

of hydrobiology at the University of Khartoum. Later he was international coordinator of the freshwater section of the IBP and consequently looks at this river from a particularly wide viewpoint.

Of the eighteen contributors, seven are from Egypt and the rest from UK, USA, Hungary and New Zealand. There are early chapters on geology, prehistory and early civilisations before getting deep into biology, where much of the information presented is new, or at least difficult to obtain elsewhere. But treatment of the many subjects is somewhat unequal: thus chapters on the fishes, water characteristics, and swamps are particularly full, while mammals and birds are touched on but briefly. There is the first good account of Lake Nasser, and the environmental influences of the High Dam at Aswan are mentioned at intervals. Rzoska indeed, has done a good job in providing a balanced statement on this controversial subject, further developed in *Nature* of June 10, 1976. He helps to correct the misleading environmental propaganda, which neglects the High Dam's primary objectives while exaggerating its ancillary effects, some of which has unfortunately crept into several ecological texts. Another large controversial project, the Jonglei Canal, which will likewise affect human ecology in a big way, is also touched on.

The book is essentially about conservation in the broadest sense—of environments, of ecosystems, of species, and of water as the life-blood of the Sudan and Egypt. With five other countries providing that water, the Nile is an international river *par excellence*.

BARTON WORTHINGTON

Rodents in Desert Environments, edited by I. Prakash and P. K. Ghosh. Dr W. Junk, The Hague, DG 180.

This is a book for the specialist, and a very good one that will undoubtedly retain its importance for many years. Of desert mammals, rodents are unquestionably the most numerous. But although they have attracted a considerable amount of scientific interest and research, this book (vol 28 of *Monographiae Biologicae*) is the first comprehensive compilation to be made of the available information on their biology in desert environments. The subjects of the 23 chapters, in a book of well over 600 pages, range from a consideration of the desert as a habitat to the nematode parasites of Indian desert rodents. The ecology of rodents in various arid regions is described – including northern Sudan (D. C. D. Happold), Iran (X. Misonne), Afghanistan (J. Gaisler), Rajasthan (I. Prakash), Australia (A. E. Newsome and L. K. Corbett), Argentina (M. A. Mares), and Russia (N. P. Naumov and V. S. Lobachev). The remaining chapters are concerned with water conservation and thermoregulation (K. Schmidt-Nielsen; W. V. Macfarlane; P. K. Ghosh; L. I. Ghobrial and T. A. Nour), reproductive biology (H. D. Smith and C. D. Jorgensen; A. C. Hawbecker), activity (N. R. French), food (M. L. Rosenzweig, Barbara Smigel and A. Kraft), coloration (D. L. Harrison), behaviour patterns (J. F. Eisenberg), ecological adaptations (A. de Vos), and prehistoric faunas (E. Tchernov; Priscilla F. Turnbull). Except for a short chapter in French on the dentation of gerbils (F. Petter), the entire volume is written in English. It concludes with author, genus and species, and subject indexes.

At a time when so many books are being produced as paperbacks, with offset print and unjustified margins, it is a real pleasure to read a book that is well bound, printed on good quality paper, and contains numerous clear illustrations. It is, naturally, expensive. Yet everyone engaged in research on the biology of desert rodents and allied topics will feel deprived if he does not buy himself a copy.

J. L. CLOUDSLEY-THOMPSON

Correction

The author of *Portraits in the Wild*, reviewed in *Oryx* July 1975, is Cynthia Moss, not Ross.

The Mammals of Pakistan

T.J. Roberts

This is the only complete work of reference about Pakistan's mammals, and it will be an essential source of direct or comparative information for students and research workers at major natural history museums and institutes throughout the world.

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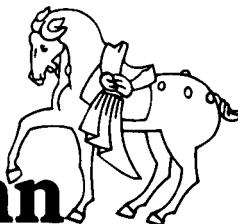
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A Full Clutch

There are 101 ways of writing a general book on birds – no doubt 1001 by the time we are all finished – and it is good that each generation of bird men is able to have its stab at it, incorporating all the fresh knowledge that accumulates so rapidly. *Bird Life: an introduction to the world of birds* (Elsevier Phaidon, £5.95) is the contribution of Dr Christopher Perrins, Director of the Edward Grey Institute at Oxford, and well done it is, covering everything from evolution to bird observatories. The colour illustrations by A.D. Cameron are quite superb.

Lambert's Birds of Garden and Woodland (Collins, £4.95) is, with no disrespect to Alan Mitchell's excellent text, a frame for the pictures of Collins's latest bird-artist discovery, 25-year-old Terence Lambert. One begins to run out of adjectives in describing bird paintings, but these really are very good, and well merit Sir Peter Scott's enthusiastic commendation. The gardens and woodlands in question are those of Britain and Europe.

The Birds of Britain and Europe in Colour (there's no copyright in this title!) crop up once more in a most attractive little book of colour photographs by Dennis Avon and Tony Tilford, this time under the aegis of Jim Flegg, erstwhile of the BTO (Blandford, £3.25). A hundred species are covered, which leaves plenty of scope for 'The Birds of Europe and Britain in Colour' next year!

An old friend from the almost prehistoric immediate post-war period bobs up again with the revised edition of the late C.A. Gibson-Hill's *A Guide to the Birds of the Coast* (Constable, £3.50). Much has happened since 1949 for the three revisers, brother-in-law Bruce Campbell, nephew Robert Campbell and artist Robin Prytherch, to incorporate in the new text, and it makes an excellent little book for the pocket (it really is pocket-sized) of the coast-going birdwatcher. Gibson-Hill's original photos stand the test of time pretty well.

Malcolm Ogilvie's *The Winter Birds* (M. Joseph, £5.75) is misleadingly titled: it is in fact about the birds of the Arctic, and as such is an excellent survey, illustrated by fine photographs, although not, as the publishers hint, the first book on its subject.

Rare Birds in Britain and Ireland, by J.T.R. and E.M. Sharrock (Poyser, £6) is a must for the rare-bird buffs, as we must now call what a few years ago were aficionados or fans or just specialists. This is the end product of an immense process of sifting and verifying sight records, and for those like me who are interested in this slightly recondite aspect of ornithology, it is absolutely irreplaceable. There is a nice line drawing and a map for each species. I especially liked the epigraph, from Robert Browning: 'Suddenly, as rare things will, it vanished . . .'

Finally the old phenomenon of two books on the same subject appearing at the same time has reasserted itself in Malta. *Birds of the Maltese Archipelago*, by David A. Bannerman and Joseph A. Vella-Gaffiero (Museums Dept, Valletta, £4.75 stg) is a fine avifauna in the true Bannerman tradition, but in smaller format than his great quartet on the Atlantic Isles. *A Guide to the Birds of Malta*, a comprehensive checklist, by Joe Sultana, Charles Gauci and Mark Beaman (Malta Ornithological Society, P.O. Box 498, Valletta, £3; paperback £1.90, including p & p), is a more modest volume, and perhaps better suited to the brief but bird-oriented visitor. Both are illustrated with line drawings, and the Bannerman also has some excellent colour plates by Chlöe Talbot-Kelly.

RICHARD FITTER

Three books for the Russian speaker/reader: *Nature and Animals of the Kommandovskii Islands*, an account of these remarkably rich islands (the Commandors) in the Bering Sea, and *The Northern Fur Seal*, both by C.V. Marakov, based on many years' study of these northern areas, together with a discussion on their protection; and *The Sea Otters Return to the Shore*, by V.V. Deshkin and C.V. Marakov, a popular treatment of 'semi aquatic mammals' – beaver, desman, musk-rat, coypu, mink, fur seal, sea otters.

International Zoo Yearbook 1976

An article on the destruction, captive history and propagation of the Arabian oryx *Oryx leucoryx* by James M. Dolan, general curator of the San Diego Wildlife Park, is the main feature in the conservation section of *International Zoo Yearbook 16*, edited by P. J. S. Olney (Zoological Society of London, £12; \$26.40). This also includes a complete record of all Arabian oryx that have been kept in captivity, calving intervals in the captive herds, and some useful comments on captive propagation. In another conservation article, Helmut Hemmer discusses sand cats *Felis margarita* in zoos and includes studbook details. The 1974 studbook for Przewalski's horse and Père David's deer are also given in detail, showing captive totals of 244 (103.141) and 726 (217.405 and 104 sex unknown) respectively. The reference sections include the valuable census of rare animals in captivity and the studbooks (summaries) and world registers for rare species in captivity.

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D. G. George and R. W. Edwards. The effect of wind on the distribution of chlorophyll *a* and crustacean plankton in a shallow eutrophic reservoir *C. Lachlan and R. P. Bray.*
Habitat selection by cock pheasants in spring *C. E. Ohiagu and T. G. Wood.* A method for measuring rate of grass-harvesting by *Trinervitermes geminatus* (Wasmann) (Isoptera, Nasutitermitinae) and observations on its foraging behaviour in southern Guinea savanna, Nigeria *Myrfin Owen.* The selection of winter food by whitefronted geese *Kathleen L. King, K. J. Hutchinson and Penelope Greenslade.* The effects of sheep numbers on associations of Collembola in sown pastures *R. H. Austin, B. F. Phillips and D. J. Webb.* A method for calculating moonlight illuminance at the earth's surface *D. A. Kendall and B. D. Smith.* The pollinating efficiency of honeybee and bumblebee visits to flowers of the runner bean *Phaseolus coccineus* L. *N. A. K. Akotoye and R. Kumar.* Population dynamics of *Characoma stictigrapta* Hmps. (Lepidoptera: Noctuidae), on cocoa in Ghana *Margaret G. Jones.* The Carabid and Staphylinid fauna of winter wheat and fallow on a clay with flints soil *S. Firempong.* Changes in populations of *Toxoptera aurantii* (Boy.) (Homoptera: aphididae) on cocoa in Ghana *A. R. McLellan.* Factors affecting pollen harvesting by the honeybee *T. R. Sinclair, C. E. Murphy Jr and K. R. Knoerr.* Development and evaluation of simplified models for simulating canopy photosynthesis and transpiration *J. E. Sheehy and L. C. Chapas.* The measurement and distribution of irradiance in clear and overcast conditions in four temperate forage grass canopies *J. G. Paterson, W. J. R. Boyd and N. A. Goodchild.* Effect of temperature and depth of burial on the persistence of seed of *Avena fatua* L. in Western Australia *W. Armstrong and E. J. Wright.* A polarographic assembly for multiple sampling soil oxygen flux in the field *Sheila A. Grant, W. I. C. Lamb, C. D. Kerr and G. R. Bolton.* The utilization of blanket bog vegetation by grazing sheep *Alan H. Fielding and George Russell.* The effect of copper on competition between marine algae *S. Fukai, S. Koh and A. Kumura.* Dry matter production and photosynthesis of *Hordeum vulgare* L. in the field *Richard J. Strange.* Nutrient release and community metabolism following application of herbicide to macrophytes in microcosms *M. A. Pemadasa.* Interference in populations of three weed species *J. R. Witcombe and A. R. Rao.* The geneecology of wheat in a Nepalese centre of diversity

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