

Book Reviews

Ecological Studies in Southern Africa, by **D. H. S. Davis**.
 Monographiae Biologicae, 14-22. Junk, The Hague. \$16.65
 or 60 Dutch guilders.

The reviewer finds it difficult to convey the immense satisfaction he has had from reading this collection of 28 scientific papers, the only connecting thread of which is the science of ecology. A strong thread, undoubtedly, but producing fabrics of such different textures as a study of the Bushmen by Tobias, the fauna of the forest soil by Lawrence, wild rodent plagues by Davis, veld-burning and vegetation by Brynard and the history of game preservation by v. d. Merwe. This is a fine body of work not bedevilled by bilingual nonsense and all it stands for, which nonsense, it might be said, does tend to isolate South Africa scientifically, when the quality of work being done there does not merit such a fate. Davis himself was one of Elton's post-graduate students at Oxford and went to South Africa to work on the ecology of plague-carrying fleas during the last serious outbreak of plague in South Africa in 1944. We learn that though the plague bacillus was present in East Africa hundreds of years ago, it came to South Africa by sea from the East about the time of the Anglo-Boer War. This senseless conflict greatly helped in getting the immigrant rodents up country to infect the indigenous rodents, in which stocks the plague bacillus is now endemic.

The Bushman, says Robert Story, is a good natural taxonomist and highly perceptive ecologist, practical rather than theoretical in his approach. There is something ironical and faintly amusing in finding that this late-comer to the biological sciences is but catching up with the accomplishments of palaeolithic man. Tobias in the preceding paper demolishes the notion of the Bushman being a desert-adapted human type. He thinks the dwarfness (also apparent in the forest-dwelling pygmy) and the steatopygy could have arisen in Pleistocene times in hunting-food-gathering people accustomed to endure periods of food scarcity. Sexual selection of biologically advantageous characters would accelerate evolution of the type. In short, the present Bushman of South Africa's desert regions does not survive because of genetically controlled anatomy, but by reason of his cultural pattern which is swift and intelligent in adaptation. This cultural flexibility and inventive genius has prevented extinction through over-specialisation to a circumscribed biological niche.

I have dwelt on this paper because it is significant in our groping towards saving species of animals. When you rear a baby orang-utan you can feed it but you cannot give it the accumulated culture of orang-utandom, and it is doubtful if it can survive apart from you. Even a fold of Highland cattle on deer-forest country does better a few years after establishment because "groundsmanship" rests with the older females and has to be learnt by each generation. Built-in savvy is common in insects and in birds, but a hand-reared raven or goose finds it hard to go wild again, for other ravens and geese are foreigners. And remember David Sheldrick's two elephants in Kenya: the female was able to be re-absorbed into the Proboscid herd culture, but the male gave it up and elected to continue as a human being. We really must remember these things in our sentimental maunderings about saving wild life and all that.

Finally, when some of us tend to think of the South African Dutch as insensitive killers of game, we might remember that within 25 years of the founding of the Cape in 1652, Governor Simon van der Stel extended protection to certain species of game. Kruger recognised the need for reserves as early as 1884, half a century before British-administered Africa got the idea. We forget, also, how many South African farmers jealously guard the game on their lands.

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