made — the large carnivores and herbivores — would seem to have less potential except to provide pleasure and inspiration. But it is obviously good sense to try to preserve large areas of tropical forest and other habitats which contain thousands — perhaps millions — of undescribed species, whose economic potential has not been studied.

Finally, the Ehrlichs believe that unless we can maintain the diversity of the world's flora and fauna, the whole life-support system may break down. This is probably true, but the organisms which are the most important — the decomposers in the soil, insignificant parasitic insects, soil fungi and sewage organisms — are seldom the subjects of popular conservation programmes. The impoverishment of our fauna with the loss of the wolf, the bear and

the wild boar has *not* had the effect of making farming in Britain less efficient — quite the reverse.

So we must come to the conclusion that conservation is a far from simple subject. The economic and similar arguments often need to be qualified. Those based on the value of diversity are far from proven. Conservationists must avoid making statements which they know to be untrue in an attempt to obtain wider support from politicians and the general public. The most cogent reason for conservation, in my opinion, is that "man does not live by bread alone"; the general and aesthetic reasons have more validity than the economic. □

Kenneth Mellanby's most recent book is Farming and Wildlife (Collins, 1981).

Fighting for the conservation of tigers

Brian Bertram

Saving the Tiger. By Guy Mountfort. Pp.123. ISBN US 0-670-61999-X; ISBN UK 0-7181-1991-6. (Viking/Michael Joseph: 1981.) \$16.95, £7.95.

THE tiger is a slim, dramatic animal, and it now has a book to match it. The numerous, large and well-printed colour plates are spectacular and superb. They do not leave a great deal of space for the authoritative text, in which the author summarizes our still scanty information on tigers, their appalling conservation plight and international attempts to prevent their extinction.

Despite the title, the tiger has not been saved, and it would be dangerous to think that it had been. Equally, it would now be much closer to extinction but for international efforts on its behalf. Guy Mountfort was both the catalyst and the power house in setting up Operation Tiger in 1972, under which the World Wildlife Fund raised nearly a million pounds for tiger conservation. He describes how the governments of India, Bangladesh and Nepal were persuaded to establish reserves for tigers, and other countries of South-east Asia have since followed suit.

The hunting of tigers for sport is no longer a threat, thanks to national legislation in most of the countries concerned. The traffic in tiger skins for the fur trade has dwindled, thanks also to CITES, the Convention on International Trade in Endangered Species. Illegal killing of tigers is declining as local policing improves and as there is less direct contact between tigers and the local populace. The main threat nowadays is from loss of the forest habitat and the prey species on which tigers depend. Through the efforts of Guy Mountfort and others, this threat has been alleviated in many areas, and general

public awareness of the plight of these wonderful animals has been raised.

What about future prospects? First, our priorities. With great difficulty and organization, large sums of money have been raised and thousands of square miles of tiger habitat protected. The total costs involved are equivalent to those needed to build a mere half-dozen miles of motorway. Which is more important? Should we have some form of conservation levy which because we human beings are so numerous would be paltry at the individual level?

Second, the status of tigers in their native reserves is relatively safe only so long as there is no breakdown of law and order in the countries concerned, and until human population pressures become irresistibly strong.

Third, although the many captive tigers in the zoos of the world are not a substitute for wild populations, they may well be a back-up. There should be tigers in the wild where they belong. But if the 350–400 wild Siberian tigers or the 600–800 wild Sumatran tigers are exterminated through human greed or folly, there are at least 800 Siberian and 150 Sumatran tigers in captivity. I am convinced that these could be used to re-stock areas from which wild tigers had been wiped out. Certainly, it would be difficult, and would need money, time and skill, and certainly there would be failures. But there is no reason in principle why, if necessary, reintroduction should not prove possible with tigers as it has with other large cats. We only hope that it does not become necessary. Guy Mountfort has done much more than most to help prevent it. □

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The sexes look at sex

Adrienne L. Zihlman

The Woman That Never Evolved. By Sarah Blaffer Hrdy. Pp.242. ISBN 0-674-95540-4. (Harvard University Press: 1981.) \$17.50, £12.25. *The Evolution of Love.* By Sydney L.W. Mellen. Pp.312. ISBN hbk 0-7167-1271-7; ISBN pbk 0-7167-1272-5. (W.H. Freeman: 1981.) Hbk \$15.95, £8.50; pbk \$8.95.

BOOKS on the evolution of human behaviour are often more interesting for the questions raised than for the answers proposed. This is particularly true when one compares the questions posed by male and female authors about the evolution of primate sexuality. The books under review provide a classic case study in contrasting, almost mutually exclusive, viewpoints.

During the 1960s, male reconstructions of human evolution informed us that human hairlessness evolved to enhance front-to-front sex; that men's social and political clubs have sprung from the co-operative camaraderie of the male hunting groups that made our species successful millions of years ago; and that human females lost oestrus and became perpetually sexually receptive so as to keep males around to provide protection and meat from the hunt.

During the 1970s, women increasingly joined men in the game of replaying human prehistory. In place of the prevalent Man-the-Hunter scenario that put males centre stage and relegated passive, dependent females to the wings, waiting for the heroes' return, women anthropologists emphasized the important social and economic role of Woman-the-Gatherer. They also drew on sociobiological theory, which hypothesizes that the sex investing the most time and energy in raising the offspring makes the choice of mates. The central male role in the evolution of human culture and institutions was disputed by field observations on primates and on gatherer-hunters such as the !Kung San, revealing the pre-eminent involvement of females in obtaining and sharing food, choosing mates, socializing children, establishing and maintaining social networks, and using tools — in contrast with the earlier image of females as rather passive recipients of male sexual and hunting activities.

Sydney Mellen's *The Evolution of Love* and Sarah Hrdy's *The Woman That Never Evolved* provide examples of the male and female viewpoints of the 1980s. Both are concerned with an evolutionary overview of human nature, particularly sexual nature. Both use the theoretical framework of sociobiology, which attempts to explain contemporary human behaviour by genes that evolved millions of years ago. Mellen draws heavily on the fossil and archaeological record of the past 2–3 million years and does not dwell on non-human