

seasonal (winter/summer) variations such as occur in the Alps. The daily frost-thaw alternation on equatorial heights results in rapid soil formation; plants and soil are daily subjected to temperature changes comparable to those that occur once a year on temperate mountains. Animals can avoid the nightly cold by burrowing or hiding among the leaf frills of giant groundsel, and even plants adapt to escape the worst effects of the climate. Plants that adopt the lowly rosette habit, also seen in the Arctic and the Alps, are more numerous than the giant (megaphytic) forms of groundsel or lobelia for which these heights are famous, and the rosette habit is shown to be a simple adaptation to cold, abandoned as soon as the plant is taken to a warmer place. But no explanation is advanced for the occurrence of the bizarre and grotesque giant groundsel and lobelias.

The most interesting animal communities are the abundant rock hyrax and rats. Here the author draws some rather far-reaching conclusions about population control on what appears to be tenuous evidence. Birds are among the main predators of these animals and here the book is decidedly weak. It is suggested that the lammergeier *Gypaëtus barbatus* is resident and eats hyrax, but without a shred of real evidence.

The book is a mine of detailed information and a must for anyone interested in East African mountains. It is written by a specialist for specialists and a layman would find it unreadable, yet it is a book which many people may want to buy in the hope that it will reveal to them the natural secrets of Mt Kenya. If scientists wish to interest a wider public they should learn to write clearly and simply about their supremely interesting findings.

LESLIE BROWN

The Past and Present Distribution of Some African Ungulates,
by **Jasmine Sidney.** Transactions of the Zoological Society of
London, Vol. 30, £6.

This fact-finding survey of certain elements of the African fauna – inspired and financed mainly by the Colonial Office and with assistance from the Department of Technical Co-operation – is based on data collected in the 1950s, during which time ‘there has been a pronounced acceleration in the decline in game numbers and game areas’; the situation has deteriorated still more in recent years. Miss Sidney summarises ten points to account for this decline, and stresses that ‘only prompt action can save a valuable national resource from disappearing’; her advocacy of game-farming to provide protein for indigenous populations, as well as for perpetuating species, is both timely and practical. It is unfortunate that it has not been possible to include all African ungulates in this survey, which is, nevertheless, the most comprehensive and authoritative treatise ever to have been compiled on the subject. Many years of meticulous study and research are supplemented by two years’ field experience in East, Central and Southern Africa, in 1958-59. The Continent is dealt with exhaustively, territory by territory; wholly or partially discussed, are six families, of which the extensive family Bovidae is divided into three sub-families, each of these further sub-divided into their relevant generic groups; the frequent distribution maps are particularly useful. The author is to be congratulated on this admirable treatise which constitutes a most valuable and informative work of reference.

C. R. S. PITMAN

Poisonous Snakes of Southern Africa and the Treatment of Snakebite by **John Visser.** Howard Timmins, 45s.

The primary purpose of this authoritative work, sponsored by the Cape of Good Hope Faculty of the College of General Practitioners, is the ready recognition of those Southern African poisonous snakes which endanger human life, combined with expert advice on the effects and treatment of snakebite. It is of such

importance that there should be a copy in every household in South Africa. The author's coloured photographs of his living subjects are of a standard rarely surpassed, and the publishers must be congratulated on the excellence of their reproduction. A valuable table shows at a glance the distribution of those species likely to be responsible for snake bite accidents in proximity to the major towns and the general distribution of representatives of the three venomous groups is outlined with excellent line drawings to indicate their fang structure. The mode of 'spitting' from a fang is also illustrated. Especially important is the enumeration of the factors – of which the layman is mostly ignorant – affecting the severity of snakebite. A novel feature is a series of informative and useful questions and answers.

Comprehensive, but concise, this is a textbook which can be highly recommended to layman and scientist alike.

C. R. S. PITMAN

The Improbable Kangaroo and Other Australian Animals, by Axel Poignant, 45s. **Marsupials and Monotremes of Australia**, by Gordon Lyne, 30s. **The Life of the Kangaroo**, by Stanley & Kay Breeden, 30s. **Australian Snakes, Crocodiles, Tortoises, Lizards**, by Eric Worrell, 25s. All published by Angus & Robertson. **Australian Birds in Colour** by Keith Hindwood. A. H. Reed, 26s.

Axel Poignant's book has a dual impact: it is literally one man's view of Australian wildlife, since he happens to be a very talented photographer, and also an imaginative re-creation of the discovery of Australia's incredible fauna and the amazement of contemporary European naturalists. Although references were made to strange hopping beasts and pouched females by seventeenth century Dutch and English navigators, it was the late eighteenth century scientific explorations under Captain Cook and Joseph Banks that made these animals a reality. The harmful effects of introducing such species as the European rabbit and fox into Australia are well known, but the need for conservation of the unique native fauna cannot be over-emphasised. It is sad that more of the aboriginal names for native animals – koala, wombat, kangaroo – have not been retained, since the Australian aborigines provide an interesting if tenuous historical background to their continent, and their place names, such as Waukaringa, Chowerup and Naremben, are most euphonious. In such an interesting book, with its historical detail, it is the more regrettable that there is no bibliography and an index to the illustrations only.

Gordon Lyne's extremely careful drawings of two monotremes and 38 species of marsupials, based on photographs and the author's knowledge of the animals, evoke their subjects – the caricatural aspects of marsupial 'mice', the satanic felinity of 'native cats', the surly bulldog quality of the Tasmanian devil, and the thick-set, badger-like appearance of the common wombat. There are brief and accurate descriptions and a few photographs.

For three years, from May 1962, the Breedens spent much of their time observing and photographing the great grey kangaroos, *Macropus giganteus*, which dominate the wildlife of Bribie Island, in Moreton Bay in south-east Queensland. The island is 20 miles long, from three miles to 100 yards wide and barely rises to 25 feet above sea level. The result is a well-illustrated and pleasantly written general account of the life of the grey kangaroo, the behaviour of adults and young, and their reactions to predators, parasites and other wildlife.

In Eric Worrell's well illustrated picture book, with simple explanatory text and index, all but five of the photographs are by the author, whose presentation is clear and authoritative. The three groups of Australian reptiles – crocodiles; tortoises and turtles; snakes and lizards – are well defined, and the animals and