

## BOOK REVIEWS

### The Action Plan for Australian Birds 2010

Garnett, S., Szabo, J., and Dutson, G. (2011)  
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THIS is the third Action Plan for Australian Birds produced since 1992 by Stephen Garnett and his colleagues. Each reviews the conservation (threatened) status of the 1266 indigenous bird taxa (species and distinct populations; excluding vagrants) found in Australia and its territories. Threats, important habitats, and gaps in information are given for each taxon listed. Twenty-seven taxa are extinct, with 20 critically endangered, 60 endangered, 68 vulnerable, and 63 near threatened. One-thousand and twenty-eight are taxa of "least concern" and are not listed. For each threatened taxon the reasons for listing are explained, the taxon's past and present distribution and abundance given, and the threats the taxon faces summarized. There is also a brief account of each taxon's ecology and a bibliography of relevant publications. Recommendations are made for conservation action, including research, with the aim of minimizing threats and ensuring the taxon's survival. Status is assessed using the criteria of the International Union of Conservation of Nature (IUCN) Red List.

Population size, geographic range, and rates of decline are the criteria used to assess status, but there are few species in Australia or its territories where such data are adequate or even available. As a result, the emphasis in the 2010 Action Plan, as in the previous two, is inevitably on taxa that are large, conspicuous, colourful, confined to islands (land or sea-locked), rare, or whose decline has been sufficiently precipitous to attract attention. Population and distribution data for such birds are substantially easier to obtain than for less conspicuous taxa. Thus, of the 268 listed taxa, sea and water birds, including migratory waders, account for 37% (89 taxa), parrots and pigeons 12% (31), and island birds, including Tasmania, 22% (60).

The small brown birds of eucalypt woodlands are barely mentioned in the Action Plans (7 taxa, 3%), despite extensive and continuing habitat loss and fragmentation on a continental scale, with the inescapable decline of most woodland taxa (Ford *et al.* 2001, 2009). Despite the limited data for most taxa, I argued that the great majority of Australian bird taxa were in decline and at risk of extinction in the 21st Century (Recher 1999). Much of avian biodiversity is lost as populations across the continent are extinguished with habitat clearing for cities, farms, and infrastructure; every species has had its genetic diversity compromised. Unfortunately, it is hard, if not impossible, to account for this using the criteria of the Red List.

The 2010 Action Plan lists 19% of taxa as threatened. The number is similar to the 2000 Action Plan (Garnett and Crowley 2000), with 61 taxa listed as less threatened and 26 listed at a higher level of threat. Better information, changes in taxonomy, and changes in the Red List's criteria are reasons given for most changes in status. However, a few species have increased in abundance and have been down-listed in status, while others have decreased and their threatened status increased.

In Recher (1999), I expressed reservations about the way the status of Australia's birds was assessed. I argued the criteria of the Red List were too restrictive and their interpretation too political. Despite not caring, politicians and senior public servants do not like reading about species becoming extinct; it is bad publicity. There is no scope in the Red List criteria to project trends into the future or to account for future threats (e.g., climate change, increased fire frequency, coastal development). In effect the assessment of status relies on past events, with conservation strategies inevitably trying to restore populations and species instead of preventing declines and losses. Garnett and I do not disagree in substance, but, in his words, he is more optimistic about the future of Australia's avifauna than I am (Garnett 1999). What I see is an avifauna in chronic decline, which as Garnett (1999) noted tends to be "managed rather than cured". Unfortunately, there is little management aimed at arresting the decline of Australia's birds bar a few high profile species, most of which are already dead men walking.

With 19% of avian taxa "officially" recognized as extinct or threatened, an alert and compassionate nation concerned about the welfare of its natural heritage should act to reverse the pattern of decline. Instead, conservation management is at a standstill and as much in chronic decline as Australia's biota. Of equal concern, there is an aspect of change in the avifauna that receives no mention in the Action Plans and little attention in conservation management. Many taxa have benefited from agriculture, urban expansion, and related activities, and have increased in abundance. Taxa that increase are as much an indicator of changing and dysfunctional ecosystems as those that are in decline (Recher 1999). I hope that those who prepare the Action Plans for Australian Birds will accept that and include the "increaser" taxa in the next decadal review, with equally clear conservation objectives as are now given for threatened taxa.

Garnett and his colleagues have assembled a large amount of information on the status of Australia's birds. It makes for sobering reading, but it is important that we have these periodic assessments. It is also important that there be a set of criteria, such as the Red List, that everyone can refer to. Despite the value of the Red List, I would like to see status assessed differently using wider criteria, with

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more attention to chronic change. The current procedures, as exemplified in the 2010 Action Plan, place too much emphasis on measurements, thereby excluding the “small brown birds” so difficult to study. Perhaps more use can be made of “expert opinion” so the plight of Australia’s small brown birds can be brought to public notice before it is too late (for an example of how to do this, see <http://www.youtube.com/watch?v=GyUmptgs4sU>). I would also like attention paid to the longer term threats of climate change, growing human populations, urbanization, and more intensive agriculture. None of these is listed as a threat to the taxa listed in the Action Plan, yet all have significant impacts on Australia’s avifauna. The survival of many taxa is in doubt as a result of changing climates, fragmented landscapes, and more intensive use of resources by people (Ford *et al.* 2001; Kingsford and Watson 2011; Thomas *et al.* 2004).

Every conservation biologist should be familiar with the content and conclusions of the 2010 Action Plan. As Graeme Hamilton says in his Foreword, “...this book describes a tragedy.” Unless we know what that tragedy is and its magnitude we cannot take effective action. The book describes more than a tragedy; it gives direction to the future and identifies gaps in our knowledge that conservation

biologists should be working hard to fill. If the tragedy becomes a disaster, it will only be because we failed to take action. Garnett, Szabo, and Dutson have informed us of the actions we need to implement, now it is up to us.

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## The Atlas of Coasts & Oceans: Ecosystems, Threatened Resources, Marine Conservation

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OCEANS cover 70% of Earth, but the impact of humans on the world’s seas and oceans is boundless. Boundless in the sense that human impacts begin on the land at the headwaters of every creek, stream, and river flowing to the sea and extend without interruption along and across every coast and estuary to the most remote and deepest parts of the oceans. Human impacts are carried with waters flowing to the sea, in the air blowing across continents, and in every vessel, regardless of size or number of occupants, that ventures out from the land. No ocean escapes the impact of humanity and nowhere at sea is there any longer wilderness.

*The Atlas of Coasts & Oceans* is a summary of the impacts of people on the world’s oceans, their resources, and on other people using the oceans. The text is presented in six parts. The first, “People and coasts” describes the settlement of people along the coasts and their impact on shorelines. Half the world’s people live on or near the coast. “Major threats to ocean resources” summarizes the effects people have on marine ecosystems, including the open ocean, fisheries, seagrass, mangroves, and coral reefs. Only 20% of potentially exploitable fish stocks

have the potential for greater production; 40% of global fisheries have “collapsed”, with trends showing 100% will have collapsed by 2050. There are now in excess of 400 “dead zones”, coastal areas that have become “eutrophic” as a result of excessive inputs of nutrients from agriculture, industry, and sewage (treated and untreated). Dead zones affect about 250 000 km<sup>2</sup> of coastal areas around the world, with the most extensive areas along the east and gulf coasts of the United States, northern Europe, Japan, and southeast Asia. “Trade, commerce, and tourism” discusses shipping, the extraction of energy from the sea (oil, gas, wind, tide, and waves), tourism, and mariculture. Ninety percent of the world’s commerce is shipped by sea and oil spills, dredging, and the translocation of exotic marine life have significant impacts on marine life. Between 70 and 80 percent of mangrove forests in Vietnam and the Philippines have been cleared to establish prawn (shrimp) farms. If you buy imported prawns in Australia, you are contributing to the destruction of the world’s most productive natural ecosystems along with the people who previously relied upon them for their livelihoods. “Climate change” presents the impacts of human-induced global warming on the world’s oceans. Among the impacts are more extreme weather events, loss of polar ice, and rising sea levels. Although the conventional forecast is for a sea level rise of 20–90 cms by 2100, studies at Princeton and Harvard universities have found that the polar ice sheets are more vulnerable than thought and a sea level rise of six to nine meters is possible with a 2°C

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