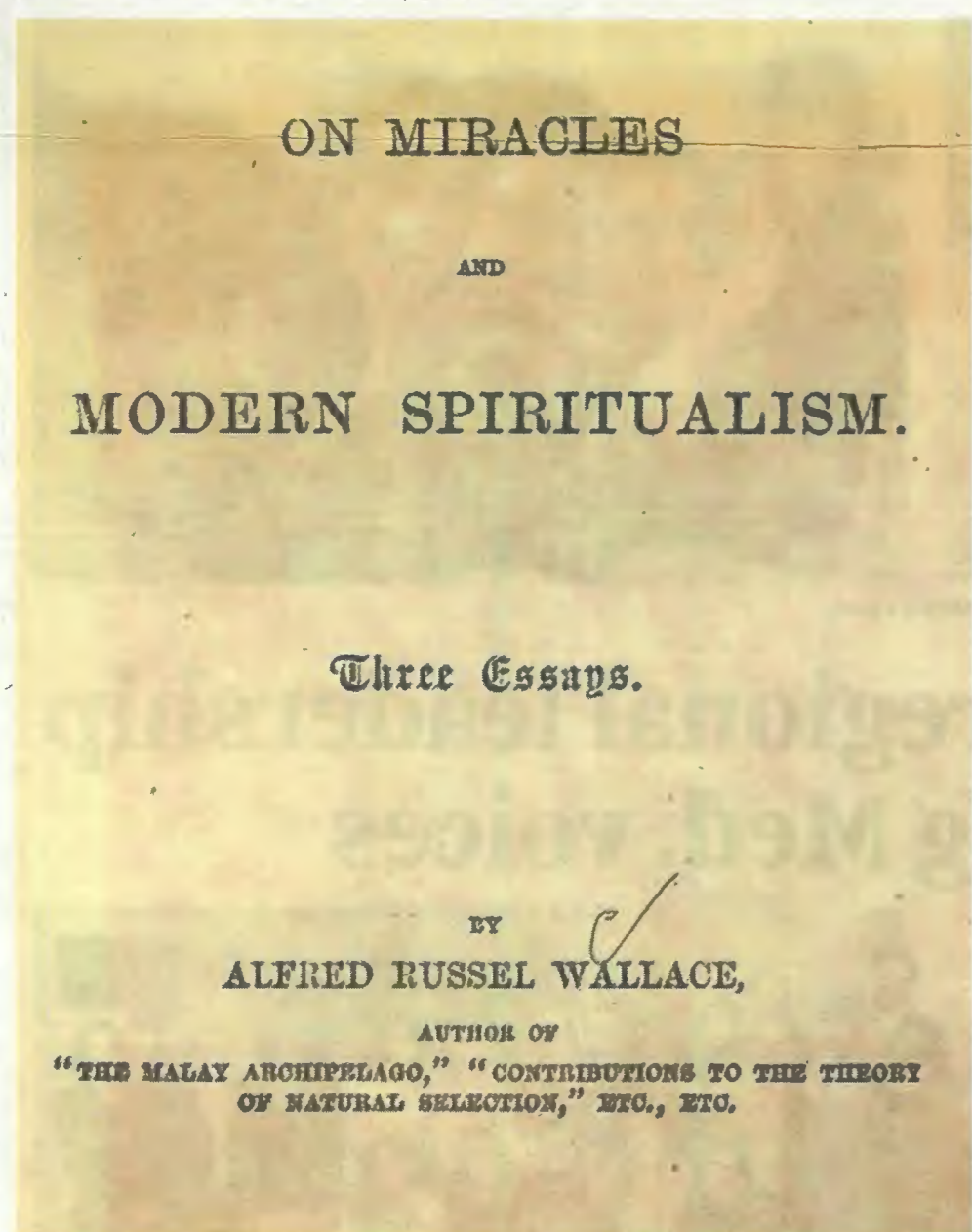


LIFE & WELLBEING HISTORY



Cover of a pamphlet by Alfred Russel Wallace on spiritualism.



Engraving from the Illustrated London News of April 12, 1862, showing Wallace's birds, the first live Birds of Paradise to be seen in the Western Hemisphere.



A male Lesser Bird of Paradise, with the female in the background, from a painting by John Gould.



Alfred Russel Wallace photographed in February 1862 in Singapore, a few days before setting out on the voyage which was to bring him to Malta.

# Birds of paradise in Malta

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On February 5, 1862, the P & O Steamship Euxine left Alexandria bound for Marseilles, with a stopover in Malta. On board was a special and unusual cargo in the charge of one Alfred Russel Wallace, identified simply on the passenger list as "Mr Wallace".

This unusual cargo consisted of two live male birds of paradise that Mr Wallace had purchased in Singapore for £100 and was "determined to bring them to England by the overland route under my own care", as he wrote in his 1869 book *The Malay Archipelago: The Land of the Orang-utan, and the Bird of Paradise*. They would be the first two examples of these wonderful birds to reach Europe.

Birds of paradise are exotic birds, the males of which have flamboyant and colourful plumage; they are found in southeast Asia, mainly in the Malay Archipelago and Indonesia. When the first Europeans sailed to this part of the world in search of rare and precious spices such as cloves and nutmeg, Malay traders gave them skins of birds which were so strange and beautiful as to excite their admiration. The traders called these birds in Malay "Manuk dewata" (Birds of God) and the Dutch traders started calling them in Latin *avis paradisicus* (paradise birds).

An early description of the birds by John van Linschoten in 1598, states that "no one has seen these birds alive, for they live in the air, always turning toward the sun, and never lighting on the earth till they die; for they have neither feet nor wings, as may be seen by the birds carried

to India". This fanciful description arose from the fact that when these birds were captured by natives for despatch to India, their feet were cut off for ease of transportation; in fact, one species still bears the scientific name *Paradisaea apoda* (footless paradise bird), given by Carl Linnaeus in 1760, at a time when no perfect specimen had been seen in Europe, and practically nothing was known about them. This species is now known as the Greater Bird of Paradise and is one of the most spectacular members of the family.

As already mentioned, the main characteristic of birds of paradise is the extraordinary development of plumage, unequalled by any other birds. In several species, delicate brightly coloured feathers arise on each side of the body from beneath the wings and extend backwards forming trains or fans. These feather tufts are often elongated and twisted into fantastic shapes and have the most brilliant metallic tints.

The Greater Bird of Paradise, for example, has a purple body with tufts of yellow and white feather which can be raised to afford a stunning spectacle. In other species these ornamental feathers spring from the head, back or shoulders. These descriptions only apply to the male birds because the females are usually brownish and nondescript; clearly the function of the male plumage is related to sexual display. In fact, besides their brilliant plumage, birds of paradise are also notable for their elaborate courtship rituals.

The birds that Wallace had purchased in Singapore belonged to the species *Paradisaea papuana*, the Lesser Bird of Paradise, one of the smaller species with a body length of 35cm. It is a native of New Guinea and, like other birds of paradise, is omnivorous, feeding mainly on

fruits and insects such as grasshoppers, locusts and caterpillars. Before buying them, Wallace observed that they were feeding voraciously on rice, bananas and cockroaches.

He set off on his journey home on a P&O liner to Bombay where he stopped for a week in order to take on fresh supplies of bananas. He was, however, encountering difficulties in obtaining live insects, as, he states, "in the Peninsular and Oriental steamers cockroaches were scarce". He did manage to capture a few dozen by setting traps in the storerooms and "by hunting an hour every night in the fore-castle". This was scarcely enough for a single meal for the two birds.

**"Wallace stayed in Malta for a fortnight, and in his own words he 'got plenty of cockroaches from a bakehouse'"**

From Bombay, Wallace travelled to Alexandria in Egypt, where he boarded the S.S. Euxine on the last stages of his long journey back to England, stopping at Malta and Marseilles. It was in Malta that his trouble in obtaining cockroaches came to an end!

Wallace stayed in Malta for a fortnight, and in his own words he "got plenty of cockroaches from a bakehouse, and when I left, took with me several biscuit-tins full, as provision for the

voyage home". So his live cargo now included, besides the two birds, a steadily diminishing number of Maltese cockroaches.

Unfortunately, he does not describe the time he spent in Malta. He does, however, refer to Malta in a book review he wrote in 1871 of *Notes of a Naturalist in the Nile Valley and Malta* by Andrew Leith Adams, noting that Adams gives "a very full account of the aspects of Malta at different seasons of the year, of the character of the vegetation, and of the birds (most of which are migratory), and of the few indigenous reptiles and mammalia; while a complete list is given of the fossils, the birds, and the fishes, which have been yet discovered. An interesting chapter is devoted to the great pre-historic rock-temple of Hhagiar-Kim (sic), with its strange pitted ornamentation and curious idols, and to the various dolmens, towers, rock-tombs, and other antiquities of the islands".

The voyage through the Mediterranean in early March was characterised by a very cold wind, and the only place where the birds' large cage could be kept was exposed to a cold draught. "Yet the birds never seemed to feel the cold". The overnight trip from Marseilles to Paris was marked by a sharp frost, but the birds arrived in London in perfect health, sustained, no doubt by those fat Maltese cockroaches.

The arrival of the two birds at the Zoological Gardens in London caused quite a sensation as they were the first living examples brought to Europe. They stimulated a great interest in birds of paradise and other exotic birds, and several beautiful, illustrated folio volumes were published describing the many species. The birds were featured in an article in *The Illustrated London News* of April 12, 1862, which also



Portrait of Wallace in the Malay Archipelago with two specimens of the Red Bird of Paradise.

carried an engraving showing the two birds, whose fine plumage was not yet fully developed. The article noted that a special room was prepared for the birds, but they had to be separated by a screen as the two males were showing signs of aggression.

The transport of the birds of paradise to London, with a stopover at Malta, was just a minor episode in the life of this remarkable naturalist, who was born in Usk, Monmouthshire, Wales, on January 8, 1823. In 1844 he met the young entomologist Henry Bates, who instilled in him an interest in natural history. He read avidly on the subject, including Charles Darwin's *The Voyage of the Beagle*, and Charles Lyell's *Principles*

of Geology, and decided that he too wanted to become a travelling naturalist.

His first trip, accompanied by Bates, was to the Amazon in 1848. He spent four years in Brazil, collecting and observing the remarkable biodiversity, which he described in his book *A Narrative of Travels on the Amazon and Rio Negro*. His voyage back to England in 1852 was marked by an onboard fire which destroyed most of his collection. Undeterred by this mishap, Wallace next undertook a trip in 1854 to the Malay Archipelago (Singapore, Malaysia and Indonesia) where he was to remain for eight years.

During his explorations Wallace amassed an incredible collection of about 126,000 zoologi-

cal specimens, including no less than 80,000 beetles. Several thousand of them represented species which were new to science. Accounts of his Malayan explorations were published in 1869 as *The Malay Archipelago*, which became one of the most popular books of scientific exploration of the 19th century, and has never been out of print since.

But perhaps Wallace's main claim to fame arose from his thoughts and ideas about evolution which led to his famous insight on natural selection. Both Darwin and Wallace came to the same conclusion after reading the writings by Thomas Malthus on population growth - that a natural process was selecting only the strongest individuals for survival. In 1858 he sent an article outlining his theory to Charles Darwin; it was published, along with a description of Darwin's own theory, in the same year. He became friendly with Darwin and other evolutionary thinkers, and published many papers, and gave lectures, defending the theory of natural selection made famous by Darwin's *On the Origin of Species*, conclusions which Wallace himself had reached during his Malayan travels.

Wallace later became a social activist; he was a staunch opponent of eugenics, one of the notions spawned by evolutionary thinking. He favoured land nationalisation and women's suffrage and wrote repeatedly on the dangers and wastefulness of military expansion. He also dabbled in spiritualism in the late 1860s and

wrote first-hand accounts of seances. This non-scientific conversion took many of his colleagues by surprise; he spent a few years urging them to look into the matter in more detail, but few followed his lead. He remained a spiritualist for the rest of his life, publishing about a hundred writings on the subject.

The remarkable Wallace, naturalist, explorer, geographer, anthropologist, biologist, social activist and spiritualist, died at Broadstone in Dorset on November 7, 1913, aged 90. His death was widely reported in the press, the *New York Times* hailing him as "the last of the giants belonging to that wonderful group of intellectuals that included, among others, Darwin, Huxley, Spencer, Lyell, and Owen". More recently, Sir David Attenborough wrote "there is no more admirable character in the history of science".

On November 1, 1915, a medallion bearing his name was placed in Westminster Abbey near Darwin's burial place.

### Acknowledgements

Thanks to Mark Anthony Falzon who first drew my attention to Wallace's visit to Malta, and to the Malta National Archives for their assistance. Anyone interested in knowing more about Wallace and his writings should visit 'The Alfred Wallace Page', online at <http://people.wku.edu/charles.smith/wallace/writings.htm>.