## **book reviews**

the Napoleonic Wars, is omitted, but is to be published by the Hakluyt Society.

This selection, then, helps to restore to the map of late eighteenth-century and early nineteenth-century intellectual life a figure too long absent and a great master of the art of letter-writing. It offers a glimpse of the long-submerged epistolary riches that provide such insight into the character of a remarkable individual and his age. John Gascoigne is in the School of History, University of New South Wales, Sydney 2052, Australia.

## Mastermind of the bird world

## Erwin Stresemann (1889–1972): Life and Work of a Pioneer of Scientific Ornithology

by Jürgen Haffer, Erich Rutschke & Klaus Wunderlich Deutsche Akademie der Naturforscher

Leopoldina: 2000. 465 pp. (German with English summary). DM68, 34.80 euros (to be ordered through G. Thieme Verlag, Stuttgart) Matthias Glaubrecht

Ever since Charles Darwin and Alfred Russel Wallace strove to solve the 'mystery of mysteries', the question of the origin and nature of species has been paramount for evolutionary biologists. Long before the 'evolutionary synthesis' became the theoretical umbrella for systematics, genetics and palaeontology in the 1940s, two of its German architects, Ernst Mayr and Bernhard



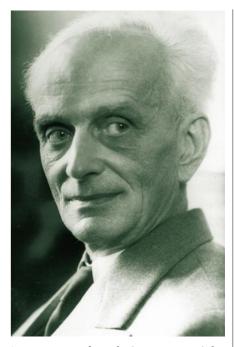
Rensch, were both guided by one man — Erwin Stresemann — who was pre-eminent in establishing many of the principles on which modern ideas of species are based.

Given Stresemann's paramount contribution to transforming the old typological and stagnant concept of species into the dynamic concept of biospecies (as one of many currently discussed species concepts), it is surprising that little information was previously available on his life and scientific work. The gap is now filled by this wellresearched account of both the scientific and personal aspects of Stresemann's long and outstanding career, by three authors who, independently and at different times, came to know him.

Klaus Wunderlich, who examined Stresemann's scientific legacy in the Staatsbibliothek Preussischer Kulturbesitz in Berlin, provides the biographical information, while Erich Rutschke shows Stresemann the man. Most of the book comprises a description and analysis of Stresemann's scientific work and achievements by Jürgen Haffer, an experienced taxonomist, ornithologist and historian of science. An appendix contains previously unpublished extracts of manuscripts, including an unfinished manuscript from 1952 on the historical development of systematic knowledge on birds of paradise, one of Stresemann's lifelong obsessions, and letters that supplement the correspondence of Stresemann with Mayr and other ornithologists that was edited by Haffer and published in Ökologie der Vögel in 1997.

Streseman was not only an eminent bird systematist and one of the most outstanding ornithologists of the twentieth century, but also a charismatic biologist who was one of the founders of the 'new systematics' in zoology during the 1920s. He was educated at the University of Munich, and by the age of 24 had already made an expedition to the Moluccan Islands (1910-12), published several articles on their bird life and been invited to write the ornithological contribution to Willy Kükenthal's famous Handbuch der Zoologie. With his later masterpiece, the seminal and lasting volume of the Aves (1927-34), Stresemann initiated the transformation of avian taxonomy into a branch of modern biological science, thereby laying the basis for a 'new avian biology'.

Appointed a curator of the Berlin Natural History Museum of the Humboldt University in 1921, Streseman established a school of young ornithologists. The Second World War abruptly ended this successful tradition in German natural sciences. The museum was left trapped behind the Iron Curtain in East Berlin, making it impossible for Stresemann to resume his leading position in ornithology. Nevertheless, in him the unity of German ornithology survived during this period, mitigating the separation of Eastern and Western scientists.



Stresemann transformed avian taxonomy. Birds of paradise (below) were a lifelong obsession.

As Mayr later generously acknowledged, he owed to Stresemann the idea of reproductive isolation as the defining property of species, which later proved most valuable for defining biological species in Mayr's 1942 and 1963 accounts. From 1914 onwards, Stresemann also discussed geographical isolation and small population sizes as underlying factors in speciation, thus favouring what later became known as the allopatric model of speciation. In the 1920s and 1930s Stresemann synthesized a balanced view of historical and ecological factors long before vicariance biogeography as the systematic analysis of distributional patterns became the dominant perception.

The book is an affectionate account of Stresemann's career. But it is not silent about his overly conservative and pessimistic attitude, from the 1950s on, resisting modernization in the delimitation of bird taxa and becoming theory-hostile to the nature of species and the systematic relations between bird orders.

To anyone interested in the development of scientific ideas, the book offers an absorbing insight into the remarkable biologist's life and his leading role in ornithology and bioscience when the latter was still a holistic discipline. Particularly, we should be indebted to Jürgen Haffer for his efforts to reveal Stresemann's long-forgotten contributions. Only when historians of science cease to make use of the rich records of influential scientists, as Stresemann certainly was, are those scientists truly dead.

Matthias Glaubrecht is at the Institute of Systematic Zoology, Museum für Naturkunde of the Humboldt University, Invalidenstrasse 43, 10115 Berlin, Germany.