the region, it is interesting that the RMBR has for many years possessed only a single example of Wallace's 125,660 specimens collected in Southeast Asia (Fig. 1). It is an Asian brown flycatcher (*Muscicapa dauurica* Pallas, 1811), found in large parts of Asia including the Malay Peninsula and Singapore. This small flycatcher was described as *Muscicapa latirostris* by Raffles (1822), but recently the earlier name *Muscicapa dauurica* has been reinstated as the correct and earliest combination referring to this species (Banks & Browning, 1995).

As early as 1988 when the then Zoological Reference Collection was opened in 1988, the Flycatcher was featured in the opening souvenir brochure (Anon. 1988). The bird was highlighted in the *Raffles Museum Newsletter*, as "the Museum's only specimen from Alfred Wallace" which "was collected by Wallace himself from Malacca. He donated it to the Raffles Museum in 1862" (Anon., 2001). A similar attribution was made in an article on the Museum's reference collection in *Cosmos* (Sum, 2010). The specimen is also referred to on the museum's website: http://rmbr.nus.edu.sg/collections/birds.html.

But here is the mystery. Wallace visited Malacca only once, in 1854, not 1862. Malacca, and a small amount of surrounding territory, was then a British possession and part of the Straits Settlements. After his return to Singapore, Wallace wrote a short paper on the birds seen in the region

(Wallace, 1855), where he mentioned that flycatchers were rather plentiful in the more open jungles, but he did not mention the brown flycatcher. Wallace is also not known to have donated specimens to any museums at the time or to have had any contact with the Raffles Museum (later the National Museum, and subsequently the RMBR). So how came this bird to the Raffles Museum? And, was it really collected by Wallace?

THE LABELS OF THE RMBR FLYCATCHER

The best clues to discovering the history of this little bird are found on the two paper labels attached to its legs with string. The first is a standard Wallace label with printed text: "Collected by A.R. Wallace. 186_" (Fig. 2). The last digit was left blank to be filled in later, and in this case a '2' was added in ink to read 1862. The name of the bird and collecting locale are then written in what indeed appears to be Wallace's handwriting "Muscicapa latirostris. Raffl." and on the next line: "Malacca". The fact that the label was one of a series used by Wallace and bears his handwriting is good reason to accept that the bird belonged to Wallace at some stage.

There are three elements written on the reverse of this label. First, there is the species name "Alseonax latirostris", in pencil, in an unidentifiable handwriting. Written over this in brown ink, by Wallace, is "descr. Blyth. Jour. As. Soc. XI. p. 791". Finally there is a number in another handwriting in black ink: "B. 11094."

The combination *Alseonax latrirostris* for this flycatcher was first advocated by Jerdon (1862, I: 459), but this book probably appeared too late for Wallace to have seen before he returned to England in February 1862. The reference in brown ink is to a report by Edward Blyth (1843), Curator of

the Museum of the Asiatic Society of Bengal in Calcutta, who described a Malayan specimen of *Muscicapa latirostris*. This identical reference, in exactly the same abbreviated form, was written by Wallace in the margin of his daily ornithological reference work, Bonaparte's *Conspectus generum avium* (1850: 321). His personal copy is now kept in the library of the Linnean Society of London. A tick next to the entry indicates that Wallace had a specimen.

The number "B. 11094." is also written on the reverse of the second label attached to the RMBR specimen (Fig. 2). Curiously, the text on the front of this label is written in Gothic script, repeating some of the information on the other label: "Muscicapa latirostris Raffl.", "1862", "Malakka" and "Wallace, S." These details suggest that this label is from a German collection, since the locality is written as "Malakka" and the 'S' after Wallace's name could mean "Sammler", i.e., collector. At the top of the second label are two letters, which seem (because they are partly punched through) to read "B. M."

We sent photographs of the labels to Dr Frank Steinheimer at the Naturkundliches Universitätsmuseum in Halle-Wittenberg, Germany. Steinheimer instantly recognised the second label as that of the "Berlin Museum" (Zoologisches Museum, now Museum für Naturkunde, Berlin). The yellow frame around the label was used in the museum for Asian birds, while the 'B' numbers indicated specimens which could be used for exchanges.

The Curator of Birds of the museum in Berlin, Dr Sylke Frahnert, kindly checked their old catalogue and found that "B 11093 *Muscicapa latirostris* from Malacca, came into the collection via the dealer E. Gerrard in October 1873. The specimen was not mounted and did not get an individual collection number." The number B.11094 is attached to a



Fig. 1. The Asian brown flycatcher collected by Alfred Russel Wallace, preserved in the Raffles Museum of Biodiversity Research, Singapore. Photograph taken in 2012.

specimen of *Hemichelidon ferruginosus* from Nepal, acquired at the same time. It is likely that there was some mistake in the entry of data of these specimens in the catalogue.

"E. Gerrard" was Edward Gerrard (1810–1910) who worked all his life in the British Museum where he was in charge of the osteology collection and listed the accessions of vertebrate specimens (Morris, 2004). He set up a taxidermy business called "Edward Gerrard & Sons" in 1850, which was at first largely run by his eldest son Edward junior (1832–1927). Although the firm specialised in mounting skeletons and skins, they traded in a large variety of zoological specimens obtained from zoos, professional collectors, and hunters. The Keeper of Zoology at the British Museum, John Edward Gray (1866), mentions that Gerrard had purchased a fruit bat "at Stevens's sale-room, included in a considerable lot of skins of birds and other animals of little value." Samuel Stevens (1817–1899) was a natural history dealer who sold all of Wallace's specimens (Baker, 2001).

Therefore, after obtaining the bird from Wallace, the dealer Stevens sold the bird to Edward Gerrard's firm before 1866, who, in October 1873, in turn sold it to the Berlin Museum.

MALACCA, 1862

The next question to explore is how a genuine Wallace bird could have come from Malacca in 1862. It is quite certain that Wallace only went there once during his travels, from July to September 1854.



Fig. 2. The two labels attached to the Asian brown flycatcher from the collection of Alfred Russel Wallace.

To answer this part of the mystery requires a thorough study of Wallace's surviving writings and notebooks from his voyage. Throughout his travels in the Malay Archipelago, Wallace paid collecting assistants to increase the size of his collections. He needed to do this, because his specimens were – it is sometimes forgotten – collected for sale as well as for his personal collection. One of those who collected for him was an English mining engineer named Frederick F. Geach. Wallace and Geach first met on Timor in January 1861 and soon became friends (Wallace, 1869, I: 295, 300). When his work in Timor was completed, Geach moved to Singapore. He remained a mining engineer in the region until 1866, working for Paterson Simons & Co., the first British company to speculate in Malayan tin mining on a large scale (Wong, 1965: 33; Wallace, 1869, II: 362). The only photograph of Wallace during his voyage was taken in Singapore together with Geach in February 1862 (fig. 3; now kept in NHM WP/2/1/3, and reproduced without Geach in Marchant, 1916, Vol. 1: facing p. 36).

Wallace's (1858–65) *Notebook 5* contains details of a collecting arrangement between Wallace and Geach. Geach continued for some time to send Wallace specimens after his return to England. The profits were carefully split when the specimens were sold in London.

One of these small collecting trips carried out by Geach was to "Malacca" in 1862. It is quite possible that Geach bought specimens rather than shoot them himself. During Wallace's 1854 visit to Malacca he found not only a natural history dealer named George Rappa, but two Portuguese men "whose sole business is procuring and selling the skins of birds and animals" (Wallace, 1855).

So it is likely that the little flycatcher from Malacca was procured by Geach who was actually there in 1862, then forwarded to Wallace, who was already back in England. As Geach was not a naturalist, Wallace filled in the label when he received the birds—checking them against his faithful old copy of Bonaparte—hence the label was in Wallace's handwriting.

FROM BERLIN TO SINGAPORE

One final question remains: how did the bird get from Berlin to Singapore? Fortunately, the museum in Berlin maintains an extensive and well-catalogued archive of historical correspondence and manuscripts—which should be a priority for every natural history collection to preserve information about their zoological holdings. As this archive is most easily accessed through an index of personal names, we asked to check for any holdings to or from the past directors of the Raffles Museum: Richard Hanitsch (director 1895–1919), John Coney Moulton (1919–1923), Cecil Boden Kloss (1923–1932), and Frederick Nutter Chasen (1932–1945).

After checking the archives, Dr. Frahnert (in litt. July 2012) suggested that the flycatcher was part of an exchange between Erwin Stresemann (1889–1972) and F. N. Chasen (1896–

1942) between 1930 and 1935. On 4 July 1930, Stresemann wrote to Chasen that he had posted some discarded bird skins on the previous day. Again, on 22 July 1932, Stresemann intimated that the museum still had some old skins from a trader, also from Malacca which are "without much value for modern researches". These may well have been sent soon after.

Although Stresemann did not list the flycatcher specifically, it is quite likely that the specimen was included among these birds given (possibly in exchange) by the museum in Berlin in the 1930s. The annual reports of the Raffles Museum for the years 1930 to 1935 do not refer to the receipt of such specimens, but only listed specific donations, while exchanges between museums were quite common at the time. So after sixty years in Germany, the little bird made its way back to Asia where it remains.

DISCUSSION

The Brown Flycatcher, once in the collection of Wallace, was probably not considered a rare or special specimen until many years later. In 1950, a signature of Wallace, cut from a letter, was donated to the Raffles Museum and subsequently displayed in the exhibition (Tweedie, 1950). Wallace was becoming a famous historical figure and any relics of him were proudly displayed.

The Wallace specimen was apparently never noticed as special until the collection of the Raffles Museum was transferred to



Fig. 3. Photograph of Alfred Russel Wallace (right) and Frederick F. Geach taken in Feb. 1862 in Singapore (Natural History Museum, London: WP/2/1/3).

the National University of Singapore in 1972. By this time its history was lost and forgotten so it was assumed to have been collected by Wallace himself in Malacca in 1862 and given to the Raffles Museum while he was still in Singapore.

Wallace's little bird made an extraordinary journey from Malacca (1862), to London (1862), then to Berlin (1873) and finally back to Singapore (c. 1930).

Malacca, obtained by Geach, 1862 Wallace 1862–1863? Stevens 1863?–uncertain Gerrard >1866?–1873 Berlin Museum 1873–1930? Raffles Museum 1930?–1972 RMBR 1972–present

The story of this little flycatcher highlights some important issues. For one, it underlines the fact that Wallace was a commercial collector not just a disinterested explorer. Specimens were procured from a variety of sources and in large numbers. Almost every writer on Wallace cites his impressive total of 125,660 specimens (Wallace, 1869: xiv). He gave a breakdown: 310 mammals, 100 reptiles, 8,050 birds, 7,500 shells, 13,100 Lepidoptera (moths and butterflies), 83,200 Coleoptera (beetles), and 13,400 other insects. Wallace (1865) calculated that his collections published to that date contained 212 new species of birds. He also bagged 200 new species of ants and a staggering 900 new species of beetles (George, 1979).

But it is a mistake, repeated by most writers, to imply that Wallace collected 125,660 specimens himself. He employed full-time collecting assistants throughout his voyage. His records do not allow us to see exactly how many specimens were collected by assistants. His English assistant from 1854–1856 and 1858–1862, Charles Allen (1839–1892), alone collected at least 40,000 (Rookmaaker & van Wyhe, 2012). Wallace's many other assistants may have collected as much as half of his total.

The story of this flycatcher also shows what a wealth of information can lie hidden within the historic specimens of a natural history collection which an archivist or historian can bring to light.

ACKNOWLEDGEMENTS

We are very grateful to Peter Ng, Kelvin Lim Kok Peng, Tan Swee Hee, and Lua Kheng Hui of the RMBR for assisting us with seeing the flycatcher and its labels and to Tan Heok Hui for supplying us with photographs. We are also grateful to Frank Steinheimer, Leitung Zentralmagazin Naturwissenschaftlicher Sammlungen of the Naturkundliches Universitätsmuseum in Halle-Wittenberg, for his quick recognition of the type of label; to Sylke Frahnert, Curator of the bird collection of the Museum für Naturkunde, Berlin, for checking the accession registers and correspondence, and to John S. Ascher, John Elliott, and Ng Wen Qing. We

are also grateful to Lynda Brooks, Librarian of the Linnean Society of London.

LITERATURE CITED

- Anonymous, 1988. The zoological reference collection preserved for posterity. In: Our heritage: Zoological Reference Collection. Official Opening Souvenir Brochure, 31 October 1988. National University of Singapore, Singapore. Pp. 8–9.
- Anonymous, 2001. Tales from the crypt: Alfred's catch. *Raffles Museum Newsletter*, No. 1 (June 15): 1.
- Baker, D. B., 2001. Alfred Russel Wallace's record of his consignments to Samuel Stevens, 1854–1861. *Zoologische Mededelingen, Leiden*, **75**: 251–341.
- Banks, R. C. & M. R. Browning, 1995. Comments on the status of revived old names for some North American birds. *Auk*, **112**: 633–648.
- Blyth, E., 1842. Report of the Curator (with descriptions of Malayan birds donated by Mackay and Spry). *Journal of the Asiatic Society of Bengal*, **11**: 788–799.
- Bonaparte, C. L. J. L., 1850. *Conspectus Generum Avium. Volume 1*. Brill, Lugduni Batavorum. 543 pp.
- George, W., 1979. Alfred Wallace, the gentle trader: Collecting in Amazonia and the Malay Archipelago 1848–1862. Journal of the Society for the Bibliography of Natural History, 9: 503–514.
- Gray, J. E., 1866. A revision of the genera of Pteropine bats (Pteropidae), and the descriptions of some apparently undescribed species. *Proceedings of the Zoological Society of London*, 23 Jan.1866: 62–67, p. 65.
- Gray, J. E., 1874. Description of a new species of cat (*Felis badia*) from Sarawak. *Proceedings of the Zoological Society of London*, 19 May 1874: 322–323, pl. 49.
- Jerdon, T. C., 1862. *The Birds of India: Being a Natural History of all the Birds Known to Inhabit Continental India, Volume 1.* Military Orphan Press, George Wyman and Co., Calcutta. xv + xlv + 535 pp.
- Marchant, J., 1916. *Alfred Russel Wallace Letters and Reminiscences, Volumes 1–2*. Cassell, London. xi + 319 [1] and vii + 291 [2] pp.

- Morris, P. A., 2004. *Edward Gerrard & Sons: A Taxidermy Memoir*. M. P. A. Press, Ascott. 128 pp.
- Raffles, T. S., 1822. Second part of the descriptive catalogue of a zoological collection made in the Island of Sumatra and its vicinity. *Transactions of the Linnean Society of London*, 13: 277–340.
- Rookmaaker, L. C. & J. van Wyhe, 2012. In Alfred Russel Wallace's shadow: His forgotten assistant Charles Allen (1839–1892). *Journal of the Malaysian Branch of the Royal Asiatic Society*, **85**(2): 17–54.
- Smith, F., 1860. Catalogue of hymenopterous insects collected by Mr. A. R. Wallace in the islands of Bachian, Kaisaa, Amboyna, Gilolo, and at Dory in New Guinea. *Journal of the Proceedings of the Linnean Society (Zoology)*, **5**: 93–143, pl. 1.
- Stresemann, E., 1930–1932. Correspondence with F. N. Chasen at the Raffles Museum, Singapore. Berlin, Museum für Naturkunde: Historische Bild- und Schriftgutsammlungen, Bestand: Zool. Mus., Signatur ZMB S IV/Nachlass Stresemann, Chasen, F.N. Bl. 1-38, Mappe 231.
- Sum, F. Y., 2010. The Raffles Museum of Biodiversity Research: A national heritage. *Cosmos*, **6**: 12–21.
- Tweedie, M. W. F., 1950. The Wallace autograph (presented by F. F. Laidlaw). Report of the Raffles Museum and Library, for the Year 1950: 5.
- Wallace, A. R., 1855. On the ornithology of Malacca. *Annals and Magazine of Natural History*, Ser. 2, **15**: 95–99.
- Wallace, A. R., 1858–1865. *Notebook 5*. Library of the Natural History Museum, London (MSS 89 O WAL).
- Wallace, A. R., 1865. Descriptions of new birds from the Malay Archipelago. *Proceedings of the Zoological Society of London,* 13 June 1865: 474–481, pls. 28–29.
- Wallace, A. R., 1869. The Malay Archipelago: The Land of the Orang-utan and the Bird of Paradise, a Narrative of Travel with Studies of Man and Nature. Vols. 1–2. Macmillan & Co., London. xxiii + 478, i + 524 pp.
- Wong, L. K., 1965. *The Malayan Tin Industry to 1914: With Special Reference to the States of Perak, Selangor, Negri, Sembilan, and Pahang.* Published for the Association for Asian Studies by the University of Arizona Press, Tucson. xii + 302 pp.