Each account sets out what is at stake, the degree of threat, which botanists offer most expertise, and which conservationists are doing what – all in splendid detail. The main aim is to help conservation planners to zero in on those areas that should be protected as a matter of top-line priority. That is to say, the books describe a large number of localities where exceptional amounts of biodiversity face exceptional threat of habitat destruction: hot spots writ large. If only we had had these fine volumes ten years ago, we would have been that much further ahead of the game.

Of course there are deficiences. One would wish there were local and regional assessments, i.e. below and above the country level. A global epicentre for plant diversity lies in the Eastern Himalayas from eastern Nepal through Bhutan and the Indian states of Sikkim and Assam, to Yunnan and adjacent parts of southwestern China. Yet the section dealing with the Himalayas is split into country-by-country assessments, so that we do not know how rich are the critical segments of e.g. Nepal or China, nor how far they contribute to the regional hot spot. Fortunately no such problem arises with regard to the Eastern Arc forests of Tanzania, since there are locality-by-locality assessments.

A further lacuna lies with the references. One would prefer to see more items of 1993 onwards vintage if the books are to serve as standard works of reference. In this respect, it seems a pity that they are not as definitive as they might be.

All in all, however, these are splendid publications. They should help markedly our understanding of plants' distribution and conservation status. While anticipating the third and final volume, I have one basic reaction for the authors: right on, write on.

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**Biodiversity and Conservation in Tumbesian Ecuador and Peru**

B.J. Best and M.Kessler (authors)
(Cambridge: Birdlife International, 1995; UK£13.25, pp.218, ISBN 0 946888 26 4, paperback)

Areas of endemism are regions of evolutionary, biogeographic, and conservation importance for they house species found nowhere else. Due to the vicissitudes of history – geological, climatic, evolutionary and human-induced change – many of these regions occupy little land area and contain numerous endemic species. As a consequence, conservationists see them as being especially critical for maintaining the Earth's biological diversity. The Tumbesian area of endemism in coastal Ecuador and Peru is one of these special areas.

The Tumbesian area defines a region of tropical dry forest containing perhaps over 1000 endemic plants and about 55 endemic birds. The tragedy is that less than 5% of the forest remains. Fortunately, there are a number of protected areas in both Ecuador and Peru having the potential to conserve some of this region's unique biota, yet, as the authors point out, the number and placement of these reserves is not sufficient to protect all the types of vegetation found in the area.

This is an important volume, examining in such detail as it does a small area of endemism. The authors tell us nearly everything we would want to know about the area.

First, they treat geography, geology, soils and climate, and then turn to biogeography; the centrepieces of the book are an extensive discourse on vegetation and a critical analysis of the avifauna. The latter focuses on the threatened and near-threatened species, as well as priority sites for bird conservation. Finally, they close the book with a large series of conservation recommendations, among which are suggestions for new protected areas as well as for important research priorities.

This volume carves a niche for itself because of its subject: whereas most of the publicity over conservation action in the tropical regions is directed toward moist forest, insufficient attention is given to dry forest. This is unfortunate since the latter environments are frequently those exhibiting high endemism and severe threat, especially from various forms of agriculture (including grazing). This has certainly been true for the Tumbesian forest, and Best and Kessler present a case-study of the conservation status of an endangered dry forest ecosystem. This book is vital reading for all those concerned about tropical biodiversity, South American biogeography, or about the conservation of endemic bird areas.

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**Understanding Marine Biodiversity – a Research Agenda for the Nation**

Committee on Biological Diversity in Marine Systems (co-chairs: Cheryl Ann Butman and James T. Carlton) (Washington, DC: National Academy Press, 1995; UK£24.95, pp. 114, ISBN 0-309-05225-4)

This research agenda was developed at a 54-person, multidisciplinary workshop. It'focuses on a novel program where ecological and oceanographic research would be integrated at all relevant spatial scales, from local to regional, and over appropriate time scales for distinguishing changes in biodiversity due to effects of human activities from natural phenomena' (p. 8).

After discussing the importance of changes in marine biodiversity, its underdescription and the exciting new research approaches being developed, this book comprises chapters dealing with six major issues: the linking of pattern to process with strong emphasis on scale, the anthropogenic causes of biodiversity change, regionally-defined model systems/habitat types, taxonomy, and a proposed biodiversity research programme.

The issue of spatial and temporal scale receives considerable attention with recognition that change is occurring on many scales, that ecological processes differ with scale and that there is interaction among scales. Much is known about processes operating on local scales but very little about inter-scale interactions. Recommended criteria used to define maximum scales for a specified project include life-history stages, relevant oceanographic processes and the key environmental issues. Shrewd insight will then be needed to select appropriate smaller scales. Moreover, the case for the concurrent study of different types of marine ecosystem is argued as is the integration of population (usually studied at small scales) and ecosystem approaches (usually large scale). Thus this research agenda is unusual in 'emphasizing an *integrated regional-scale research strategy* within an environmentally relevant and socially responsible framework (p. 23).