

## Is bushmeat just another conservation bandwagon?

There is currently great interest in the sustainability of bushmeat hunting (bushmeat being any wild animal hunted for human consumption). All the big conservation 'players' have contributed to the debate, issued statements or funded research. IUCN's World Conservation Congress in October 2000 and the CITES Conference of the Parties in April 2000 both discussed bushmeat. Both organisations have since sponsored initiatives in West and Central Africa aimed at obtaining action on the issue. Major conservation organisations are funding research, including the Wildlife Conservation Society (which has a long track-record in this field) and Conservation International. The World Bank has commissioned a major report on the issue (Bennett & Robinson, 2000). Fauna & Flora International (FFI) is a partner in a UK government-commissioned project identifying priority research areas. Conservation organisations have formed the US-based Bushmeat Crisis Task Force (see <http://www.bushmeat.org>), of which FFI is a member, and the UK-based Bushmeat Working Group of the Tropical Forest Forum (see <http://www.forestforum.org.uk>), where academic conservationists and government policy makers can exchange experience and ideas.

So why has there been a huge increase in interest in the bushmeat issue over the last few years? Partly there is an emerging realisation of the seriousness of the problem. For example, the extinction of Miss Waldron's Red Colobus *Procolobus badius* ssp. *waldroni* was attributed to bushmeat hunting (Oates *et al.*, 2000), and five million tonnes of bushmeat is estimated to leave the Congo basin each year (Fa *et al.*, in press). But much of the interest is because the issue chimes with our changing view of what is important, both in conservation and in academic ecology. In ecology there is a growing emphasis on spatial heterogeneity, uncertainty, complex multi-species systems, and how to scale up from individual behaviour to the ecosystem level. The bushmeat problem has all these elements. The idea that conservation problems are embedded in a human landscape has become mainstream thinking, and has led to the shifting of emphasis in conservation towards human-centred approaches, rather than biological ones. Bushmeat is also a fruitful arena for political debate within conservation; it constitutes a major extinction

threat for vulnerable species (e.g. the great apes, <http://www.4apes.com/bushmeat>) as well as being an issue in the sustainable use of natural resources. Using protected areas as a solution could be argued for both by preservationists and proponents of sustainable use (analogous to using Marine Reserves for fishery yield enhancement), but without basic ecological and social data, the argument remains theoretical.

Bushmeat hunting is the toughest challenge yet for human-centred conservation. It is deeply embedded in the general economy, widely distributed geographically, often in areas with few legal controls, involves a range of people (hunters, dealers, vendors and consumers), and supplies both subsistence needs and commercial markets, with complex commodity chains leading to big cities and even across national borders. Bushmeat can be a key part of people's livelihoods. Hence when conservationists struggle with policy options for controlling unsustainable hunting, they have to consider economics, cultural issues and the complex web of social influences on hunting incentives. We need to know how the general economic environment affects people's decision-making - what other employment opportunities are available, how the costs and benefits of bushmeat hunting (and its control) are distributed. Many of these questions are relevant to conservation generally, but bushmeat hunting brings them into perspective.

Support is increasingly being sought from development agencies, which are experienced in tackling problems faced by the rural poor and in using policy interventions to make people's livelihoods more secure. The involvement of these agencies is essential for the success of projects tackling the unsustainable use of wildlife. But conservationists must not take their eye off the ball - our aim is the conservation of species and their habitats, while the aim of development agencies is the elimination of poverty. Although there are ethical and practical reasons why collaboration with development agencies is a good thing, it is still a means to an end (Oates, 1999). The unsustainable exploitation of bushmeat and the extinction of one or two threatened species are important conservation issues, but may not be issues for development agencies seeking to improve people's livelihoods.

So far, little research has been carried out on the economic factors influencing the bushmeat trade (but see Wilkie & Godoy, 2000). We are still describing the problem, its magnitude, and which species are affected.

But this is not enough – we need to move from description to prediction, and to testing our theories in the real world. Only then can we make progress.

Finally, is the level of attention to bushmeat hunting warranted? Is it really that important a cause of population declines and extinctions? It could be argued that habitat destruction, which does not have the same high profile, is a greater concern. The *2000 IUCN Red List* (Hilton-Taylor, 2000) shows that habitat loss and degradation is the major threat to wildlife, affecting 83% of threatened mammals, followed by exploitation, which affects 34%. Of course, threats do not act independently but synergistically; this is particularly true of bushmeat and logging. Attention to the social and economic environment within which bushmeat hunting takes place can help in tackling other threats. The bushmeat issue has also focused attention on a particular geographical region (Central and West Africa) and on a particular level of interaction between humans and wildlife (local communities). The bushmeat problem is not exclusive to these areas, but they are important and previously neglected focal points for conservation action. Although it may seem that bushmeat is just the latest conservation bandwagon, it is addressing real and urgent issues, the tackling of which will have far-reaching benefits.

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#### Letter from the Editor

For this issue of *Oryx*, the first to be published by Cambridge University Press, we have made an adjustment to the ordering of the contents, bringing both of the popular news sections, Briefly and Conservation News, together after the Editorial. The cover has been redesigned to give a more contemporary look, and a new paper is being used that is made from at least 75% post-consumer recycled fibres.

I would like to report that 67 manuscripts were submitted for peer review in 2000, with an acceptance rate of about 50%. At the time of writing (the end of October 2001) 74 manuscripts have been submitted in 2001, of which 48 are being reviewed, revised or have been published, and 27 have been rejected. To date, for manuscripts submitted in 2001, the average time for peer review is 33 days, the average time taken by authors to satisfactorily revise manuscripts is 48 days, and average time from submission to publication, including papers published in this issue, is about 9 months.

In order to allow publication of more manuscripts there will be an average increase of 16 pages per issue in 2002. For those readers wishing to contribute items to the Briefly, Conservation News, Grants and Opportunities, Meetings or Publications sections, the deadlines for each issue are now included in a slightly revised Instructions for Contributors on the inside of the back cover.

The Impact Factor for *Oryx* for 2000 was 0.96. Impact Factors, which provide a measure of the frequency with which articles have been cited, are calculated and published by the Institute for Scientific Information. Further information on calculation of the Impact Factor and its use can be found at <http://www.isinet.com/isi>, in the Journal Citation Report section.

Please note that the address of the web site for *Oryx* has changed, and it can be now found at <http://uk.cambridge.org/journals/orx>. As in previous years the titles and abstracts of papers are freely available, as is the Briefly section. In this issue we have provided the web site address for all of those publications referred to in the Briefly section that do not require a subscription. These links are 'live' in the online version of *Oryx*, and can be used to avoid typing in lengthy addresses.

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