

Paper presented at workshop on *Stewardship - Promoting Conservation and Sustainable Use on Private Lands*, World Conservation Congress, Montreal, Canada, October 1996.

**THE CONTRIBUTION OF PRIVATE INITIATIVES IN CONSERVING
BIOLOGICAL DIVERSITY: A PILOT STUDY**

Colin W. Watkins and Michael J.B. Green
World Conservation Monitoring Centre, Cambridge

ABSTRACT A major gap in the available information on the world's protected areas concerns private initiatives in protecting biodiversity. In order to begin to address this gap, a preliminary survey of private protected areas was carried out in some East and Southern African countries. This pilot study demonstrates the significant contribution of private initiatives to national protected area systems and underlines the importance of extending this survey to entire regions, as part of a global review of the role private protected areas.

1. INTRODUCTION

The World Conservation Monitoring Centre maintains a database of the world's protected areas, an initiative which was begun in 1981 by the IUCN Commission on National Parks and Protected Areas (now WCPA, the World Commission on Protected Areas) when it established a unit specifically to manage information on protected areas. This database, for example, provides the basis of the *United Nations List of Protected Areas* which is regularly produced by WCMC and WCPA.

Within the database, protected areas are classified according to their management objectives, based on the internationally recognised system developed and refined by IUCN over many decades. Under the present management categories system (IUCN, 1994), a protected area is defined as:

An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.

While unambiguous in terms of the remit of protected areas to conserve biological diversity, the definition is suitably broad with respect to the means of achieving this through a range of different public and private approaches to stewardship.

Sound, comprehensive data on the world's protected areas is essential for purposes of planning, policy development and monitoring progress in biodiversity conservation. Over the years, WCMC has built a fairly comprehensive dataset of protected areas within the wildlife sector, such as national parks, nature reserves and wildlife sanctuaries administered by national protected area agencies.

In the case of tropical countries, in particular, coverage has since been extended to the forestry sector as a contribution to the *FAO Forest Resources Assessment 1990*. The results of that study demonstrated vividly a major gap in information on the world's protected areas. Protected areas within the forestry sector, many of them forest reserves allocated to conservation or watershed protection, accounted for 4.5% of total land area within the tropics, compared to 7.8% for protected areas in the wildlife sector (WCMC, 1993).

There remain other gaps in the available information on the world's protected areas, the most significant of which probably relates to privately owned or managed reserves. Some of the world's oldest protected areas were originally established through private initiatives, very often by nobility for purposes of sport hunting. An early example is the New Forest which was declared a Royal hunting preserve in 1079 by King William II. Private initiatives, through ownership or lease of land by private individuals or conservation bodies, are playing an increasingly important role in biodiversity conservation: witness the *Nature Conservancy* in the USA, which owns land throughout the world, and the *National Trust* which is the second largest landholder in England. In the tropics, particularly in Africa and Latin America, there has been a steady rise in the number of private protected areas since the 1960s (Alderman, 1992). But information on the number, extent and location of private protected areas, as well as the biodiversity which they safeguard, is either unavailable or scattered throughout the literature.

In order to begin to address this information gap, WCMC decided to undertake a preliminary survey of private protected areas in some African countries in order to establish whether or not a comprehensive study was warranted. The objectives of this preliminary study were:

- to review the scope of private initiatives underway in a selection of African countries;
- to assess the contribution of the private sector to biodiversity conservation in a selection of African countries; and
- to provide a basis for developing proposals to carry out a series of regional studies of private initiatives.

The results of the preliminary survey are presented in this paper.

2. METHODS

2.1 Scope

The study was confined to selected countries in East and Southern Africa, in the knowledge that they feature well-established and extensive privately managed protected areas. Selected countries were Kenya, Malawi, Mozambique, Namibia, Tanzania, Uganda and Zambia. In order to gain a more representative sample of the private sector, the survey was extended to include the Republic of South Africa and Zimbabwe. However, time and resources permitted only the collation of summary statistics for these two additional countries.

A principal difficulty with the term private protected area lies in the word *private*, which may be interpreted differently according to the national or local legislation, culture and language. During the course of the study and as a result of discussions with collaborators from study countries, a working definition private protected areas was agreed as follows:

Sites owned freehold or formally leased by individuals, corporations and other private bodies in which wildlife conservation is a primary activity and the responsibility of such owners or leaseholders.

Laws may sometimes place restrictions and obligations on the owners or leaseholders, but these do not diminish the private nature of such sites.

Clearly, this definition of a private protected area, in which wildlife conservation is a primary activity, is weaker than the IUCN definition of a protected area, which is especially dedicated to the protection and maintenance of biodiversity (Section 1). It is likely, therefore, that not all private protected areas considered in this preliminary study would qualify as a protected area *sensu* IUCN.

2.2 Data gathering

Information on private protected areas was solicited by means of a questionnaire from a range of contacts within the selected countries. Responses to the questionnaire varied. Contacts in Uganda, Malawi and Mozambique were unable to find the resources to undertake the work involved. The Tanzanian authorities provided details of the only significant private protected area in the country, Mkwaja Ranch. This was supplemented by other information from Knight Frank International, Estate Agents, who have been marketing the ranch. The National Parks and Wildlife Services of Zambia provided a list of their privately-owned sites, as did the Ministry of Environment and Tourism, Namibia. The Centre for Biodiversity, National Museums of Kenya holds information on many of Kenya's private protected areas and was able to complete questionnaires for the majority of such sites.

2.3 Information compilation

Data from the questionnaires were entered into the WCMC Protected Areas Database. Where available, mapped information was digitised and incorporated with the WCMC Biodiversity Map Library, a geographic information system which is linked to the Protected Areas Database. These information management systems were used to generate summary statistics from which the contribution of the private sector to the region's protected areas system is reviewed.

3. PRIVATE PROTECTED AREAS IN EAST AND SOUTHERN AFRICA

The results of this preliminary survey are summarised in Figure 1 and, in Table 1, compared with the extent of legally designated protected areas under the jurisdiction of government agencies. Although they cover only a selection of countries in East and Southern Africa, they demonstrate the extensiveness of private protected areas in several of these countries.

In the Republic of South Africa, private protected areas (i.e. game ranches registered with the authorities) are very much more numerous and more extensive than legally designated sites. In Kenya, Namibia and Zimbabwe, the extent of private protected areas is also significant, both in terms of total land area (1% or more) and in comparison with the legally designated protected areas system. Only in Tanzania, with just one site, and Zambia do private protected areas represent a tiny proportion of the entire protected areas system.

Private protected areas provide a variety of important conservation and other services, ranging from safe havens and breeding endangered species in the wild for subsequent re-introduction to ecological tourism and sustainable use of wildlife. The conservation role of private protected areas is sometimes crucial. For example, Ol Ari Nyiro Ranch holds 10% of Kenya's remaining 500 black rhinos *Diceros bicornis*. Further details and examples are provided in the next section.

Figure 1

The extent of private protected areas in East and Southern Africa, expressed as a percentage of the total area of each country.

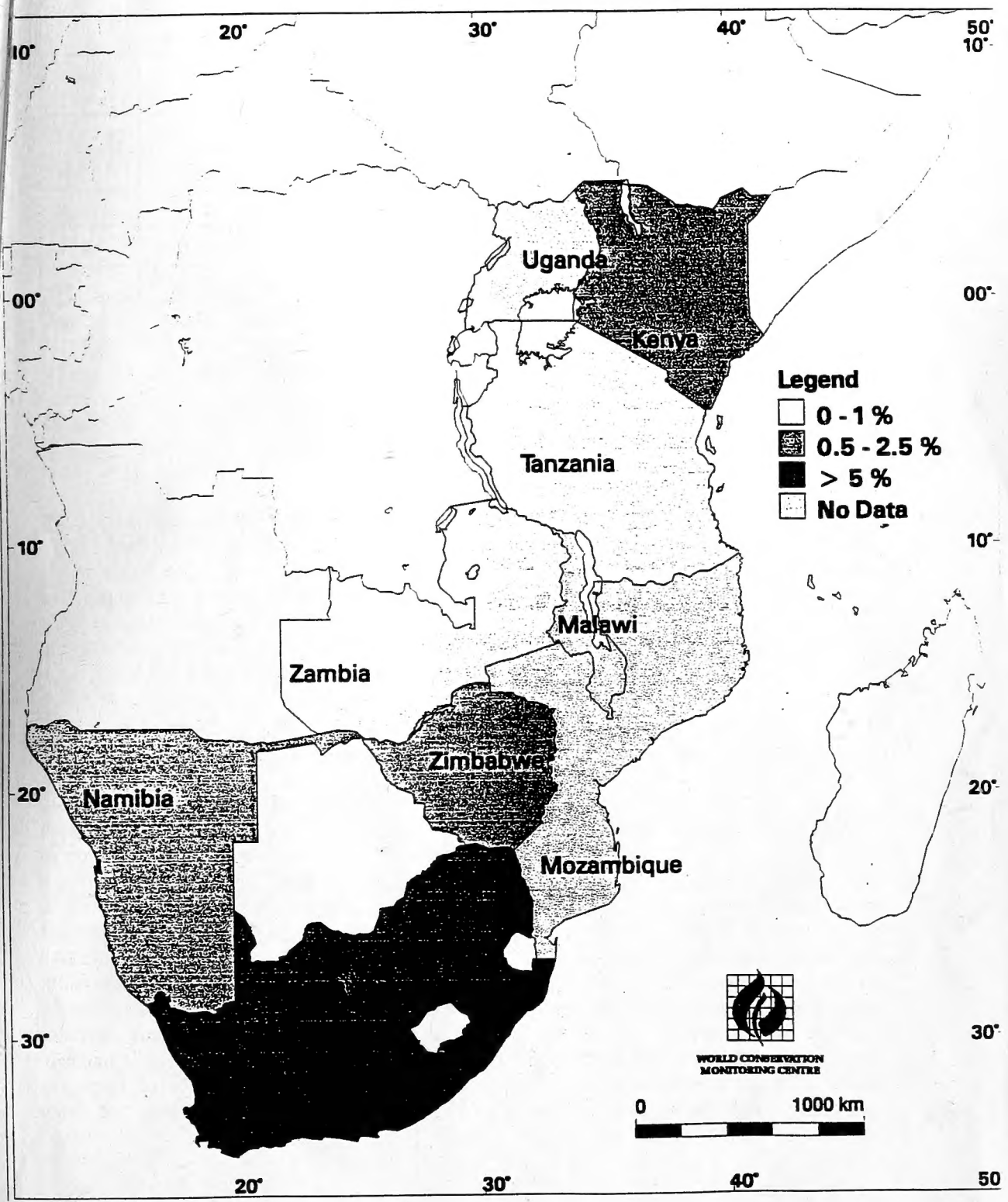


Table 1 Extent of private and legally designated protected areas (IUCN Management Categories I-V) in a selection of East and Southern African countries.

Country	Total Area (sq. km)	Private Protected Areas ¹			Legally Designated Protected Areas ²		
		No.	Area (sq. km)	% total area	No.	Area (sq. km)	% total area
Kenya	580,370	50	12,211	2.10	36	34,702	5.98
Namibia	824,290	148	7,642	0.93	11	103,706	12.58
South Africa	1,184,825	4,035	80,932	6.85	235	74,134	6.26
Tanzania	945,090	1	465	0.05	28	130,000	13.76
Zambia	752,610	12	219	0.03	20	63,609	8.45
Zimbabwe	390,310	3	6,500	1.67	25	30,678	7.86

¹ Compiled from returned questionnaires and personal communications.

² Source: McNeely *et al.* (1994).

4. CONCLUSIONS AND RECOMMENDATIONS

The results from this preliminary study demonstrate that, although practices vary from country to country, the private sector makes an invaluable contribution to biodiversity conservation. Countries which have had free-market economies for a long time, and in which the purchase of freehold property is permitted, have attracted private individuals and corporate bodies to invest in conservation-oriented initiatives. Those countries, such as Tanzania, which have been more socialist in style and in which freehold land is not available have not attracted the private sector.

There is often anecdotal evidence of private initiatives in many other countries of the world, particularly elsewhere in Africa, throughout the Americas and in Europe. They also feature to a lesser extent in parts of Asia and Australasia.

Given the significant contribution of the private sector to the world's protected areas, based on this pilot study, it is necessary to gain a thorough understanding of the distribution of private protected areas and the biodiversity which they support. This is important for a number of reasons. First, it is vital for conservation planning purposes, particularly at national, regional and even global levels. Identification of gaps in protected areas systems, for example, could precipitate the selective purchase of sites to meet specific objectives, such as the conservation of threatened species or centres of diversity or endemism. Secondly, greater awareness of the contribution of the private sector will help to develop and strengthen its role in conserving biodiversity, particularly as national protected areas agencies increasingly explore novel approaches to managing their estate. Thirdly, there is much to learn from the private sector, particularly with respect to the economics of managing protecting areas through sustainable use of wildlife resources, ecotourism and other enterprises.

Based on these preliminary findings, it is recommended that the survey be extended to other countries in Africa and that a similar study be commissioned for Latin America. The feasibility of carrying out such a survey in North America and Europe should be assessed, prior to undertaking a global review of private protected areas.

* * * * *

REFERENCES

Alderman, C.L. 1992. The Economics and the Role of privately Owned Lands Used for nature Tourism, Education and Conservation. Paper presented at IVth World Parks Congress, Caracas, February 1992. Environment Division, World Bank, Washington, DC.

IUCN, 1994. *Guidelines for Protected Area Management Categories*. IUCN Commission on National Parks with the assistance of the World Conservation Monitoring Centre. IUCN, Gland, Switzerland and Cambridge, UK.

McNeely, J.A., Harrison, J. and Dingwall, P. (Eds) 1994b. *Protecting Nature: Regional Reviews of Protected Areas*. IUCN, Gland, Switzerland and Cambridge, UK.

WCMC, 1993. Assessing the Conservation Status of the World's Tropical Forest. A Contribution to the FAO Forest Resources Assessment 1990. Unpublished report. World Conservation Monitoring Centre, Cambridge, UK.

ACKNOWLEDGEMENTS

The study was generously supported by the Dulverton Trust, of St. James Place, London, established in 1949 to support conservation, youth, education, and general welfare.

Many agencies and individuals contributed their time and effort to this pilot study. We are most grateful for the help received from Kamau Wakanene of the Centre for Biodiversity at the National Museums of Kenya, Jonathan Barnes of the Ministry of the Environment and Tourism, Namibia assisted by Immanuel Nghishoongele, Henry Mwima of the National Parks and Wildlife Service, Zambia and Godfrey Kamukala of the National Environment Management Council, Tanzania.

We communicated with many organisations and individuals, including Judy Oglethorpe, IUCN Mozambique and Peter Caroe of Knight Frank, International Estate Agents, who provided material on Mkwaja Ranch in Tanzania.

Within WCMC, we particularly wish to thank James Paine, Alison Barrett, Ronan Smith for technical assistance, Gillian Bunting for producing the maps, Laura Battlebury and Victoria Freeman for secretarial assistance.

Figure 1 The extent of private protected areas in East and Southern Africa, expressed as a percentage of the total area of each country.