

Publications

Wildlife Conservation by Sustainable Use edited by Prins, H.H.T., Grootenhuis, J.G. & Dolan, T.T. (2000), xiv+496 pp., ISBN 0 412 79730 5, £115, Kluwer Academic Publishers, Boston.

Here is a rich mine of pickings for those who wish to conduct realistic and ultimately successful conservation policies in the African savannah. Unfortunately its length, scholarly density and price present major obstacles to its accessibility.

The book is a collection of some 20 papers, with summary opening and concluding chapters by the editors. The papers derive from a workshop at the Lewa Downs Conservancy in Kenya (the conservation strategy of which is the subject of one of the papers) held, one infers, around 1997, and subsequently revised and prepared for publication over a lengthy period. The editors hint at the effort needed to bring the results into the public domain, including the takeover of the original publisher. Moreover, there is rich irony in the fact that while the workshop was held with the support of David Western, then Director of the Kenya Wildlife Service, the foreword is by his immediate successor, Richard Leakey, who even by the date of publication had moved on to head the Kenyan Civil Service.

The question that the proponents (from Wagenigen University in the Netherlands) were trying to answer was whether the apparent conservation success of policies in Southern Africa to give wildlife outside protected areas an economic value could be effectively applied to the East African situation. To this end they assembled a group of people, mostly working in East Africa but with a sufficient sprinkling of Southern Africans, including ecologists, hunters, tour operators, ranchers, veterinarians, game croppers, national park planners and economists. The book conveys the strong impression that members of the group genuinely interacted. For example, where issues of judgement came up polls were taken and the results are given, indicating a broad consensus without claiming unanimity. The result, therefore, is substantially more than the sum of a disparate collection of individual contributions.

There is not space here to summarize all the papers, but they are broadly arranged in groups. In the first group, Jane Stanley for Machakos, Brian Heath for Laikipia and Peter Szapary for Lewa describe Kenyan attempts to move from pure cattle ranching to wildlife conservancy or a combination of the two. They

demonstrate that, while wildlife populations benefit, neither cattle raising nor game cropping produce more than a minimal return (<1 per cent of capital value) from land which now has a high value for dispersal into small parcels. Safari hunting, if permitted, would however, substantially raise returns for far fewer animals harvested. The same point is made later in a study of game-use by Game Ranching Ltd, a Kenyan enterprise. Jan Geu Grootenhuis, Hebert Prins and Floris Deodatus explore in some depth the interaction between wildlife and livestock in terms of disease transmission, reaching the perhaps surprising conclusion that wild animals are at more risk from livestock than vice-versa.

The substantial decline of wildlife populations in Kenya's rangelands over 20 years is convincingly demonstrated by Wilbur Ottichilo and colleagues, while Helen Gichohi argues that Nairobi National Park is now at risk because the land into which its herds of herbivores disperse for much of the year is being rapidly converted into smallholdings. Switching the focus to Tanzania, Nigel Leader-Williams gives an authoritative account of the way in which colonial era policies centralized the control of wildlife resources and allowed few benefits to flow to local people, although trophy hunting, with its high economic return, was permitted. He outlines a new strategy, which was being adopted at the time of the workshop, for devolving control of wildlife resources to local communities, but we are left to speculate whether it has had any success.

The following chapters are meant to indicate solutions, although they vary enormously in style and substance. Graham Child and Langford Chitsike of Zimbabwe argue powerfully that ownership of wildlife by individuals or communities and the removal of perverse pricing incentives are vital to successful conservation. They have the evidence to prove it. Robin Hurt and Pauline Ravn present a mass of detail about the potential returns from including safari hunting in any use strategy, demonstrating that it produces an income per hectare some seven times higher than that from cattle or game ranching. Tourism can generate even higher returns, as shown by Allan Earnshaw and Lucy Emerton, but only in areas that are scenic and have very high concentrations of wildlife. Brian Child uses case studies from Zambia and Zimbabwe to describe how changing wildlife from a public to private good can

provide the incentive to protect and increase its populations.

But perhaps the most valuable chapter in the volume is the penultimate one, drawn from the contributions to the workshop, in which Brian Child applies the lessons of the Southern African experience to East Africa. The consensus was that if the degradation of wildlife populations in Kenya and Tanzania, both in the Parks and in the rangelands that interact with them, is to be reversed, the essentials are enlightened governance, the removal of perverse incentives, especially those promoting agriculture, and local ownership and use. The case is well made and the need to act on it is urgent, but one fears that these insights still receive scant attention in donor strategies or in the heated debates at international wildlife convention meetings.

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Hunting for Sustainability in Tropical Forests edited by Robinson, J.G. & Bennett, E.L. (2000), xxi+582 pp., ISBN 0 231 10976 8 (hardback), £48, 0 231 10977 6 (paperback), £20, Columbia University Press, New York.

Hunting for Sustainability in Tropical Forests has finally been published after several years in press. However, for those working on what is becoming one of the most pressing threats to biodiversity conservation in the tropics – the hunting for wild meat – it was worth the wait.

Despite the delay, this book represents the most complete global overview of the current effects of hunting on wildlife and people in the tropics. Importantly, the focus of the book is more geographically diverse than other work that has dealt with this issue recently. Much of the work in the past decade has focused on the commercial 'bushmeat' trade in West and Central Africa. However, Robinson & Bennett have assembled case studies and results of research from Africa, Asia and the Neotropics. As well as the editors' individual efforts, 39 other authors have contributed to the book from a variety of NGOs and universities. The breadth of experience within this group of contributors adds to the diversity of the topics covered. Much of the work ranges beyond market studies, the staple of research on wild meat in the past, and looks into the socio-economic forces driving increasing trade and at links to other sectors such as commercial logging.

One of the starkest, and most urgent messages from the book, is that hunting is usually unsustainable on a biological level, i.e. biological production of the game

species involved is exceeded by off-take. Fourteen out of 17 studies that specifically evaluate sustainability found hunting to be unsustainable for some of the species hunted. This is not just in the case of commercial hunting responding to demand from urban areas, it is also occurring at the so-called subsistence hunting levels.

The initial chapter of the book, by the editors, clearly establishes that the problem of unsustainability is because of socio-economic factors, with huge amounts of wild meat being an important resource to different sectors of society, both rural and urban. For me the most crucial part of a book such as this should be about solutions. However, coverage of this aspect is not sufficiently detailed or extensive. It seems clear that we must try to find solutions that are able to deal with hunting for wild meat in its broad geographical and social context. This is the essence of the difficulty of working on this issue, and one that this book nevertheless reaffirms.

Despite the complexity of factors that influence wild meat hunting, we need to find some basic principles that can be applied and refined at local levels to try and manage non-endangered wild animals as the resource that they represent to millions of people. This book concentrates on the widely accepted solutions of controlling illegal hunting, and maintaining effective protected areas (not easy options in the context of many developing countries). Although protected areas must remain a corner stone of effective conservation in the context of wild meat hunting, there must be broader solutions too.

There are, however, reasons for hope within the book that make one think that the 'empty forest' syndrome, where the trees are standing but there is hardly any vertebrate fauna left, can be averted. One of these is that in some areas where duiker hunting in Central Africa is theoretically unsustainable at site level, populations are maintained by immigration from surrounding areas, and thus the actual level of hunting remains sustainable. Work from both South America and Africa suggest that spatial planning using this principle to create 'source' and 'sink' areas, which animals move in from and are hunted from, respectively, may prove to be a valuable management tool. Such landscape-planning approaches require dialogue, and agreement of priorities between different branches of government. It is the methods of promoting this type of policy that I would like to have seen explored in more depth. The lack of clear-cut solutions does, however, serve to reaffirm the fact that there are no simple solutions to the problem of unsustainable wild meat hunting.

The amount of information that is contained in this volume is huge, and the research effort behind it

staggering. For anyone interested in understanding the complexities of the human and biological factors that determine the current sustainability of hunting in the tropics, this book is essential. As such it should serve as a basis for more practical attempts to increase the sustainability of wild meat hunting, as well as to highlight the importance of this issue to decision makers and donors in both conservation and development sectors.

To enhance this function, the final chapter, a synthesis by the editors, has now been revised and republished as a World Bank Environment Department Paper, with more emphasis on potential and attempted solutions.

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