

REVIEWS

Silvius, M.J., A.P.J.M. Steeman, E.T. Berczy, E. Djuharaa & A.M. Taufik. 1987. *The Indonesian Wetland Inventory. A preliminary compilation of existing information on wetlands of Indonesia.* P.M.P.A., A.W.B./Interwader, EDWIN: Bogor, Indonesia. Two volumes (Main volume, I-XXVI + 121 pp; Volume 2, site compilation, 268 pp).

Available from AWB/Interwader, P.O. Box 254/BOO, Bogor, Indonesia. Price US\$, 15 in Indonesia, or \$ 20 overseas (\$ 30 airmail). Cheques or drafts payable to M.J. Silvius, National Co-ordinator, AWB-Indonesia.

When the Indonesian Wetland Inventory was proposed in 1985, the task seemed daunting. Work started in October 1986, and incredibly the first draft was ready for presentation at the IWRB/Interwader symposium at Malacca in February 1987. The final report now published is an impressive achievement. It seems ironic that this report, produced through commitment and enthusiasm on an extremely low budget, should now be in use by consultants engaged through funding by major international loan agencies. It would seem appropriate that governments and funding agencies attach the importance that is deserved to environmental database collection, as a pro-requisite for the sound development of land resources. This report shows abundant fields in which such funding might be directed. It is very clear, in reading the site descriptions, just how little is known about very many sites that may be considered of international importance. The sponsorship and objectives specifically cover the inventorisation of wetland sites in Indonesia as part of a global programme. In Indonesia, the weakness of the data base is very apparent for all natural environments, not just the wetlands although these do form a significant proportion of the Republic's land surface.

The compilers are careful to name the inventory as preliminary, and indeed a primary objective is to invite additional data as an on-going programme. The General Introduction expressly invites users to provide comments and data, and to contribute to a more complete work to be published in the near future. Perhaps this request should be emphasized in bold print. Readers of *Kukila* who are planning to visit Indonesian wetlands are requested to contact the AWB/Interwader office for information and data sheets (see volume II Appendix 1).

Volume I gives quite comprehensive background information on Indonesian wetlands and the effects of developments on them, including sections on swampland reclamation, sago palm, seagrass culture, aquaculture (especially brackish water fish and prawn ponds carved out of mangroves), forestry, large dams, hunting (sea turtles, crocodiles, water-birds and large mammals) and pollution. This is the volume of more general interest, and indeed a strong case can be argued

for the entire volume to be translated into Indonesian, in order to ensure a wide readership by planners concerned with just those development sectors here outlined. It is recommended that the sponsors seek the ca. \$.2000 that would be required for this purpose.

The 28 appendices to volume 1 provide supporting data to each of the sections outlined in the previous paragraph. Ornithologists will find a preliminary list of Indonesian waterbirds in Appendix 2 of volume II (given in this volume as it is derived from inventory data, although in a future edition it might be more appropriately transferred to volume I). In volume I, the five mangrove areas in Appendix 1 need to be named, as they do not correspond to the seven regions given in Appendix 2.

Volume II presents the complete site data sheets. In Chapter 1, areas of specified wetland types are listed by province, with a gross area for Indonesia of 37.5 million hectares, nearly 20% of the total land area. In fact it is extremely difficult to establish size of areas as every map or data source tends to give a different picture of size, utilization, etc. However a systematic study of land systems and land use by remote sensing is currently in progress, and area figures will be revised. For example, it is now known that the gross area of wetlands in Kalimantan is 7 million ha, compared with the 10.2 million quoted, although the difference is partly one of definition. One problem facing the compilers is to decide how much of this vast area can or should be listed. Where does one set the limits for a vast peat swamp, for example in Riau, which incorporates several individual sites of importance? If some man-made features are included, then terraced ricefields in the mountains of Java or Sumatra are equally "Wetlands".

The second column of figures in Chapter 1, "remaining area", presumably relates to the relatively undisturbed wetland habitat that remains, while the final column list the categories that are under reserves. One might perhaps add those that are under "protection forest status", although it is acknowledged that status of protection is low many such areas have been logged or overlap with logging concessions, and the status can be degazetted readily.

The main problem facing this reviewer was the geographical identification of sites. Since the maps supplied with Volume II are folded in a back pocket, scale need not be a limitation. The small scale and lack of any physiographic detail limits their value, and the lack of geographical coordinates (or in some cases incorrectly given) compounds the problem. In some cases, 'several of the numbered locations are seriously displaced, although it is understood that the maps of Sumatra and Sulawesi have been corrected in later copies.

The inset showing distribution of wetlands on the Irian Jaya map is a very useful feature that might be applied to each region. Once the nation-wide remote sensing survey, referred to above, implemented by

the Land Resources Department of the UK Development Natural Resources Institute, is completed, such maps would be easy to prepare, and the individual sites accurately superimposed upon them. It is strongly recommended that this be done in any future edition. However, it is perhaps symptomatic of the compiler's problems that a number of sites, including Irian 22, the last in the book, cannot even be located.

It is emphasized throughout that the data is very incomplete. Essentially every site that is known is presented, and it is acknowledged that many sites may be omitted, while it may be that some included sites no longer exist. Here again, the preparation of simple maps as outlined in the previous paragraph would greatly assist in the future identification of important omissions. The comparison of numbered sites with wetlands distribution on the present Irian Jaya map adequately illustrates this point.

Site information is presented in the form of completed data sheets. This may be appropriate for a preliminary edition, as it particularly emphasizes the inadequacy of the data. However, for a future edition, it may be sufficient that the data are stored in this format, and it should not be necessary to print the data sheets in full. A lot of the information could be summarized in introductions to each region, with only the salient points being given for each site. Thus for example, there is much repetition of monsoon seasons given in sites 9-11 of Maluku which could be condensed in an introductory paragraph.

It is clear that much of data has been collected by workers who were perhaps unaware of the relevance of what they were collecting. Much of the climatic data is rather facile and sometimes dubious, and the opportunity now exists for upgrading this sort of information. Similarly, readers of *Kukila* will recognize the inadequacy of the bird list at the great majority of sites. Commonly just a few species are given that are in fact of widespread occurrence, sometimes in unusual sequence (Sum 33 lists a whistler between thick-knee and redshank). There are very few sites which carry comprehensive bird lists made by recent ornithological surveys, and here again the message inherent throughout the inventory: the abysmal lack of scientific data for some of the richest environments in the equatorial zone. If birds, in both variety and numbers, are accepted as indicators of ecological richness, then the message to bird-watchers is clear. See, for example, Sum 15 (Danau Belat), where a water-bird colony is reported but no information is available. Indeed such a colony may be indicated by its alternative name of "Sarang Burung".

Indonesia has very few ornithologists, and there must be enormous scope for co-operation between AWB/Interwader and other national or international ornithological organizations to encourage the more scientific and adventurous bird-watchers to select sites where ornithological surveys would be valuable.

It is amazing how few of Indonesia's waterbird colonies have been located. Pulau Dua (Jav 3) and Pulau Rambut (Jav 5) are quite well documented, but few others. It is satisfying to report that a number of major colonies have since been reconfirmed in East Java (Silvius, pers. comm.) as a direct result of information obtained from the Inventory. Outside Java, the inaccessibility of many coastal sites is a major reason for this lack of knowledge. Importance colonies have only recently been located in S.E. Sumatra (see AWB Press Release, this issue).

All readers of *Kukila* who have comments are specifically invited to submit them. Only a few comments are relevant here. For example, there are two notable omissions, Ujung Kulon National Park off West Java, and Rawa Aopa in SE Sulawesi, both of which have now been added to the database. Rawa Aopa is a good example of a relatively accessible site that requires a full ornithological survey.

In Kal 6 (Gunung Palung), the lack of reference to the existence of a research station established by scientists from Harvard University is perhaps symptomatic of the frontier mentality that seems to pervade Indonesia's outer islands, where ecological knowledge seems to have almost territorial implications, a mentality that is familiar to the editors of *Kukila*. Here again lies an inherent value of the Inventory, a first attempt to collate data from a very wide range of sources.

Inaccuracies of co-ordinates and inadequacy of up-to-date information are well illustrated by Mal 3 and Mal 11 (Teluk Waetle and Wae Muat). The former has now been occupied by 2000 transmigrant families, although natural habitats do still exist there. The precise location of the second also important (It is not mentioned in the accompanying article on Manusela National Park by Bowler & Taylor), for there is a transmigration settlement of 3500 families in this region also. Again the national remote sensing survey referred to previously will serve to complement and up-date the Wetlands Inventory.

Iri 1 on the north coast of the Bird's Head Peninsula of Irian Jaya admirably illustrates the role of the inventory in drawing attention to the danger points. It is stated to be "the most important nesting site for Leather-back Turtles in SE Asia", near to the "largest Dugong population in the world", yet while proposals for a nature reserve are being processed, spontaneous immigrants to the region may be posing a serious threat.

Finally, since there is a degree of ambiguity in the definition of wetland sites, with the inclusion of several national parks designated primarily for their mountain habitats, in which wetlands play a secondary role, this reviewer offers no excuses for proposing one additional region, about which he has no first-hand knowledge. This is the Orosuwa karst region of Irian Jaya, located approximately 3' - 4" S, 133° 40' - 134° E - With its limestone cliffs reputed to reach a

height of 1000 m, it is studded with lake-filled troughs (Kamakalawar, Laamara, Aiwasa, Mbuta and Kumkabraf) and deeply indented bays with the appealing names of Triton and Arguni, and it may perhaps constitute one of the least known scenic wonders of the world.

In summary, the compilers are to be commended on the thoroughness with which they have succeeded in collecting the available data on the wetlands of the entire Republic of Indonesia in a very short time, and high-lighting the serious gaps in basic knowledge. The threats to a great many sites are serious, but the surveys required are often expensive. Such surveys are beyond the resources of a developing nation, and their global importance now needs to be recognized by the scientific communities and international sponsoring agencies.

The Indonesian office of the Asian Wetland Bureau has an important role to play in conducting and/or co-ordinating these surveys, and it should receive the full attention that its work deserves, both nationally and internationally. Surveys in southern Sumatra, the Barito drainage in Kalimantan, the Brantas and Solo deltas and Cilacap in Java, and the wetlands of SE Irian Jaya are already in progress. The Indonesian Wetlands Inventory reveals a great many other sites where essential data is lacking. As a first step, it would be useful to prepare an executive summary emphasizing those sites where surveys or positive conservation measures are an urgent priority. Such a summary would assist in directing the attention of those individuals and sponsoring agencies who may be in a position to assist in the ever important task of collecting the data on which land use and conservation policies should be based.

D.A.H.

Van Marle, J.G. & K.H. Voous. 1988. *The birds of Sumatra*.

British Ornithologists' Union Checklist no. 10. London. 240 pp, 9 tables, 3 maps and 6 pages of photographs- Price 18 pounds sterling (overseas rate) from the British ornithologists' Union, c/o the British Museum (Nat. Hist.), sub-dept. of Ornithology, Tring, Hertfordshire HP23 SAP, U.K.

The publication of the Sumatran Checklist has been awaited with eager anticipation, and once again we express admiration at the volume of work that has gone into the compilation of this valuable BOU series. There has been remarkably little recent literature on Sumatran ornithology, and much of the older literature is oriented towards the definition of taxa, especially in the montane regions with their higher degree of endemism. More recently, greater interest has been shown in lowland birds, but often by observers engaged in industrial or agricultural projects that will result in the loss of the habitat in which their observations were made. The checklist thus fulfils an urgent need for the compilation of both historical data and the expanding volume of recent field observations into a single data base.

The thirty pages of introductory chapters, with black-and-white plates, adequately describe the setting for the systematic section. The Sumatran region is taken to cover the mainland and all off-shore islands including those in the Java Sea such as Belitung. The volcanic island of Krakatoa, although administered from Sumatra, is excluded as it is avifaunistically closer to Java. The exclusion of the Natuna Islands should also be noted, as these too are administered from Sumatra, though they are covered in the Borneo Checklist (Smythies, 1957).

A larger scale for Map 3, covering two pages, would have permitted a more useful presentation of physiography and vegetation. The distribution of forest would appear to be optimistic, especially in Lampung, but the scale and definition do not permit valid comment. However, a recent remote sensing study is now available (L.R.D., 1988), that shows that about 50% of the region is under some form of the original forest cover; this ranges from only 19% of Lampung province in the south to 69% of Aceh Province in the north. At first sight, this may appear not unsatisfactory, but in fact it corresponds very approximately with the area of land systems unsuitable for agricultural use. This would imply that all the areas considered suitable for agriculture have already been cleared, corresponding mainly to the lowland forests that formerly carried the highest species diversity. In fact, quite substantial areas of unsuitable terrain have also been cleared, and thus there may be an equivalent area remaining of dry lowland forest, mainly in the central regions. The last decade has seen some massive estate and resettlement projects in the lowlands, and it is mainly logging interests which contain the pressures to release more of such land. The chances of retaining any of the richer lowland forests in pristine condition are remote, but are rather better in the hills and peat swamps.

There are presently over 41 000 sq km of reserves, and a further 64 000 sq km under protected forest status, in total about 22% of the land area. The six largest conservation areas are shown on Map 2, but it must be noted that three of these are mainly hilly or montane, two are coastal or peat swamps, and only Way Kambas contains a moderate area of dry lowland forest. Although large parts of Way Kambas have previously been logged and now consist of secondary forest, "its relative importance grows steadily; as the onslaught on lowland forests continues, very soon it may be the only such forest that remains between Bandar Lampung (Teluk Betung on Map 2) and Palembang. There are urgent conservation priorities to protect the wet l and habitats of the east coast, both for migrant waders and for resident storks and herons, and this is now being actively promoted through the Asian Wetland Bureau (Indonesia). There are also priorities for some of the habitats of the West Sumatran island endemics and associated human cultures, for.ex ample Simeulue and Siberut. With the international attention now being paid to the global level of the destructive effects of forest clearance, further conservation initiatives for important natural habitats may have a receptive audience.

It is a happy coincidence that the total number of species accepted for Sumatra and its satellites is 600. (In the list of species not currently accepted, on p. 219, there is one error: *Centropus nigrofus* is the Sunda Coucal. It is more significant to note that breeding has yet be confirmed for 47% of the 43% indigenous species of the mainland (450 for the whole region).

The checklist recognize 16 endemic species, four on the West Sumatran islands and eleven from mainland mountains. The remaining endemic is *Trichastoma vandarbiiti*, known from only one specimen obtained in sub-montane terrain. Thus the main Sumatran lowlands have no endemic species, with the probable exception of the enigmatic. *Cyornis ruecki*, known from only four skins, two of which are trade skins labelled Malacca though their provenance is highly suspect.

The list of 'enigmatic' species is very long, and many more might be added to those so annotated by the authors. Although *Mulleripicus pulverulentus* (The correct anglicized spelling is *Muelleripicus*) appears to have valid Sumatran specimens, why is it that there has not been one confirmed record from this century, compared with its relative frequency in Malaysia and Kalimantan, and indeed its continued presence on Java? A quick perusal through the systematic section will soon reveal the considerable gaps in knowledge, with species as varied the pheasants, *Otus* owls, *Pycnonotus nieuwenhuisii*, *Melanocclilora sultanea* and even *Lonchura leucogastra*. Most of the pittas fall into the enigmatic category, especially *Pitta schneideri* which was noted in 1914 as locally very common' but which has not been recorded for over 70 years (see however, Hurrell, this issue, which describes i ts rediscovery).

As noted -in earlier reviews of this series, the authors have been allowed considerable latitude in the depth of analysis, from simple checklists (Libya) to detailed taxonomic treatise (Wallacea). The present work is not taxonomic, beyond recognizing that a number of opinions may exist. In some instances, there is little more than the authors could have said; there is no point in speculating on the taxonomic affinities of species known from one or two specimens, such as *Lophura hoogerwerfi*, *Otus stresemanni*, *Trichastoma vanderbilti* and *Cyornis rueckii*. These have a note questioning their taxonomic standing, and a similar approach might have been taken with *Pycnonotus nieuwenhuisii*, known from single specimens each from Sumatra and Kalimantan. The existence of such old specimens are little more than reminders of the huge amount of work that still needs to be done.

In other instances, however, the authors' opinions on some problematic species would have been instructive. The endemic races of *Picus canus dedemi*, *Myiopobonastes glaucinus castaneus* and *Cochoa dzurea beccarii* all warranted closer attention. Indeed, present opinion supports Salvador! (1879) and Robinson & Kloss (1918) in treating *beccarii* as a full species (cf. Collar & Andrew, 1987).

Slightly more disconcerting is the authors cavalier attitude to some of the papers included in the bibliography. In a paper cited several times in the text, Mees (1986) clearly treats *Aethopyga temminckii* and *A. mystacalis* as distinct, with the former occurring on (but not endemic to) Sumatra, and the latter endemic to Java. Such a meticulously argued distinction should have been followed or carefully refuted, but it should not have been ignored.

Equally confusing is the treatment of *Trichastoma pyrrhogenys buttikoferi*. The authors include this endemic form in *T. tickelli*, contrary to the cited reference (Ripley & Beehler, 1985). The babbler, which is known only from the mainland, is then subjected to a further indignity by adding *conereturn* as an endemic race from Belitung, though in the paper cited, Mees (1971) was proposing *Trichastoma abbotti concretum* Buttikofer to replace *Malacocinda abbotti buttikoferi* Finsch, and not discussing *Trichastoma buttikofer* at all. (Note here also that the standard anglicized spelling is *Buettikofer*).

A second criticism is rather worrying, and concerns transcription and typing errors which have been overlooked. Some are minor errors, such as the 13 species of Picidae on p. 28, instead of 23. Errors in the systematic section are more serious. When the reviewer checked his own records, a number of errors was detected: for example, all his records of Jungle Flycatchers were *Rhinomyias umbratilis*, not *olivacea* as quoted. It would seem necessary in such instances for the authors to publish their corrections, but this will be comprehensive only if those who have made contributions now check the entries.

More problematic is the authors' willingness to accept unpublished

records from field observers, without further details. For example, on the first page of the systematic section, three petrels are included, along with other maritime species, on the basis of single observations made on 1 July 1984. Field identification in this group is notoriously difficult, and without questioning the validity of the records, it seems proper to insist on a published reference or in *in litt* annotation, before new species can be accepted. The preface acknowledges that by no means all field observations proved acceptable following correspondence, but is such procedure acceptable when future workers will not have access to this correspondence?

The question of acceptance of records from poorly known regions is clearly a major problem of checklist compilers and for editors of journals concerned with less well-known regions, and inevitably standards may differ from those operating in countries which have a much higher base of scientific knowledge, where 'rare birds committees' will systematically co-ordinate and evaluate the records submitted by a very large body of amateur ornithologists.

While publications such as these, together with increasing numbers of comprehensive field-guides, will help to put countries like Indonesia on the ornithological map, and thus encourage a much greater volume of field activity, this usually does not include the collection of specimens, and the problems of adjudication will grow. Some of the species accepted do appear to be somewhat contentious, and the compilers of the definitive Way Kambas list, for example, will require to give some records very close scrutiny.

Perhaps greater use might have been made of square brackets, a policy often adopted by *KUKILA* for records considered as not absolutely confirmed, thus drawing attention to requirements for further study. For example, we do not know whether or not the authors have access to recent sight records of *Rhinomyias brunneata* from Way Kambas, and chosen to reject them, but there is no reference in the text. While this species is wholly expected to reach Sumatra in winter, difficult new species should be accepted only with, at least, a description from a bird in the hand. In the final analysis, determining whether or not an individual species reaches Sumatra as an overlooked but regular migrant, or vagrant, may not carry great practical importance. There are more urgent priorities, not least of which is to ensure that the habitats which they would require on arrival are available to them. The ultimate objective of the checklist is the promotion of conservation, as briefly but succinctly stated in the Editor's Foreword. As noted earlier in this review, the threats to the forest, especially in the lowlands, are extreme, more particularly in the southern regions in the forefront of population spread out of Java. There are still opportunities for sound land use planning and management, in which conservation of representative natural ecosystems is one component, but time is running out in many areas, and action is required now. Such planning is multi-disciplinary, and

largely socio-economic, and those who most stress the conservation of natural habitats will often feel a sense of frustration. At least, however, conservationists need to have access to the necessary data in readiness for evaluation alongside the proposals for agricultural settlement and forest management. We are still at the stage of not knowing just what is in the forests that are being so rapidly cleared.

It is in this sense especially that we welcome the publication of an ornithological data base for Sumatra, with the hope that more observers will now fill in some of the many gaps in knowledge. It is perhaps an axiom that ornithological richness is a useful 'rule-of-thumb' guide to important natural habitats, and while this might be debatable, governments and their planners have neither the funds nor the time to wait for the detailed biological surveys that are necessary. Thus in the mind of this reviewer, ornithologists may have a key role in wise environmental planning.

The publication of the Sumatran checklist is expected to stimulate a number of papers presenting additional records. The editors of *KUKILA* already have in preparation some revisionary notes, and a comprehensive checklist is under preparation for the important Way Kambas site. It is our hope that many more observers will use the opportunity now provided to submit their field records, and thus develop the role which they can play in conservation.

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parte occidentale di Sumatra dal Prof. Odoardo Beccari. *Ann. Hue. Civ. Stor. Nat. Ganove*. U: 169-253.

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D.A.H.

Collar N.J. & P. Andrew 1988. *Birds to watch : The ICBP World Checklist of threatened birds*. International Council for Bird Preservation Technical Publication no. 8. 320 pp. Price UKP 9.50 from ICBP, 32 Cambridge Road, Girton. Cambridge CB3 0PJ, U.K.

ICBP/IUCN is engaged in the compilation of the third edition of the bird Red Data Book, which will be a much more comprehensive, geographical/organized version. Inevitably, it is a long term project, and so far only *The threatened birds of Africa* has been published, in 1985.

In the meantime. *Birds to Watch* is a global list of threatened species and its rationale, implied in the Introduction, is that the World cannot wait while the data is gathered for the third Edition. For many regions, It is affectively the current Red Data Book.

This is especially true for Indonesia, and as the author of the 'unwelcome comment' that "Red Data Books may be guilty of endangering a degree of complacency" referred to in the Introduction, this reviewer is particularly happy to see *Birds to Watch*.

This comment should be viewed in two contexts : the second edition of the Red Data Book, with its approximately 275 species World-Wide, has served its purpose in focussing public attention on the most critical species, as then perceived, and is in urgent need of a fresh approach (which is the basis of the third edition). Secondly, the second edition is utterly irrelevant to Indonesia. The comment referred to above was amply justified by the fact that Indonesia now has 126 listed species, the highest country list, whereas previously there were only 14. This is not, of course, an increase in real terms, as has been implied by the review in *New Scientist* (14 July 1988), but a reflection of the total inadequacy of the data base when the second edition was published. *Vanellus macropterus* in Java and *Eutrichomyias rowleyi* in Sangihe (Sulawesi) may have been exterminated before they got a listing, and several of the previously listed 14 species were but mere migrants or wanderers to Indonesia (e.g. *Sula abtsotti*, *Fregata andrewsi*, *Tringa guttifer*). How many of our small island endemics may have gone the way of the above two species, unnoticed? birds to watch, indeed.

With 11% of the World's bird species now in the threatened category, the compilers of *Birds to Watch* will hopefully kill any complacency that may exist, especially in Indonesia. Following the systematic section, the useful country lists in Appendix 1 show that Indonesia has the longest list (126), exceeding even that of Brazil (121) with that country's infamous forest destruction, and conservationists in Indonesia have every reason to be alarmed. In addition, Appendix 2 lists candidates for inclusion in the main list ("near-threatened" etc) and includes some 97 further species in Indonesia.

In all fairness, however, it should be noted that Indonesia has a remarkable wealth of species, in the order of 1,500 including migrants, or up to 17% of the World's avifauna. At least in part, the high total of threatened species results from the inclusion of the "insufficiently known" category, exemplified by such statements as "Wetar has not been visited by ornithologists for seventy years" (under *Gallicolumba hoedtii*). while the state of ornithology in the Republic has advanced enormously over the past decade, permitting the compilation of a threatened list that has at least some validity, wide areas urgently await modern field study, both on the larger islands and many of the smaller islands (eg. Banggal, Sula, Buru, Obi, Bacan). While such surveys may succeed in intermingling species for the Red Data Book third edition, this reviewer is reluctant to suggest that they will produce a shorter list; they could well result in a short list however, of immediately endangered species.

There are very few specific comments to make "in this review, and they merely imply that the studying and listing of threatened species is an evolving process. The lack of comment results partly from the thoroughness with which the drafts were circulated and the rapid response elicited from those listed in the introductory acknowledgements. Perhaps the omission of the three endemic owls *Otus* sp. of the West Sumatra Islands results from inputs by recent visitors, but it is surprising that *Bradypterus mentis* is dropped from the earlier draft, while the one record by Operation Raleigh (see Bowler S. Taylor, this issue) hardly justifies the exclusion of *Zoothara dumasi*. The inclusion of three Sundanese hornbills is somewhat surprising, at least in the Indonesian context, especially in view of the exclusion of *Berenicornis comatus*. In comparison with these hornbills, surely *Loriculus flosculus*, a barely known Flores endemic, should not be relegated to Appendix 2. Perhaps a future Appendix 2 should include *Padda oryzivora*, formerly a Javan endemic but widely introduced through an over-zealous bird trade and now just as widely reduced by this same trade. It is good to see *Pycnonotus zeylanicus* listed in Appendix 2, a species which is suffering so much from the depredations of the trade, which is of course a major contributory cause for the inclusion of many species, notably *Cacatua* spp (and parrots world-wide) and *Leucopsar rothschildi*. One error was detected in Appendix 2: King Bird-of-Paradise *Diphyllodes respublica* should be Wilson's Bird-of-Paradise (on Waigeo and Batanta).

The editors of *KUKILA* especially welcome *Birds to Watch*, together with the BOU checklists, as they provide the basis for giving much needed publicity within Indonesia. As very few of these books will ever find their way here, except in the hands of visitors, serious consideration might be given to extracting all the Indonesian species to publish as a pamphlet locally. Ideally, this should be incorporated into a pan-Indonesian bird list which is a task that the Indonesian Ornithological Society urgently needs to tackle. While we may bemoan the fact that there are still very few Indonesian ornithologists, the educated public is becoming steadily more aware of the wealth of its natural endowment and will be receptive to such publicity.

Meanwhile, *Birds to Watch* at last provides a basis on which field workers can contribute data for a more definitive Indonesian endangered list in the Red Data Book third edition. There is a lot to do.

D.A.H.

Amadon, O. & J. Bull. 1988. Hawks and Owls of the World: a distributional and taxonomic list (with the genus *Otus* by Marshall, J.T. A B.F. King). *Proc. Western Foundation Vert. Zool.* 3 (4): 294-357. Price \$10.00.

The total number of species listed is 292 hawks and 162 owls. The introduction to the systematic list includes useful comments on the various genera, placement of species and discussion of superspecies. Within the list, notable are the inclusion of *Ketupa* within *Bubo* and *Megatriorchis* within *Accipiter*. Although sub-species are not listed, where an endemic taxon is grouped under a more widespread species, this is generally indicated, e.g. *Tyto sorocula* (a mis-spelling for *sorocula*?) is listed under *novae-hot landiae*, and *Otus enganensis* under *magicus*, but the authority for these treatments is not always clear Marshall (1978) treats *enganensis* as perhaps having affinities with *umbra*, so reference to the presumed later opinion is required. In the case of *Otus bakkamoena*, in contrast, the authority for separating East Asian (and Indonesian) birds as *lempiji* is given, a separation of which this reviewer was previously unaware.

This reviewer prefers not to enter the sometimes contentious debate on vernacular names, except to note that hyphens are rigidly not used for generic double names (eg Hawk Eagle). It would also be useful to know the distinction between Goshawk and Sparrowhawk - why, for example, should *Accipiter trinotatus* be named Spot-tailed Goshawk in White & Bruce (1986) but Spot-tailed Sparrowhawk in the current work?

Treatment of preferred habitat is necessarily brief, but that of distribution is very often curtailed. Almost it appears as if the distribution has been regarded as a tedious appendix to the main work which is the taxonomic listing. Among the 66 species of hawk and 37 species of owl occurring in the Indonesian region, there are a number of deficiencies in the listing that reduce their value. Clearly the precise distribution of such widespread species as *Pandion haliaetus*, *Milvus migrans*, *Falco peregrinus* and *Tyto alba* is beyond the scope of this work. However, a somewhat closer definition is required for others, listed simply as 'Indonesia' among other areas, in view of the range of avifaunal regions covered by this country, species such as *Ichthyophaga humilis*, *Spitornis cheela*, *Butastur liventer*, *Accipiter virgatus*, *Spizaetus cirrhatu*s and *Phodilus badius*. Similarly, New Guinea and some Wallacean islands are dismissed as 'islands to the north' (of Australia) for *Falco longipennis*.

The distributional treatment is inconsistent in detail. The ranges of eg *Spizaetus* (other than *cirrhatu*s) and of nearly all the owls are clearly identified (although surely Borneo is an error for *Glaucidium cuculoides*). Reference to a recent standard checklist such as White & Bruce (1986) would have clarified the distribution for many species. Sometimes the references to New Guinea are in error, for example *Aquila audax* and *Falco berigora* are incorrectly confined to the Papua New

Guinea portion of the island.

Without wishing to be over critical of the minor points of distribution, perhaps a wider circulation of the draft would have reduced the errors and omissions, some others of which are listed below:

Aviceda leuphotes reaches Sumatra in Winter, and (rarely) Java.

Accipiter badius reaches the Malay Peninsula and Sumatra.

Accipiter rhodogaster occurs in both Sulawesi and Sula, a distribution which is correctly stated for *Spizaetus tanceolatus*.

Buteo buteo occasionally reaches the Malay Peninsula and Western Indonesia.

Microhierax latifrons occurs in Northeastern Borneo, not Northwestern as stated.

Falco tinnunculus also reaches the Malay peninsula and, rarely, the Greater Sundas.

Tyto novaehollandiae: 'Tanimbar Island and nearby islands' is barely a proper description of Tanimbar and Buru islands for *T. soro(r)cula*.

Tyto nigrobrunnea: 'Taliabu and perhaps other islands in the Sula group' is very conjectural when the species is known only from the type specimen from Taliabu.

The paper is a very useful summary on the state of taxonomic classification of the World's hawks and owls, and stands complete as such; with more careful treatment, it could have stood as a complete statement of their distribution.

References:

Marshal, J.T. 1978 *Systematics of smaller Asian night birds based on voice*. Ornithological Monographs no. 25 Amer. Orn. Union.

White, C.M.N. & M.D. Bruce. 1986. *The birds of Wallacea (Sulawesi, the Moluccas, 8, Lesser Sunda Islands, Indonesia)*. B.O.U. Checklist no. 7. London,

D.A.H.

Also received :

Korea University (Tokyo) and Wild Bird Society of Japan. 1987.
Endangered bird species in the Korean peninsula.

This little booklet is produced as a result of co-operation between Japan and the Democratic People's Republic of Korea (North Korea), and gives an english translation of papers given at the Korea-Japan Migratory Bird Symposium in January 1987. It is a nice example of the product of co-operative efforts being made by neighbouring Asian nations irrespective of political barriers. Although the title embraces both North and South Korea, the main emphasis throughout is on data from the north. In its 75 pages, it carries short features on 18 endangered species, all but one of which is migratory and therefore of international significance.

While some of the species are quite common elsewhere "in their range, of particular interest are the three crane species (Hooded, Japanese and White-naped), the Chinese Egret, Black-faced Spoonbill, White and Black Storks, Chinese Merganser, Crested Shelduck, Swan Goose and Great Bustard. At the end, protected areas of North Korea are listed, and there is a checklist of species for the whole peninsula (.392 spp).

Available from Wi Id Bird Society of Japan, Aoyama Flower Building 1-1-4 Shibuya. Shibuya-ku, Tokyo 150.

Also from Museum of Korean Nature, Korea University, 1-7000 Ogawa-cho, Kodairi-shi, Tokyo 187. Price not quoted.

The Hongkong Bird Report 1986. 112 pp and 16 B&W photos.
Hongkong Bird Watching Society, GPO Box 12460, Hongkong.

It is always a pleasure to receive the Hong Kong annual bird reports, which have interest for ornithologists throughout the S.E. Asian region. 1986 saw nine first records for Hongkong, all of which are described in some detail, and additions and corrections are given for the 1986 Annotated Checklist (reviewed in *KUKILA* 3(12)). The usual monthly report and records committee reports are given, and the results from the international waterfowl count of January 1986. As usual, there are fascinating notes on birds in the People's Republic of China, but perhaps of special interest to oriental readers will be the lengthy paper on status and identification of the Nordmann's Greenshank. The editors of *KUKILA* can only feel envy for the quality and content of these reports, however it should be realized that there may well be more ornithologists in the 1000 or so sq. km. of Hong Kong's territory than there are in the 6000 km spanned by the Republic of Indonesia.

Rahmani, Asad R & Ranjit Manakadan. 1988. *Bustard sanctuaries of India: Strategies for their conservation and management.* Bombay Nat. Hist. Soc. Technical Publication no,13. Price Indian Rs.20.00 or 6.00.

This is a report on the Endangered Species Project undertaken on the Great Bustard *Ardeotis nigriceps* by the Bombay N.H.S., with the assistance of funding from the U.S. Fish & Wildlife Service. While primarily concerned with the bustard and also the Asian Elephant, the project has been expanded to include other endangered species such as the Lesser Florican *Sypheotides indica*, Bengal Florican *Houbaropsis bengalensis* and Jerdon's Courser *Cursorius bitorquatus*. The report outlines the results of the project under three main headings; biology of the Great Bustard, sanctuaries and management. It exemplifies the high standard of work that we have come to expect from the Society, and the proposed conservation measures are inherently practical. The report is illustrated with 29 B-&W plates in addition to the two magnificent colour plates on the covers. Data and recommendations, including information on visitor facilities, are given for eight sanctuaries.

SINGAPORE BIRDS - In Their Natural Habitat

This is the title of a new series of three 50 x 80 cm posters released by Jurong Bird Park at Jurong Hill, Singapore. Each poster shows 34 species of indigenous Singapore birds photographed in the wild on the island by wildlife photographer Morten Strange of Flying Colours Photography. A short text accompanies each picture and describes the characteristics of the species. The posters are available from the Jurong Bird Park at Sing \$. 6.50 each, and from leading book-stores in Singapore.