# ALFRED RUSSEL WALLACE

A REDISCOVERED LIFE

MICHAEL A. FLANNERY

#### Description

Alfred Russel Wallace: A Rediscovered Life is a new biography of the codiscoverer of the theory of evolution by natural selection and one of the nineteenth century's most intriguing scientists. Its provocative thesis is that Wallace, in developing his unique brand of evolution, presaged modern intelligent design theory. Wallace's devotion to discovering the truths of nature brought him through a lifetime of research to see genuine design in the natural world. This was Wallace's ultimate heresy, a heresy that exposed the metaphysical underpinnings of the emerging Darwinian paradigm. Biographer Michael A. Flannery is Professor and Associate Director for Historical Collections at the Lister Hill Library of the Health Sciences, University of Alabama at Birmingham (UAB) and editor of Alfred Russel Wallace's Theory of Intelligent Evolution (2008).

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#### Publisher's Note

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#### Praise for Alfred Russel Wallace: A Rediscovered Life

FLANNERY'S RIVETING TALE OF REDISCOVERY PROVIDES CONVINCING new evidence that Alfred Russel Wallace—the acknowledged co-discoverer of evolutionary theory—supported an argument from design for all forms of life which, in many ways, anticipated modern intelligent design thinking. This fascinating work of intellectual history recasts a new, more complete and lasting image of the once all too elusive Wallace.

Philip K. Wilson, MA, Ph.D., Historian of Medicine and Science Professor of Humanities and Science, Technology & Society Director, The Doctors Kienle Center for Humanistic Medicine Penn State College of Medicine

MICHAEL FLANNERY HAS WRITTEN A SUPERB BOOK THAT IN ITS PASsion and subjective honesty offers a cogent and articulate defense of Alfred Wallace's theory of intelligent design, with all its moral and ethical implications, as a counterpoint to the materialistic worldview that came to be known as Darwinism.

> John S. Haller, Ph.D. Emeritus Prof. of History and Medical Humanities Southern Illinois University, Carbondale

This biography of Alfred Wallace by Michael Flannery is the most important new book I have read in years. The immense attention focused on Charles Darwin by evolution historians has unfortunately overshadowed Wallace, whose life was arguably more fascinating and insightful. Unfortunately views that are offered on Wallace today are often from Darwinist perspectives. Flannery remedies this imbalance with his story of Alfred Wallace that brings an entirely new light to the theory of evolution. In this corrective against the familiar but erroneous casting of Wallace as a miniature Darwin, Flannery artfully brings out the stark contrast—even down to their final works—between the evolution co-founders. But this volume is not merely a look back. Like any good history, Flannery's tells us where we are, and how we got here.

From their early years onward, Wallace and Darwin existed in different worlds. Their paths intersected at evolution, but they approached and departed that intersection with many different perspectives. Flannery provides a broader context than is usually found in such histories and in convincing detail demonstrates the influences and connections to today's discussion. Neither idolizing Wallace nor minimizing Darwin, Flannery provides a much needed balanced view that leaves us with a richer understanding of our ideas on origins.

Cornelius Hunter, Ph.D. Author of the books Darwin's God, Darwin's Proof, and Science's Blind Spot

In this lucidly written book Michael Flannery shows that Alfred Russel Wallace, the co-discoverer of the theory of evolution by natural selection, thought the theory was incomplete—the guidance of a higher power was needed to explain nature. Wallace's ideas show strongly that the godless view of evolution taken by so many modern evolutionists is not forced on them by the evidence; rather they assume it in spite of the evidence.

Michael Behe, Ph.D., Professor of Biochemistry, Lehigh University Author, Darwin's Black Box and The Edge of Evolution

For too long, Alfred Wallace's contributions to the science of evolution have been ignored or grossly mischaracterized. Why? Largely because he provided both a coherent criticism of Darwin and Darwinism and a theist-friendly alternative account of evolution. The secular intelligentsia sided with Darwin because Darwinism provided them with a view of evolution that handily eliminated God. They succeeded in making Darwinism the default view of evolution, both in history books and biology textbooks. As a result, our understanding of the history of evolutionary theory and our understanding of evolution itself have suffered. Wallace's account of evolution, if it had received a fair hearing, would have (I believe) won the day, and our understanding of the history of evolutionary theory and evolution itself would be much different today. But it is not too late. Wallace may yet become

the beginning point of intellectual renewal, and Michael Flannery's fine biography of Alfred Russel Wallace will go a long way in bringing that much-needed revolution about.

> Benjamin Wiker, Ph.D. Author of The Darwin Myth

HISTORIAN MICHAEL FLANNERY'S ACCOUNT OF ALFRED RUSSEL WALlace's life work is a lucid sketch of the scientific and philosophical controversies over evolution in the mid-nineteenth century... Wallace observed, to Darwin's chagrin, that man's intellect—his reason, his artistic and musical ability, his wit, his talent, and most of all man's moral sense—must be caused by an "Overruling Intelligence" that guided evolution. Wallace insisted that man's mind was created by a Mind. Flannery's book is a concise and eloquent exploration of Wallace's genius and of his rejection of Darwin's implicit materialism and atheism. These differences persist in our modern debate about origins, and today Wallace's views may well be advancing. Flannery's superb book provides the reader with indispensable insight into the earliest squalls in the modern tempest over Darwin's theory and intelligent design.

> Michael Egnor, M.D., Professor and Vice-Chairman Department of Neurological Surgery Stony Brook University Medical Center

FLANNERY'S BOOK IS A WELCOME ADDITION TO ANY BOOKSHELF THAT offers a window into evolution. It comes down to this: Darwin was following evidence that supported a materialist theory he already espoused; Wallace was following evidence that shed light on the nature of nature. Popular culture chose Darwin, and the rest is the stale Darwin worship promoted in popular culture and academy alike, as an alternative to engagement with the facts.

Denyse O'Leary Co-author of The Spiritual Brain

### 4.

## THE CENTRAL AND CONTROLLING INCIDENT OF MY LIFE

The Malay Archipelago, 1854–1858

Reflecting on the experience nearly fifty years later, Wallace called his work in the Malay Archipelago "the central and controlling incident of my life." Indeed it was. It all started with his arrival at Singapore on April 20 after more than six weeks at sea. He stayed in Singapore several months collecting birds and bugs. He did not arrive alone. He had brought a sixteen-year-old boy, Charles Allen, with him as an assistant. He knew the lad as the son of a London carpenter who came recommended by his sister Fanny and his brother in-law Thomas Sims, but Charles could never quite meet the demanding naturalist's high expectations and Wallace noted that Charles didn't remain long (about 18 months) before gaining employment at one of the Singapore plantations. The schedule he gives of his daily activities while in Singapore is instructive in showing the general daily routine he would adopt throughout the remainder of his stay in the East:

Get up at half-past five, bath, and coffee. Sit down to arrange and put away my insects of the day before, and set them in a safe place to dry. Charles mends our insect nets, fills our pin cushions, and gets ready for the day. Breakfast at eight; out to the jungle at nine. We have to walk about a quarter mile up a steep hill to reach it, and arrive dripping with perspiration. Then we wander about in the delightful shade along paths made by the Chinese wood-cutters till two or three in the afternoon, generally returning with fifty or sixty beetles, some very rare or beautiful, and perhaps a few butterflies. Change clothes and sit down to kill and pin insects, Charles doing the flies, wasps, and bugs; I do not trust him yet with beetles. Dinner at four, then at work again till

six: coffee. Then read or talk, or, if insects very numerous, work again till eight or nine. $^{38}$ 

Dissatisfied with his catches in and around Singapore, Wallace and Charles went to Malacca for around nine weeks. Upon returning to Singapore Wallace became the local guest of the "White Rajah," Sir James Brooke, who had been in the Malay Archipelago for fifteen years and established over the years a rather benevolent dictatorship over the region. The rajah soon convinced Wallace to go to Sarawak in Borneo. He arrived on November 1, 1854, and remained the next fourteen months.<sup>39</sup> It was in Borneo that Wallace encountered, lived with, and grew rather fond of the Dyak headhunters in the region. One might think that native headhunters would repulse an English Victorian visitor, but not Wallace. "The old [Dyak] men here related with pride how many 'heads' they took in their youth," he noted with some sympathetic interest, "and although they all acknowledge the goodness of the present rajah [Brooke], yet they think that if they were allowed to take a few heads, as of old, they would have better crops. The more I see of uncivilized people," Wallace concluded, "the better I think of human nature on the whole, and the essential difference between civilized and savage man seem to disappear."40 Wallace came to live with and implicitly trust the Dyaks. While the Englishman appreciated these people more than most of his fellow countrymen, certain ceremonies could become annoying. At one such event, for example, a local Orang Kaya (rich ruler) arrived to much fanfare: "All the time six or eight large Chinese gongs were being beaten by the vigorous arms of as many young men, producing such a deafening discord that I was glad to escape to the round house, where I slept very comfortable with half a dozen smoke-dried human skulls hanging over my head."41 This incident is interesting in demonstrating the ease and mutual trust Wallace was able to foster with indigenous peoples who might have "offended" Victorian sensibilities. This fact alone would be an important feature distinguishing Wallace from all his fellow naturalists (Darwin, Huxley, and Hooker).

The inadequacies of Charles as a naturalist's assistant forced Wallace to cast about for a replacement, and he found one at Sarawak: a 14-year-old Malay boy named Ali who would remain the adventurer's constant aide and companion for the rest of his stay in the region.

If the Amazon was Wallace's apprenticeship in natural history, the Malay Archipelago was where his ideas began to come together. To facilitate this process he began a separate journal to include a hodgepodge of articles and scientific text extracts, observations, anecdotes, and assorted musings. Fascinated by the orangutan, he would publish an article on the human-like beasts in the Annals and Magazine of Natural History. But of much greater significance was an essay, "On the Law Which Has Regulated the Introduction of New Species" (first appearing in the Annals and Magazine of Natural History [September 1855]) that is often simply called Wallace's "Sarawak Law" paper. Wallace was in Sarawak from November 1, 1854 to January 25, 1856;42 the paper was written in February 1855 during the rainy season, with only Ali as his cook and companion, Wallace had time to pour over his books and ponder his experiences. Putting his ruminations to paper, Wallace made a bold proposal comprised of nine "facts" forming one overarching law, namely, that four specific geographical principles and five geological principles suggested the following: "Every species has come into existence coincident both in space and time with a pre-existing closely allied species [italics in the original]." Here is a summary of its basic principles:

#### Wallace's Sarawak Law

Four geographical principles:

- 1. The distribution of large classes and orders is significant;
- 2. Distributionally distinctive genera are important;
- Natural species affinities are almost always geographically circumscribed;
- Countries with similar climate, though separated by wide seas or large mountains, will exhibit families, genera, and species closely allied to one another.

#### Five geological principles:

- Distribution of the organic world in time is close to their distribution in space;
- Most large, and a few smaller, groups extend through several geological periods;
- 3. Each geological period, however, includes unique groups not found elsewhere;
- 4. Species of one genera or family within a period are more closely allied than those from different periods;
- 5. The appearance of groups and species are singular events, no group or species has come into existence more than once.

The importance of Wallace's Sarawak Law paper has not been missed by subsequent scholars. Admitting that the actual mechanism *causing* evolutionary change remained to be discovered, the famous American paleontologist and geologist Henry Fairfield Osborn nonetheless declared Wallace's contribution "a very strong argument for the theory of descent, as explaining the facts of classification, of distribution, and of succession of species in geological time. Wallace," he called, "a strong and fearless evolutionist...." More recently, Iain McCalman called the Sarawak paper "the first ever British scientific paper to claim that animals had descended from a common ancestor and then produced closely similar variations which evolved into distinct species."

Unfortunately, Wallace's Sarawak Law article got about as much attention as did his books on the Amazon and palm trees. There were a couple of exceptions. Sending a copy to his old Amazon colleague Henry Walter Bates, Bates declared, "The idea is like truth itself, so simple and obvious that those who read it and understand it will be struck by its simplicity and yet it is perfectly original." More importantly, Charles Lyell, the geologist who had so influenced both Wallace and Darwin and remained a Down House confidante, read Wallace's paper and was frankly rattled by its persuasively argued uniformitarian thesis against his own objections to evolution. He felt beat at his own game. When

Lyell met with Darwin in April 1856, he seriously urged the now preeminent expert in barnacles to publish his theory as soon as conceivably possible. Darwin read Wallace's paper too but claimed it contained "nothing very new."46 It's hard to say why Darwin missed Wallace's point. Perhaps he was simply too self-absorbed to see it. His leading biographer suggests as much. "Usually so alert to the different ways of seeing nature, Darwin blindly stared past the implication in Wallace's words. Though looking outwards," Janet Browne admits, "he was not prepared to see the possibility that someone else might be hesitantly circling around before arriving at the same theory. His own work, not Wallace's, was primary."47 Still, the overall silence which met Wallace's Sarawak effort remains inexplicable. Even Huxley, writing years later, noted, "On reading it afresh I have been astonished to recollect how small was the impression it made."48 There was another group unimpressed with Wallace's publication. Writing to Samuel Stevens, his dutiful agent replied that "several naturalists" (perhaps including Stevens who needed specimens to keep the cash flow going) were disappointed by his "theorizing." What they wanted were specimens not speculations! Wallace needed to get back to work.

Perhaps his agent and his clients back in Britain were spoiled. By the end of January 1858, after Wallace had been in the Malay Archipelago nearly four years, he could write proudly to his entomologist friend Bates that he had collected 620 species of butterflies, 2,000 species of moths, 3,700 species of beetles, 750 bee and wasp species, 660 fly species, 500 species of "bugs, cicadas, etc.," 160 species of locusts, 110 species of dragonflies, and 40 earwig species: 8,540 species in all!<sup>49</sup> This does not include numerous bird and mammal species.

Thanks to his indefatigable collecting, from both Wallace's and Stevens's perspectives the Malay venture had proven a commercial success. And for good reason—Wallace was traversing the entire archipelago. June and July 1856 he spent exploring and collecting on the islands of Bali and Lombok; in the fall of that year he landed on Macassar at the island of Celebes; and in 1857 he spent his time in the Aru Islands and the

Moluccas. This former group he found so delightful that he returned there in 1859. Here he found one of the most exotic and prized creatures he had longed to encounter: "New and interesting birds were continually brought in," he recalled with relish, "either my own boys or by the natives, and at the end of a week Ali arrived triumphant one afternoon with a fine specimen of the Great Bird of Paradise. The ornamental plumes had not yet attained their full growth, but the richness of their glossy orange colouring, and the exquisite delicacy of the loosely waving feathers, were unsurpassable." He was perhaps the first Englishman to see this exquisitely beautiful creature in its wild habitat. Wallace summarized his entire time in the Aru Islands thus:

My expedition to the Aru Islands had been eminently successful. Although I had been for months confined to the house by illness, and had lost much time by want of the means of locomotion, and by missing the right season at the right place, I brought away with me more than nine thousand specimens of natural objects, of about sixteen hundred distinct species. I had made the acquaintance of a strange and little-known race of men; I had become familiar with the traders of the East; I had reveled in the delights of exploring a new fauna and flora, one of the most remarkable and most beautiful and least known in the world; and I had succeeded in the main object for which I had undertaken the journey—namely to obtain fine specimens of the magnificent Birds of Paradise, and to be enabled to observe them in their native forests. By this success I was stimulated to continue my researches in the Moluccas and New Guinea for nearly five years longer, and it is still the portion of my travels to which I look back with the most complete satisfaction.51

Wallace also spent time in the Moluccan islands: Banda, Amboyna, Ternate, and Gilolo. Grand as his time in the Aru Islands was, his time in this island group would be memorable. He arrived on the island of Ternate on January 8, 1858, "the fourth of a row of fine conical volcanic islands which skirt the west coast of the large and almost unknown island of Gilolo."<sup>52</sup> Here history would be made.