recommendation is that, where pain and distress are devastating and where research permits, the animals be created or rendered decerebrate.

The book is written for the general reader. It is always clear and straight-forward in its presentation of issues. Even though the book is aimed at a non-specialist readership, perhaps a little more time could have been given to the science and technology involved. A simple explanation of the main ways in which transgenic animals are produced is consigned to an appendix. On the other hand, a little less time might have been dedicated to preparing the ground with criticisms of positivist views of a value-free science, reductionism, environmental philosophy, risk assessment and the role of the expert.

Bernard E Rollin has written a helpful and thoughtful introduction to the moral and social issues involved in the genetic engineering of animals.

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Elephants and Whales: Resources for Whom?

Edited by Milton M R Freeman and Urs P Kreuter (1994 but only available to the public 1995). Gordon and Breach Science Publishers SA: Basel. 321pp. Paperback. Obtainable from the publishers, Postfach, 4004 Basel, Switzerland (ISBN 2884490116). Price £20 or US\$30.

There is a fundamental difference between those who consider elephants and whales to be 'resources' for people, and those that consider them to be 'beings' with intrinsic rights. Those readers looking for an intellectual reconciliation of these divergent, and increasingly diverging positions, will not find it in this edited volume. Indeed, the ethics of harvesting these species are ignored or dismissed. The ethics of not harvesting (and thus depriving people of their livelihood) are addressed only in a preliminary fashion (in Doubleday's chapter). The book never makes an attempt to define appropriate balances of human and animal rights in the case of these bell-wether species. There is no discussion of the important issue of sentience, which lies at the heart of the controversy on whether whales and elephants should be harvested. The editors (Freeman & Kreuter), in an introductory chapter only, examine the idea obliquely by attacking the proposition that elephants and whales are intelligent (using a non-convincing and specious argument about brain body ratios that shows no understanding of basic allometry). Biocentric perspectives are dismissed (in Sugg & Kreuter) as a 'fruitless attempt to avoid the conundrum of subjectivity'.

Instead, contributors to the book accept the assumption that elephants and whales should be treated as resources. This acceptance is perhaps the only thread that binds the book together. This is a collection of papers, not an integrated set of contributions. One part of that collection is a set of chapters (Freeman & Kreuter; Sugg & Kreuter; Kreuter & Simmons; Bonner; Freeman) that advocate and rarely analyse. Alternatives are starkly contrasted, with 'bad guys' (non-governmental organizations, members of the IWC and CITES environmentalists, animal rights advocates, urbanites from western cities) and 'good guys' (utilitarians, free-marketeers, rural Africans, traditional users of resources) generalized to the point of caricature. The old, tired dichotomies are revived (conservationists vs preservationists, free markets vs government regulation, local communities vs intellectual

elites). The raison d'etre of non-governmental organizations is gleefully ascribed to be making money by espousing popular causes. The use of language is frequently emotive and derogatory. Arguments and data are marshalled to promote a point of view rather than to develop a considered argument. These chapters do little but fan the paranoias of those who feel their righteous positions are misunderstood.

Two of these chapters (Kreuter & Simmons; Bonner) are just revisionist histories of the ivory ban wars. A challenge to the interested reader is to contrast these two papers with John Hoyt's 1994 comparable book *Animals in Peril: How 'Sustainable Use' is Wiping Out the World's Wildlife* (Avery Publishing, New York) which examines many of the same events. Reading both, illustrates how polemics create such separate conceptual universes that resolution of the issues appears insurmountable. Our natural world will surely suffer unless intellectual rigor and pragmatic analysis replace histrionic advocacy.

The rest of the contributions in this collection are more intellectually challenging. Five chapters (Kisangani; Hasler; Peterson; Taylor; Thomas) which could be part of another book, thoughtfully consider the 'Resources for Whom?' question, focusing largely on wildlife harvests in Zimbabwe and Zaire. Who owns individuals of wild species? This is especially a problem with wildlife species that move across the landscape. Who actually benefits from the exploitation of wildlife? Is it or should it be the nation state? private companies? the local community that harvests the animals? the communities that suffer the depredations of wild animals? How should benefits be allocated between potential user groups? Answering these questions depends on understanding the relationships of political power, the specific goals of those who can manipulate the situation, and the influence of resource users on conservation options.

Then there are contributions that focus on whales, and these can be divided into two groups. Five chapters (Kalland; Sanderson; Ris; Doubleday; Caulfield) are social and economic histories of cetacean harvests in northern waters. The 'Resources for whom? question contrasts the economic interests of whalers and whale protectionists, and the struggle to replace the harvests with non-consumptive uses (primarily tourism). The discussion is generally constructive and useful. Kalland in particular, in an analysis which will certainly make whale protectionists uncomfortable, critically dissects the campaigns and constituencies of the anti-whaling organizations without losing his intellectual objectivity. Two chapters (Broch; Freeman & Kellert) examine attitudes towards whales and whaling – the first from the perspective of the whalers, the second based on attitudinal surveys of the general public in five industrialized countries.

If one accepts that wildlife species are resources that are harvested by people (and to do otherwise ignores reality), if one recognized that wildlife must be valued by people if it is to survive, and even if one believes that the biota has intrinsic rights, then arguments can be made to allow and even encourage the harvest of wildlife species under specified circumstances, and this can include elephants and whales. This reviewer believes that such arguments can be made, and if one is willing to accept significant trade-offs, then wildlife can be conserved, and people's livelihoods can be maintained and their cultural traditions respected. Integrating these different goals, with their inherent contradictions, can justify sustainable use as a strategy to promote both conservation and development.

However, this book does not provide a coherent justification for the harvest of elephants and whales - despite its explicit intent to do so - although many of the chapters make

important contributions to our understanding of resource exploitation. Instead, where they occur in this book, justifications for the continuing harvests are based on narrow, disciplinary enthusiasms. For the free-marketeers, the harvests should continue because to do otherwise distorts economic markets. In tune with the fashion here in the United States, anything smacking of socialism or governmental regulation is suspect. For others, the harvests are integral parts of traditional, indigenous patterns of resource management, which have intrinsic value in their own right. For social activists, wildlife harvests provide a mechanism to empower local communities to control their own resources. For those who identify with rural Africans, the continuing trade in elephant ivory is a repudiation of the centuries-old exploitation of Africans by European societies. For still others, supporting the harvest of elephants and whales is almost a knee-jerk response against the excesses of the animal rights movement. Constructing a coherent argument for wildlife harvests on such shaky foundations is difficult, and the editors, perhaps wisely, do not even try.

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EarthKind: A Teachers' Handbook on Humane Education

David Selby (1995). Trentham Books Ltd: Stoke-on-Trent. 424pp. Paperback. Obtainable from the publishers, Westview House, 734 London Road, Oakhill, Stoke-on-Trent ST4 5NP, UK (ISBN 0 948080 88 4). Price £17.95.

This large format paperback, which is in excess of 400 pages, does not live up to its claim to be a handbook – it is hardly a concise treatise or guidebook. Rather it is a vast rambling sort of book, containing a large number of classroom activities and within which it is not always easy to locate useful information.

It is made up of 20 Chapters divided into five sections. The sections are entitled EarthKind Education, The Earthkind Classroom, The EarthKind Curriculum, The EarthKind Teacher and The EarthKind School. The three chapters in the first section have the titles: The Humane Education Family, Humane Learning, and Aims and Objectives. This last chapter lays out the aims of 'humane' education as perceived by the author and proceeds to specific listings of objectives. It is difficult to quibble with many of these wide-ranging aims or objectives; it is important to recognize that the majority of the items mentioned are built somewhere into the curriculum in schools in the UK, in Personal, Social and Health Education, together with biology and geography. Perhaps the best way to make use of this list would be to subject it to curriculum mapping. Near the end of the book is a school checklist which reflects these objectives and shortly before that a lengthy profile of 'the humane teacher'. Similar checklists appear under the banner of 'environmental' education. Indeed there is much in this book that resonates with publications from that particular interest group, despite the qualifications put forward by Patty Finch, quoted in this book, that environmental educators concern themselves with 'the oceans but not the aquarium-bound whale' etc, etc.

Some of its contents and similar activities would be found in books directed at Personal, Social and Health Education and coming from the Green Teacher movement, but in this book the strong implicit and explicit subtext is associated with animal rights in a broad sense.