Book review

A Concise History of Ornithology

By Michael Walters (one chapter by John Coulson). 2003. Published by Helm, London. 255 pp., numerous black-and-white illustrations. ISBN 1-873403-97-6. \$A99.95.

Michael Walters, recently retired from the Natural History Museum, has produced this book in an attempt to summarize the long and complicated history of ornithology. As would be expected, his emphasis is on bird studies in museums and he has drafted in a university-based researcher, John Coulson, to round the book off with a short account of the 20th century, during which studies have become much more orientated to the field.

Walters has subtitled his book 'the lives and works of its founding figures', and indeed the emphasis is on people rather than birds (the index only includes people) and the systems of bird classification they invented. Potted histories of the main characters are usefully provided and many have their portraits alongside (although undated and uncredited as to artist or copyright holder). The author pays due credit to those who have previously attempted to compile a history of ornithology, the most important of these being Alfred Newton (in the introduction to his *Dictionary of Birds*, 1896) and Erwin Stresemann (Die Entwicklung der Ornithologie, 1951). Ornithology got a late start as a science, as compared to other disciplines such as botany – plants, being static, were avidly studied as a basis for medicine and food, whereas birds were harder subjects. Birds threatened with extinction were simply curiosities until after the time of Darwin, as people thought only their gods had the ability to influence the future of species.

The book begins with early times and Aristotle's valiant attempt to classify the kinds of birds, of which he identified about 140. His erroneous views on incubation periods are still faithfully quoted nearly 2500 years later. Fables dominated the ornithology of the succeeding centuries, although the Holy Roman Emperor Frederick II (1194-1250) wrote a classification of birds based on their habitat and food. Aldrovandi produced a great work on birds in 3 volumes (1599–1603), which included a section on those of a 'middle nature' such as bats and ostriches. By the early 16th century, explorers had started to bring living birds (such as parrots) back with them, and a few badly prepared skins. Paintings from this period were much more likely to survive, however, and are still widely studied by modern ornithologists - for instance, Georg Hoefnagel's portrait of the Mauritius Red Rail is now considered to be of great importance, as the only known likeness of the bird as it was in life.

In the 17th century, British ornithology began to develop. Walter Charleston was the first Englishman to produce illustrated lists of birds (he also tried to prove that Stonehenge had been built by Danes) but Francis Willughby was the true

father of British ornithology, helped by his friend John Ray. Most pioneers of ornithology at the time, including the British, were amateurs but as the preparation of bird skins became more sophisticated (progressing from methods such as Réamur's, who used the residual heat of ovens after bread had been baked) it became possible to study and draw specimens at leisure. George Edwards' 4-volume *Natural History of Birds* (1743–51) was produced from such early specimens, which explains why the models for his plates look as if they had all been hammered onto matching perches (they had). The availability of prepared specimens also kick-started North American ornithology – Mark Catesby's *Natural History of Carolina* ... (1731–43) being the first proper published work on their birds.

The first great collections included Réamur's in Paris and the vast assemblage of Hans Sloane, which founded the British Museum in 1759. Sloane's collection included over 1100 birds (skins, skeletons, nests and eggs). When Walters' book went to press none of these were thought to survive since then a Sloane Collection hornbill skull has been unearthed after much sleuthing (Steinheimer and Cooper 2003). Not surprisingly, the author does tend to concentrate on ornithologists whose collections are now at the Natural History Museum's bird outstation at Tring in Hertfordshire, and he skims over topics such as the history of oriental ornithology, or interesting bird collections in other museums (although Australian readers will be interested in the account of the one formed by the Compte de la Porte de Castelnau, who was based in Melbourne as Consul General from 1862). There is also a useful list of the first published accounts of Australian birds, from John Latham's gallant shots-in-thedark of the turn of the 18th and 19th centuries, to the more first-hand accounts by crews of ships such as the Coquille and Thetis. Walters rightly considers that John Gould was the first to try to produce a systematic account of Australian birds, but Gould Leagers (and Gould fans) will be upset and bemused to read that he 'contributed little to the development of ornithology', that he was 'not an artist' and had not actually drawn even one of his thousands of plates, but had achieved his fame by his 'ability to ingratiate himself'.

Compare the low level of sophistication of the 18th century publications with Richard Bowdler Sharpe's *Catalogue of Birds in the British Museum* (1874–95), and one can only agree with Walters' opinion that these 27 thick volumes in many ways comprise the most important ornithological work ever published (although, oddly, Walters does not include it in his Bibliography). The 19th century was what might be considered the first boom period for museum-based ornithology, the 20th for field studies – with the burgeoning of molecular science as we enter the 21st the importance of preserved material is being rediscovered and museums have become hotbeds of activity again (a development briefly discussed by Coulson).

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Walters discusses the different systems of avian classification devised over the centuries (such as those of Buffon, Linnaeus, Scopoli, Pallas) in great depth, and there is much about the great bird collections (although not much about the great bird collectors). He devotes nearly 60 pages to appendices, where he lists the different attempts there have been over the centuries to produce a workable classification of birds, from Walter Charleton's effort of 1668 to Hans Gadow's in 1892. However, Walters does not include 20th century attempts, and leaves it to Coulson to briefly explain Charles Sibley's monumental and revolutionary method of classification based on DNA analysis. Walters' appendices would have made a nice paper for the journal *Archives of Natural History*, perhaps, but seem a shade academic for a book aimed at birders with no historical knowledge and

where space is limited (to judge from the word 'concise', the small font and long paragraphs). The same applies to Appendices A and B, lists of bird plates based on Emperor Rudolph's collection and the itinerary of Freycinet's voyage of 1817–20, which are included without explanation.

A useful reference for ornithologists (although with only passing reference to Australiana), but which would have been much enhanced by greater organisation, some colour plates and a better standard of printing.

Steinheimer, F., and Cooper, J. H. (2003). Sir Hans Sloane's Rhinoceros Hornbill skull: an avian remnant from the founding period of the British Museum. *Archives of Natural History* **30**, 166–167.

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