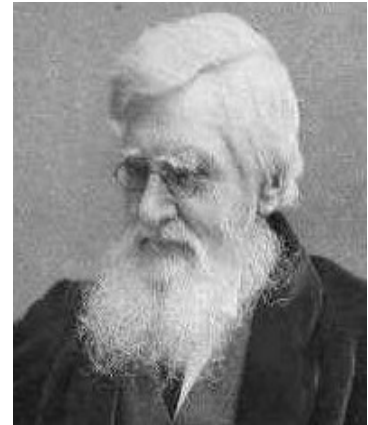


## A Brief History of Alfred Russel Wallace: Consummate Natural Historian and Evolutionary Biologist

In 1858, over 20 years after Charles Darwin had returned to England from a nearly five year, around the world expedition as the naturalist aboard the Beagle, he was making slow progress on a manuscript detailing a theory of the evolution (“transmutation”) of species through the process of natural selection. His ideas were based on collections and observations made while on the expedition, and on subsequent studies. On June 18<sup>th</sup>, he received a manuscript from Alfred Russel Wallace, a young naturalist who was conducting research in the Malay Archipelago. The manuscript, entitled “On the Tendency of Varieties to depart indefinitely from the Original Type.” In it, Wallace described a theory of the evolution of species very similar to that Darwin himself had formulated, including an incremental mechanism involving natural selection. Darwin was caught completely off guard but, to his enduring credit, agreed that Wallace's manuscript, as well as a summary of his own conclusions and related correspondence, would read at meeting of The Linnaean Society in London on July 1<sup>st</sup>. The next year, Darwin's monumental Origin of Species was published. Since that time, the names of Darwin and Wallace have been inextricably linked as giants in the development of evolutionary theory. But who was Alfred Russel Wallace?



Wallace, the 8<sup>th</sup> of nine children, was born to a middle class family on January 8<sup>th</sup>, 1823 near Usk in what is now Wales. The family was initially financially comfortable but suffered a reversal in 1835. Hardship followed. His only formal education was about two years at Hertford Grammar School. He learned land surveying while employed by his brother, William, and later found employment as a teacher at the Collegiate School in Leicester. There, in the town library, he read books on natural history, and he met the like-minded Henry Walter Bates. The two spend as much time as possible collecting insects. In 1848, the two set out for Brazil to collect insects and other animals, some for their collections, and some to sell to private collectors and museums upon their return to England, but the ship on which he was traveling sank and he lost his records of the expedition and most of the specimens.

Apparently undaunted by the experience, he set off for the Malay Archipelago. Wallace traveled extensively in the what is now Malaysia and Indonesia, made extensive collections and natural history observations (many biogeographical in nature), as well as observations on the lives of the indigenous people of the region. All of this led, in 1858, to his formulation of his theory of the origin of species through the process of natural selection. Wallace was ill at the time but, as soon as he could, he detailed his theory and sent it off to Darwin, who he knew through correspondence, asking that it be sent on to Lyell if Darwin approved. Thus began the chain of events outlined above which led to the joint reading of Darwin's and Wallace's papers at the meeting of the Linnaean Society.

Wallace returned to England in 1862. In 1866, he married Annie Mitten. He continued to write on a wide variety of topics, including spiritualism, to which he had converted in the late 1860s, and social evolution. In these latter endeavors, he and Darwin disagreed. His best known books remain The Malay Archipelago, The Geographical Distribution of Animals, and he is considered a founder of the science of biogeography. He died in Broadstone, England on November 7<sup>th</sup>, 1913.