

the advantage of illustrating the altitudinal zonation of flora and fauna, perhaps the most fascinating feature of the natural history of the Andes.

So the book takes us across coastal deserts and equally desertic high plateaux, hot steppes and cold steppes, the highest lakes and the great tropical rivers, rain forest and cloud forest, paramos and pampas. The main subject is wildlife but with frequent sallies into archaeology, Amerindian customs and folklore, altitude acclimatisation, zoogeography, palaeontology and some occasionally unorthodox history. This is a lot to cram into 200 pages and some readers may find the book overstuffed; others may enjoy the seemingly inexhaustible torrent of facts and names. There are some striking illustrations in colour.

Mr Morrison's first interest is the mammals and he describes a wide cross-section. This is particularly valuable as most Andean mammals are uncommonly difficult to see. With the birds he is more selective (inevitably so with 1500 species in Colombia alone) but he has good pages on flamingoes, condors, and the species a visitor can expect to see, say, at Titicaca or Santa Marta. Alas, every chapter records declining numbers, species in danger of extinction, and the difficulty of promoting conservation in a continent which traditionally accepts reduction of wilderness and increase of population as twin symbols of progress.

This account may help naturalists wondering which part of the immense cordillera to visit—especially those who, after due warning, wish to explore some of the less accessible regions that have attracted the author.

G. T. CORLEY SMITH

Horses, Asses and Zebras in the Wild, by Colin Groves. David & Charles, £3.50.

The author of this excellent book has experience of equids in the wild (especially of zebras in Africa); he has also diligently viewed them in captivity, investigated the literature, and consulted authorities. The result is an easy-reading assemblage, clearly set out and in reasonable compass, covering the whole field. There are chapters on probable ancestry and related creatures, on feral animals and domestication, and several appendices.

This is a very difficult group. Most authorities disagree on either the broad view or the detail, and there are few attempts to deal with it comprehensively. A pitfall arising from the author's material is that it tends to perpetuate popular mythology in matters of detail and to pay too much uncritical respect to whatever has been written and claimed by anybody else. Some details are trivial, of course. For example: the animal shot by Col. Przewalski himself in the 1870s, from which the species *E. przewalskii* was first described, is instanced as the standard of five characteristics. But it is now known that this animal was immature, that colour varies with age, season and, in certain respects, individuals, and, besides, that it was certainly not Przewalski who shot it. The skin and skull were passed to him by a frontier official who had obtained them from Kirghiz huntsmen, and its exact provenance cannot be known. (Indeed it is quite likely that the nominate discoverer never saw a Przewalski horse alive.) Again, that delightful taxonomic error the *dzigetai* or *djigetai*, reappears as one of two distinct forms of Mongolian wild ass, whereas the word is simply an explorer's misunderstanding of the Mongolian slang term 'long-ears' (applied sometimes to any wild ass, or even wolf). Mongolians—like Russians—use the one Twki word *kulan* or *khulan* for all wild asses.

But *de* such *minimis* the reader should *non curat*. What is perhaps more

grave is that on some deeper matters the account of the views of specialists could profitably have done with a more liberal dose of salt. The pretensions of palaeontologists to align family trees exactly are highly speculative (after all, equids extant are very variable animals, and no one knows what the owner of skulls, teeth and limb bones were really like). 'Experts' purporting to account for the variety and history of present-day domestics ride all manner of hobby-horses, and common sense about the behavioural psychology of the systematists themselves is the essential key to understanding the vast array of subspecies and local races invented in the nineteenth century (there were more than 40 of *E. burchelli* alone).

The author would have been wise *inter alia* to treat the gulf between the Asian and African asses (the half-ass and the true-ass) as more important, the division between onager and kiang as less; to pay more attention to fertile crossing or its absence as a criterion of specific difference; to remember that behaviour in captivity is not decisive proof of behaviour in the wild; not to overlook the early depiction of wholesale importation of Libyan asses into Egypt as a possible hint on the origin of the donkey; and to accept less readily the speculation about wild factors in certain western European feral horses and, in particular, the legend of the Siberian white horse as gospel.

The author is perhaps too pessimistic about the survival of remnant herds of *E. przewalskii* in the Mongolian wild. Though numbers must be very small, Mongolian zoologists have in the last year accepted several sightings as genuine—and they are the best people to know.*

On the whole, however, he has managed without disaster to get through a vast amount of controversial matter in what is intended as an introduction to the group, and our gratitude for the wealth of pertinent material and views should be unqualified. Particularly noteworthy are the clear distribution maps and the photographs of rare forms—Cape mountain zebra, Nubian wild ass and the now extinct Syrian half-ass, the last specimen of which died at Schönbrunn Zoo; only recently that zoo reported that its photographs were destroyed in the war. The sentiments on conservation are impeccable.

IVOR MONTAGU

A Guide to the Birds of Trinidad and Tobago, by Richard French. Livingston, \$12.50

The Life of the Hummingbird, by Alexander F. Skutch. Octopus Books, £3.95

An encouraging feature of recent bird books has been a rapid filling of gaps, triggered partly by improved facilities for getting almost anywhere in search of birds. Forty years ago the bird-watcher in Africa had almost no books to help with discovery or identification. The same situation persisted much later in tropical America: of over 150 books and papers listed in the bibliography of the Trinidad and Tobago guide, only a couple of dozen antedate 1945.

Trinidad and Tobago have been more fortunate than most of the American tropics in that a Field Guide (by G. A. C. Herklots) has been available for just on fifteen years, and, for considerably longer, Trinidad has been something of a spawning ground of tropical ornithologists. The new guide nevertheless takes a substantial step forward in its comprehen-

*See *Oryx*, February 1974, page 364, Wild Horses and other Endangered Wildlife in Mongolia, by D. Tsevegmid and A. Dashdorj, who accept three sightings in 1966, one in 1967 (and also a track sighting), and two in 1968. These references are not included in the book. *Editor*