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Book review

THE ACTION PLAN FOR AUSTRALIAN BIRDS 2010

By Stephen T. Garnett, Judit K. Szabo, and Guy Dutson 2011. Published by CSIRO Publishing, Melbourne. 442pp., tables, maps. Paperback. AU\$49.95, ISBN: 9780643103689.

At first appearances, Australian birds seem not to have fared as badly as those in some other countries. Compared to New Zealand for example, where 14% of species became extinct since European settlement (42% since humans first arrived), Australia has lost just over 2% of its avian taxa since European colonisation. Australia is in fact much more notorious for its mammal extinction crisis (27 species over the last 200 years!). However such a simplistic summary would not do justice to the true status of our birds as a whole, and the likely trajectory of many species. The sad fact is that a further 211 taxa (17% of extant taxa pre-European colonisation) are known to face ongoing threatening processes that may, with varying degrees of likelihood and time-frame, lead to their ultimate extinction. It would be foolish to deny the inexorable negative momentum caused by human-induced impacts such as introduced species, climate change, and the loss, degradation and fragmentation of habitats. It is only through a deep understanding of the biology of each species and the particular threats faced by each, that we can hope to limit widespread declines in our bird populations.

The latest Action Plan for Australian Birds (2010) by Stephen Garnett, Judit Szabo and Guy Dutson has an essential role to play if we are to stop further losses of bird species, sub-species and populations. It is the third account in a series led by Stephen Garnett with previous versions in 1992 and 2000 (the latter co-authored by G. M. Crowley). The latest version provides concise summaries for the conservation status of each of the 238 taxa (species and sub-species) considered to be under threat. These summaries comprise maps, reasons for inclusion in a particular category of threat (Extinct, Extinct in the wild, Critically Endangered, Endangered, Vulnerable, Near Threatened), the status of the bird species in 1990 and 2000, together with brief reasons for any change since then and biological parameters such as its taxonomic 'uniqueness', range, abundance, ecology and additional threats. The conservation objectives are then outlined together with the management actions and the further information required to implement these objectives. The species summaries are well written, beautifully laid out and easy to follow. The directives for action based on the available presented information are in most cases logical and unambiguous, making the conclusions for individual species totally accessible to scientists, managers and policy makers alike.

The collective expertise and sheer amount of work involved in this book are impressive. In essence, it is an exercise in the optimal use of the limited information that is available. However, although there are strong arguments for employing an 'optimal use' method, this strategy becomes problematic when there is very little information available, and can create the illusion of greater confidence in the listings than is actually merited. I was left with some concerns of this nature.

As stated in the introduction to this book, the methods use IUCN Red list protocols whereby if a species is assessed to be consistent with the criteria in any of five rule sets, it may be classified at that

level. The main components for assessment are (1) data on geographic range, (2) current population size, (3) current habitat fragmentation and (4) trends in population size and habitat. An admirable quality of the whole exercise was the input from a wide range of 'knowledgeable' individuals, and the reaching of apparent consensus in most cases. It was however frustrating reading in the introduction about the nine taxa that caused the greatest difficulty. The elucidation process and role of RAMAS software in making decisions concerning these and other taxa were not well explained. I was also concerned that so little information was given to justify the decisions behind the 64 taxa categorised previously as Near Threatened or above, but not listed in 2010 (Appendix 2). Many were changed for technical reasons (e.g. a change in the criteria for 'Near Threatened') but in other, sometimes more dramatic, cases (e.g. the change of Crested Shrike-tits Falcunculus frontalus whitei from Endangered C2a to unlisted), I felt the need for greater transparency, including both references and a better explanation of the methodology.

This volume has great value and the above quibbles do not diminish the enormous amount of work that went into all 238 listings, nor the fact that the internationally accepted procedures were applied with rigour. One of my main reactions, however, is that we need to feel greater humility, and acknowledge more openly, our lack of data for many Australian birds. Ours is a big country with an impressive avifauna, yet we have a small human population, and a correspondingly low density of professional and amateur ornithologists. We do extremely well with our limited resources (with credit especially to BirdLife Australia), but we do not have the level of detailed knowledge available in Europe and North America. Many of our species have still never been studied in detail, and few have been studied over long periods. This means that we often do not know much about the ecological (e.g. long-term responses to drought or fire) or demographic processes (e.g. reproductive rates, agespecific mortality or even life-spans) necessary for understanding the trajectories of our wild bird populations, especially in the face of global change. In the parlance of this book, more of our species are 'Data Deficient' than is admitted. The authors explained why they eschewed this category whenever possible (i.e to promote action), and I agree that it is usually best to 'make a call'. However, it is also good scientific practice not to place greater confidence in that call than is merited by the available data. In this light at least some of the listings in this book should be viewed as interim measures until better data are available. To the authors' credit, each species summary contains an explicit 'Information required' section, although many of these could easily have been expanded. In my view, this volume should not only be a call for action to halt known threatening processes, but also for a whole new wave of essential basic research on our most threatened species. Ultimately, this book is a clear indication that the nation needs a long-term commitment to a strategic national bird monitoring system.

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