

## Book Review

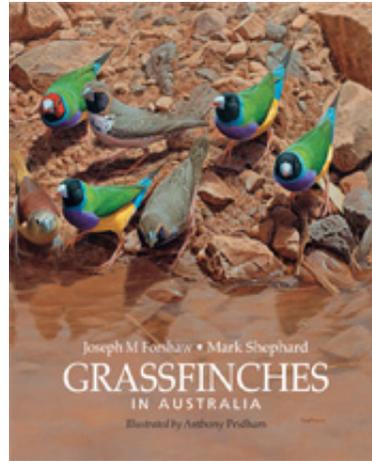
# Grassfinches in Australia

**JOSEPH M FORSHAW AND MARK SHEPARD.**

*Illustrated by Anthony Pridham. Line drawings and text figures by Frank Knight. 2012. CSIRO Publishing, Collingwood, Victoria. A\$185. Hardback with 318 pages, numerous paintings, figures and maps.*

This is a beautiful and substantial book that looks like a coffee table book, but is much more. It is a hefty and large format (330 mm by 270 mm) book full of cracking paintings by Anthony Pridham that capture the essence of these attractive finches in poses that show typical behaviour and the key points in their identification. In addition to the full page illustrations of the different species there are numerous smaller paintings and line drawings (the latter by Frank Knight) that effectively supplement the description of courtship, mating or agonistic interactions and illustrate diagnostic features, subspecies and even mutants. In addition there are early colonial paintings, mainly by the convict artist Thomas Watling, such as a 1787 painting of the Diamond Firetail, *Stagonopleura guttata*, the first Australian finch to be formally described and named, within eight years of settlement. These early paintings are very evocative and informative, and they also show how much bird illustrations have advanced. It is very fitting that the book received a Whitley Award Commendation for Illustrated Zoology in 2013 - I have rarely seen a bird book that is as well illustrated. The book is worth buying for the illustrations alone.

The text of the book matches the quality of the illustrations so this book is a worthy successor to Cayley's book on the Australian finches



(Cayley 1932) that was substantially augmented by Immelman's books (Immelman 1963, 1985). *Grassfinches in Australia* includes a broad range of information from the scientific, aviculturist and bird watching literature on the biology of the finches and their conservation status. As such this book is the definitive reference for this group of extraordinary birds and is likely to remain so for many years. The book covers the finches in the family Estrildidae, including the four introduced and vagrant species (Nutmeg Mannikin, *Lonchura punctulata*; Pale-headed Mannikin, *L. pallida*; Black-headed Mannikin, *L. malacca*; and Java Sparrow, *L. oryzivora*). The book does not include the introduced finches in the family Fringillidae such as the European Goldfinch, *Carduelis carduelis*, and Common Greenfinch, *Chloris chloris*.

The first chapter provides a general introduction to the grassfinches, their phylogeny and likely origins, their common features and provides a foundation for the species accounts that follow. The second chapter is a comprehensive overview of aviculture and again provides a basis for that section in each of the species accounts. Each species has a chapter with all of the following detailed sections: description; distribution; general notes; habitats and status; movements; social behaviour; field notes; diet and feeding;

vocalisation; courtship and mating; nesting; eggs; and extensive aviary notes. Within each of these sections there are up to date accounts that incorporate the modern literature in a lively first-person style so the sections are highly informative without being tedious. Records from the Australian Bird and Bat Banding Scheme are used to illustrate longevity and maximum recorded movements in the wild. Many of the finches have declined and the section on habitats and status covers the past and present distributions using a variety of sources such as national and regional atlases, surveys and the authors' own personal observations, weighing up the evidence for the likely causes for declines and highlighting populations that seem to be recovering. The status of the finches in South Australia is well summarised with thoughtful comments on the habitat decline in the Mount Lofty ranges in particular.

I applaud the sections of the book devoted to captive birds in aviaries as this adds considerably to the scope of the book. Grassfinches being such attractive and tractable finches are very popular with aviculturists: for some species much of what we know about them comes from observations by both professional and amateur aviculturists. The Red-browed Finch, *Neochmia temporalis*, was apparently a popular cage bird in the earliest days of Australian settlement, with records from 1788 onwards. From the 1930s the emphasis in aviculture shifted from merely keeping finches to successfully breeding them and this led to a deep understanding of housing and breeding requirements. Interestingly, the Aviculture Society of South Australia was a pioneer in the shift to keeping colonies of well-housed breeding finches. The issue of trapping wild birds is dealt with comprehensively and the prohibition on wild-caught birds from the late 1970s provided further impetus for captive breeding. Some species have several morphs in the wild and even more in captivity, and the inheritance of these different colour morphs was elucidated in captive species like Gouldian Finches, *Erythrura gouldiae*. The Zebra Finch, *Taeniopygia guttata*,

has become an avian laboratory rat with large colonies maintained in the northern hemisphere for research on many aspects of ornithology. In my own field of bioacoustics much of our understanding of avian hearing and the learning of songs comes from research on captive Zebra Finches. Similarly, Zebra Finches have been pivotal in furthering our understanding of the integration of signal processing by avian ears and brains. These laboratory colonies have over time deviated from the wild morph and this is well illustrated in the book and shows the need for supplementary studies of wild populations which are fortunately still common in arid parts of Australia.

I tested the usefulness of the book by paying particular attention to the species with which I am most familiar, particularly Diamond Firetails. I found the information for all these species to be accurate and informative with many little-known nuggets sprinkled through the text. This book would have been very useful when we were starting our research on Diamond Firetails as it clarifies many issues and would have been invaluable in establishing our breeding colony. For example, Diamond Firetails are difficult to sex and the book outlines the sexual differences in morphological features used by aviculturists, particularly bill colour. We have since found that females have more white flank spots than males and use them as cues to dominance in agonistic interactions such as at food. There is overlap in spot number but it is a useful and easy way to sex these firetails. This information is not in the book simply because it was published too late for inclusion. The only addition I would have liked for each species account would be spectrograms of their common vocalisations because I think they would clarify the thorough and accurate descriptions of songs and calls in the text.

In summary, this is an admirable book on an iconic group of Australian birds. Each species is systematically described in detail with all the essential information on their biology and conservation status. The illustrations are superb

and substantially add to the value of the book as the definitive text on the Australian grassfinches. It is an expensive book but the expense is justified by the quality of the printing and the illustrations. There would be very few bird watchers who would not learn a great deal from this scholarly and sumptuous book.

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