REVIEWS

Dekker, Rene W.R.J. 1990. ***Conservation and biology of megapodes (Megapodiidae, Galliformes, Aves).*** PhD Thesis, University of Amsterdam, Institute for Taxonomic Zoology (P.O. Box 4766, 1009 AT Amsterdam). Limited edition, available at GBP 8.00 sterling incl. airmail from the author at: National Museum of Natural History, P.O. Box 9517, 2300 RA Leiden, The Netherlands.

This 132-page booklet is a compilation of seven chapters, (two of them co-authored). The first four chapters deal with the conservation and management of the Maleo and other megapodes, and the remaining three with aspects of their biology. Much of the work for this thesis was conducted on Sulawesi's endemic Maleo (the Indonesian Ornithological Society's logo) during Phase I of the Maleo Conservation Project.

The megapodes, of which 19 species are currently recognized, are noted for using alternative heat sources for incubating their eggs. The two main strategies are building mounds of rotting vegetation, and burying in volcanic or sun-heated sands, and Chapter 6 clearly relates these respectively to the absence, or presence, of large carnivores; it is noted that the introduction of feral cats on islands holding mound-building megapodes will lead to the extinction of entire populations or even species. The final chapter discusses the evolution of these strategies, and concludes that they are not a primitive trait inherited from reptilian ancestors, but have been acquired secondarily, and that burrow-nesting has evolved from mound-building.

Chapter 3 is of particular concern for the conservation of the Maleo, listing 48 breeding sites in Sulawesi, plus 9 sites that require confirmation. This is not a complete list, and indeed the last issue of *Kukila* identifies further sites, including the shores of two SE Sulawesi lakes, while this issue provides further support to the existence of a Buton population. A glance at Fig. 1 suggests wide areas where data may be lacking, but there is absolutely no cause for complacency. Rapid population increase around the coasts of Sulawesi, through both sponsored and spontaneous transmigration (which is not obligatory, as stated on p. 19 - many of the new settlers actually originate from South Sulawesi, and not Java and Bali), is causing a breakdown of traditional sustainable harvesting systems, and very few of these sites are considered secure.

Other chapters deal with breeding biology, in a group that lends itself to artifical incubation and re-introduction. The Maleo Conservation Project is researching the management aspects of the Maleo at two sites in Dumoga-Bone National Park, and the three-year gap between Phase I and Phase II, which was beyond the control of the project sponsors, is to be deplored. The first progress report from Phase II, which commenced in October 1990 under a new project officer, indicates that habitat management, security and hatching success have all deteriorated over this period.

While it is a pleasure to report that Phase II of the Maleo Conservation Project is now underway, there seems to be a very strong case for a complete survey of all known sites, a search for new sites, and extension of conservation activities to those sites having better prospects for long-term survival. The Project's aims will be defeated if it ensures the survival of only two or three sites in the North while the remaining sites are continuing to be exterminated.

In the abstract to Chapter 1, Dekker writes that the people of Sulawesi are unknowingly exterminating a natural resource with economic potential. The same statement must hold true for other megapodes elsewhere, some of which lack any recent data whatsoever. For Indonesian megapodes, the World Pheasant Association is seeking to carry out a preliminary survey in 1991 of the possibly endangered *Megapodius bemsteinii,* endemic to the Banggai and Sula Islands, and there is urgent need for similar surveys of other species while time remains.

This little book makes fascinating reading for anyone interested in the unique behaviour of these galliformes, and will hopefully engender the sort of interest that is required to protect them. Education and awareness will be the foundation for their management, but there is good potential here for ornithologists to carry out the initial surveys, both of the Maleo in Sulawesi and of the other species. The book is fully recommended, quickly because stocks are limited.

D.A.H.

Silvius, MJ. & A.W. Tauflk. 1990. ***Conservation and land use of Pulau Kimaam, Irian Jaya.*** PHPA-AWB/Interwader Report. Price $10 ($15 incl. airmail) from AWB offices in Bogor and Kuala Lumpur.

Pulau Kimaam is a deltaic island of over 11,000 sq. km. at 8°00'S, 138°30'E on the coast of SE Irian Jaya. A Wildlife Reserve, proposed to be upgraded to a Strict Nature Reserve, occupies some 7000 sq. km. of the southern half of the island, together with the adjacent, smaller island of Pulau Komolom, and is the largest wetland reserve in Indonesia. The island is remote and inaccessible, inhabited by about 10,000 people who speak three major languages. It is a singulariy unhealthy human-environment, due in large measure to the almost total annual inundation, which dries out progressively through the dry season. Nevertheless, the habitats which support a very rich avifauna are in part man-made, owing to extensive annual burning, without which a more forested and quite different habitat would become re-established.

The reserve fulfils all criteria of the Ramsar Convention on Wetlands of International Importance, and is noted particularly for its very large breeding population of Magpie Geese, as well as large numbers of Australian Pelican, Glossy Ibis, White Ibis, Royal Spoonbill and herons, and a wide range of other waterbirds. Indeed, very few areas in SE Asia can claim such a rich wetland avifauna. A total of 168 bird species has been recorded, including viable populations of some Papuan woodland endemics (Cassowary, cockatoos, Greater Bird-of-Paradise) that are threatened by poaching in more accessible areas elsewhere. Nevertheless, the slow transition to a cash economy, and improved means of transport, are beginning to upset the balance that has hitherto prevailed, and crocodiles are already being harvested, and poached, at unsustainable levels. The eggs of the Magpie Goose are also extensively harvested, and indeed one reason for the annual burning is stated to be the promotion of this harvest.

While major agricultural development projects on Pulau Kimaam are perhaps unlikely in the foreseeable future, owing to the island's remoteness and the sheer intractability of the environment, progressive changes will occur through improved social welfare and accessibility. This PHPA-AWB survey has succeeded in monitoring the situation before any serious degradation of this unique environment has commenced, and recommends a number of measures that, if implemented, should help to ensure the development of the human population in harmony with the wise management of the island's natural wealth.

Kukila looks forward to publishing a report of the Pulau Kimaam ornithological survey in due course.

D.A.H.

Silvius, M.J. & M. Zieren. 1990. ***Three years ofwetland and waterbird conservation activities in Indonesia, October 1987 - September 1990.*** **PHPA-AWB.**

This is a progress report of the activities of the Directorate General of Forest Protection and Nature Conservation (PHPA) and the Asian Wetland Bureau in Indonesia since formal Agreement to cooperate was signed in October 1987. Readers of *Kukila* will be aware of many of these activities from the reviews of the official reports, and papers on the ornithological data derived from them, that are regularly published in the bulletin; indeed the Indonesian Ornithological Society is deeply inUebted to AWB for the assistance it freely gives in producing *Kukila.*

One study that has not been reported in *Kukila* is the project on market-netting of migratory waterbirds on the north coast of West Java, where 300,000 birds are caught each year for food, and it is pleasing to see that a follow-up survey was made in 1990 in conjunction with the Royal Australian Ornithologist's Union (RAOU); hopefully this will lead to further cooperation with the RAOU Wader Group, and to a major project designed to support sustainable management of this important economic activity, and protection of the less

common species. A proposal has since been made for a 20-month project, initially focussing on the Milky Stork as a flagship species.

Asian Wetland Bureau has come a long way since its small beginning as Interwader, when the hitherto unrealized global importance for waterbirds of Sumatra's east coast was identified, and this report shows that AWB is fast acquiring a voice of authority for all agencies concerned with the management of Indonesia's valuable wetlands. We wish AWB success in the execution of its 1990-1995 plan of operations outlined in the final appendix to this report.

D.A.H.

Erflemeijer, P., G.R. Alien & Zuwendra. 1989. ***Preliminary resource inventory of Bintuni Bay and recommendations for conservation and management.*** **AWB-PHPA, Bogor.**
Price US$ 15 (excl. postage).

This is the study from which the Bird Report by Erftemeijer *et al.* (this issue) was derived. The area, in Irian Jaya, is described as having some of the most extensive (260,000 ha), best developed and least disturbed mangrove forests in S.E. Asia, and of particular interest are the accounts of the bay's birds and fish (an annotated checklist includes 144 fish, inclusive of six hitherto undescribed taxa). The report describes the impacts of modern commercial harvesting - marine fisheries and mangrove logging - on a hitherto pristine environment and its human inhabitants, and the logging is a sensitive issue that has aroused international protest. A large nature reserve had previously been proposed and agreed in principal, but the concessions of two existing and two proposed logging companies overlap substantially. The report proposes rational solutions that will hopefully be adopted officially, but further assurances are still needed that the recommended management and monitoring measures are implemented in order to protect this unique site.

D.A.H.

The Hong Kong Bird Report 1989 is now available. It achieves the same standards that we have come to expect from this society, and this issue includes, for the first time, 18 colour photographs. Apart from the customary accounts of the society's activities and year's records (which include first Hong Kong records of Relict Gull, Pied Wheatear, Yellow-bellied Bush Warbler and Two-barred Greenish Warbler), feature articles include the identification of Pechora Pipit, a review of the status of the Black-faced Spoonbill, two seabird features, and a discussion of migration at Beidahe in NE China. The report is available from the Hong Kong Bird Watching Society at P.O. Box 12460, GPO, Hong Kong, price US$ 14 (surface mail) or $ 16 (airmail).

Gibb, David. 1990. ***Wallacea. Asiteffade for birdwatchers.*** Price pds. 11. Available from: Hemy Southeran Ltd, 2 Sackville Street, Piccadilly, London WX1 2DP; Sanderling Books, Restensgeo, The Street, Sporle, Swaffham, Norfolk PE33 2DR, UK; FBRIS, 5 Stanway Close, Blackpole, Worcester WR4 9XL, UK.

This privately produced 100-page booklet is a practical guide to many of the better bird localities in the unique Wallacean zone of faunal transition and endemism. The main sites covered are Sulawesi (Lore Lindu, Tangkoko-Batuangas, Dumoge-Bone), Halmahera, Seram (Manusela), Lombok, Sumbawa, Kornodo, Flores, Timor and Sumba. Detailed information is given in a personal style on logistics and costs, and where to find many of each island's endemics, with bird lists and sketch maps. A few notes are provided on identification, a section that might well have been expanded, because until a comprehensive Wallacean field-guide is published, visitors will continue to face the challenge of identifying the region's approximately 240 endemic species without any guidance whatsoever, other than the 'museum' plumage descriptions given in the BOU Wallacean checklist (White & Bruce 1986).

Any ornithologist visiting Wallacea, outside the organization of one of the growing number of specialist tour companies, would be well advised to purchase this booklet. While the Indonesian Ornithological Society is anxious to encourage the collection of survey data from outside the better-known localities (see announcement of the *Kukila* Database in our last issue), we also acknowledge that familiarity of an island's avifauna has first to be obtained in the most time and cost-effective manner.

D.A.H.

(For more general, in-depth tourist information of high quality, including practicalities, the series of Periplus Indonesia Travel Guides presently being published is highly commended. Guides so far available are: Irian Jaya, The Moluccas, Sulawesi, Bali and Java; others will follow for Sumatra, Kalimantan and Nusa-tenggara, and a guide to "Underwater Indonesia").

Croxall, J.P. (Ed.). 1991. ***Seabird status and conservation: A supplement.*** ICBPTech. Publ. 11, Cambridge, vi + 308 incl. numerous text maps. Price GBP 17.50.

The eleventh in the ICBP Technical Publication Series is subtitled as a supplement to the original of the same name (Tech. Publ. No. 2, 1984), which is now out-of-print. Several new papers are added and others have been up-dated. The areas covered are (new areas asterisked): NE Canada*, the Great Lakes*, British Columbia, California, Baja California*, Brazil*, Uruguay', NE and SE USSR, Sri Lanka*, Malaysia*, Indonesia, the Mariana Islands*, Heard and the McDonald Islands, and the Australian Antarctic Territory. The Baja California, Columbia, Brazil, Uruguary, Sri Lanka and Indonesia papers include an abstract translated into a national language.

For landlubber ornithologists who have difficulty in placing some of the areas on a map, and for whom most sea birds are a neglected trans-frontier grey area variously covered in different national field guides, this book provides good reading. Recent global field guides such as Tuck & Heinzel (1978) and Harrison (1983) have served a useful function in focussing interest on a group that is now seen to be widely threatened and deserving of far more attention. Even their taxonomy is confusing for many, and identification problems pervade whole families, enhanced by the difficulties under which many of them are observed. The families covered are penguins, albatrosses, petrels and their allies, tropicbirds, boobies, cormorants, pelicans, frigatebirds, gulls, terns and auks, but of course very different assemblages of these are found in the widely contrasting regions that are covered.

The fifteen individual papers are invaluable and make comprehensive statements on seabird status; all credit to their authors. However, in the course of up-grading the earlier version that has gone out-of-print, an opportunity appears to have been lost to make a more comprehensive statement on the subject. ICBP's aim is to save the world's birds and their habitats, and earlier books in the series, including this one's predecessor, admirably serve this purpose. A particularly valuable earlier volume was No. 8, *Birds to watch,* which was an interim checklist of the world's threatened birds. The individual papers of the present volume deal with 130 species, nearly half the total number of seabird species, yet they refer to only 8 of the 66 seabirds that are listed as "threatened" or "near-threatened" in *Birds to Watch.* **ICBP's** many supporters might reasonably have expected some follow-up statement.

Appearing so soon after the ICBP XX World Conference at which the Seabird Specialist Group had its own workshop, the value of this book would have been enhanced if the editor had been given the mandate to summarize knowledge of the status of seabirds globally, drawing upon both the fifteen papers and on literature elsewhere to identify the key threatened species and islands, the threats that are common to many of them, or specific to certain regions (eg introduction of predators, fishing techniques, marine pollutants, and the different types of human disturbance that reflect the socio-economic conditions in the different regions), and to discuss a conservation strategy. Global aspects receive a two-page introduction (which acknowledges the principal gaps in regional coverage), and a cross-referenced list of species (difficult to use because the "chapter" numbers are not included in the page headers in the text). The reader will find detailed information on the local status of many species, but a global summary of none (except those endemic to a single region).

In contrast, however, the 15 regions covered are admirably served. For South-East Asian seas, the two papers by Wells and de Korte provide full coverage from the Gulf of Thailand and South China Sea through to Irian Jaya (missing are the Philippines, Papua New Guinea and the very important Christmas Island). They make depressing reading. In contrast to some high latitude regions, sea birds are declining throughout SEAsia, with few exceptions. The ravages of fishermen now supercede the natural fluctuations in population caused by vegetation growth in response to geological cycles. Declining inshore fisheries drive

fishermen further afield, and they now regularly visit remote islands that conservationists and even governments simply lack the resources to police. Introductions of rats, in some places cats, are almost inevitable. A Malaysian island demonstrates the effectiveness of an authoritative presence, in that case the military, but nothing short of permanent wardening will protect the rest. Education is a long-term and perhaps optimistic solution. Tourism might bring the necessary financial inducements, and is being promoted as a conservation method, but it has its own problems, and is always at the mercy of global economics and security.

The seabird colonies of Malaysia and western Indonesia have for the most part long since declined. Some stunning colonies, though depleted, still remain in eastern Indonesia, and for these, at least nominal conservation status exists or is proposed. However, legislation is meaningless without active back-up, and tourism here may bring our best hope in the Short-term.

This may not be a global book, but it very succesfully summarizes the data and conservation needs of the areas that are treated, and is particularly valuable for an important but neglected group of Indonesian birds.

D.A.H.

IUCN(1990). ***1990 IUCN Red Ust of threatened animals.*** IUCN, Gland, Switzerland and Cambridge, UK. 228pp.

This is the current 'red list', with over 5000 taxa in the mammals (698), birds (1047), reptiles (191), amphibians (63), fishes (762) and invertebrates (2250). The bird list is derived directly from Collar & Andrew (1988). This book is a list only, with broad geographical ranges. There are no changes in the Indonesian list, except that the IUCN categories of threat have now been added. Excluding the two species listed as extinct, and the two sea-bird entries from Christmas Island, most of Indonesia's 126 species are classified as rare or indeterminate, which mainly reflects the state of knowledge. It is worth noting that some island endemics would always have received a 'rare' designation.

Further discussion of the classification of the 5 species listed as endangered, or 26 as vulnerable, would serve little value at this time (the data were supplied mostly by readers *otKukild).* The five are three Wallacean cockatoos, Schneider's Pitta and the Bali Starling. With the parrot trade continuing, we believe that *Cacatua sulphured* should also be listed as endangered, and that all four Wallacean cockatoos should be up to the status of CITES Appendix I (not only C *moluccensis).* Wallacean parrots will shortly become the focus of a survey and management project, while the long-running Bali Starling Project is, at last, beginning to have some positive results. It is to be hoped that surveys of Kerinci-Seblat National Park will eventually show that the habitat of Schneider's Pitta is relatively secure, except perhaps on Mount Kerinci itself, and that the listing as endangered is pessimistic.

Those engaged in studies of Indonesia's threatened birds should continue to use *Birds to Watch* as their data base, and should note that Appendix 2 of that book lists a further 98 species that may be 'near-threatened'. Some of these will certainly warrant a listing, for example Wallace's Hanging-parrot on Flores (perhaps with a vulnerable rating), and visiting ornithologists, whether project-based or as tourists, should remember that they will be the main source for data on the 224 species listed in *Birds to Watch* that will be required for the planned definitive Asian Bird Red Data Book.

Reference

Collar, N.J. & Andrew, P. 1988. *Birds to Watch.* The ICBP World checklist of threatened birds. ICBP Tech. Publ. 8, ICBP.

DA.H

Holmes, D.A. & S.V. Nash. 1990. *The birds of Sumatra and Kalimantan.* Singapore: Oxford University Press (Images of Asia Series), ii-xii + 83 pp. + [1] + 24 pll.

This is the second book in a series of guides to the birds of Indonesia by Holmes and Nash. In philosophy it follows *The Birds of Java and Bali* (for review see *Kukila* 4: 160), and introduces the commoner birds of the region in a way accessible to the beginner and the visitor. It is impossible to overestimate the importance of such guides, for until the Indonesian people know about their fauna, conservation measures are unlikely to be successful. It should be a priority that funds be found for the publication of this series in Indonesian.

Sumatra and Kalimantan share much of their avifauna and are sensibly treated together, though with a combined list approaching seven hundred the coverage here is less thorough than in the earlier volume. 148 species are described and illustrated, mostly in colour, and a further 129 species are mentioned in the text. The choice of species is difficult and sometimes hard to justify; the Large Wren-babbler *Napothera macrodactyla* is illustrated but is not common on Sumatra, whereas the common endemic montane Sumatran Wren-babbler *N. rufipectus* is not mentioned. However, mostly the commoner species are treated, and once again the text is fluent and informative. Indeed, the author has again produced a text entertaining to the beginner yet still rewarding reading for the more experienced birdwatcher. The plates are similarly effective, and the frontispiece of Schneider's Pitta P. *schneideri* should inspire the most jaded to head for the mountains of Sumatra.

The appendix differs from that in *The birds of Java and Bali* in being a list of all the species endemic to the Greater Sundas, rather than a comprehensive checklist. The sensible classification produces a total of 123, including the seven endemics known from north Borneo but not yet recorded in Kalimantan, and is a useful supplement to Southeast Asian guides.

The next in this series should be a guide to the commoner birds of Sulawesi. The team of Holmes and Nash works, and similar books on the birds of other regions of Indonesia will be a further aid in the conservation of one of the world's most varied avifaunas.

PA.