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EVALUATION OF THE RHINO CONSERVANCY PROJECT IN ZIMBABWE

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EXECUTIVE SUMMARY

- 1) This report is an evaluation of the Rhino Conservancy Project (hereafter 'RCP') in Zimbabwe, undertaken on behalf of the project manager, WWF, and the donor, the Beit Trust. RCP had the broad aim of establishing breeding nuclei of black rhinos on private land in areas of Zimbabwe remote from Zambian poachers. RCP was granted GBP 1 million over 5 years and began officially in January 1991. This report therefore constitutes a mid-term review of RCP at a time when there is a considerable balance of funds remaining unspent.
- 2) RCP was initiated with novel and important aims that related to the conservation of one of Africa's most endangered species. The aims encompass the theoretical requirements of conservation biology with an approach to species protection that is set in a policy of sustainable wildlife- and land-use by the private sector.
- 3) All parties concerned, from the donor, project manager and project executant (hereafter PE), the Department of National Parks and Wild Life Management (hereafter DNPWLM) and the private land-owners deserve every congratulation for their vision in implementing RCP and for its achievements to date. The evaluator fully applauds the great strides forward RCP has made in consolidating the establishment of two breeding nuclei of rhinos that are increasing in number, especially when this is compared with the worsening rhino situation in the rest of Zimbabwe.
- 4) A further important achievement is that the breeding nuclei of rhinos have been established in the context of promoting a change by private land-owners in use of land of marginal value for livestock. In making the change from cattle to the potentially more lucrative and sustainable option of wildlife utilisation, black rhino conservation is being placed under the care of the private sector rather than remaining a financial burden on the state.
- 5) Given the ambitious nature of RCP as it was originally proposed and the worsening rhino situation in Zimbabwe, the project has succeeded in achieving many of its objectives to a remarkable degree. Furthermore, as with all good projects, RCP has achieved other important objectives that were not envisaged originally. A summary of major events in the life, and notable achievements during the course, of RCP is given as Table 1. Among its notable successes (besides those outlined in 3 and 4) are the following:
- a) to have catalysed a communal approach to land management among private landowners who have formed conservancies in the context of legally binding constitutions;
- b) to have promoted the rationalisation of fencing requirements for private land to a single perimeter fence around a number of properties and establishing areas of a size large enough for rhino conservation, in particular, and for effective wildlife management, in general;
- c) to have established a radio network and other basic security requirements for each conservancy:
- d) to have played a more general role in rhino management throughout Zimbabwe.

Table 1: Summary of main events in the life of the Rhino Conservancy Project

Month & Year	Event
July 1989	Initial commitment by Beit Trust to rhino conservation in Zimbabwe
Nov 1989	WWF Proposal entitled Zimbabwe Rhino Conservancy Project
T 1000	accepted by Beit Trust
Dec 1989	WWF seek approval of DNPWLM for RCP
Jan 1990	Zimbabwe Black Rhino Conservation Strategy approved by Director and by Parks and Wildlife Board
May 1990	DNPWLM approve RCP
Aug 1990	Ranchers in Save Valley vote unanimously to form a Conservancy
Sept 1990	Post of TCO in DNPWLM, designated as Ecologist: Rhino Conservancies, advertised
Jan 1991	Roaul du Toit commenced appointment and RCP begins formally
Jan 1991	Ranchers in West Nicholson vote to form the Bubiana Conservancy
June 1991	Finalisation of Constitutions for Rhino Conservancies and
	formal establishment of Save Valley and Bubiana Conservancies
Oct 1991	Completion of research on perimeter fencing requirements
Dec 1991	Drawing up of WWF/Beit and conservancy's mutual responsibilities
	on fencing loans and other WWF/Beit assistance
Jan 1992	Zimbabwe Black Rhino Conservation Strategy approved by Minister and published
April-May 1992	Acquisition of translocation lorry and of aircraft
1992-1993	Numerous rhino operations throughout Zimbabwe
May-June	Rhinos from Midlands moved to Bubiana and Save Valley Conservancies
1993	
Aug 1993	Chiredzi River Conservancy established through signing of constitution
Sept 1993	Finalisation of Action Plan for Protection of Black Rhinos in Lowveld Conservancies
Oct 1993	Publication of "The Lowveld Conservancies: New Opportunities
	for Production and Sustainable Land Use"
March 1994	Initiation of consultancy to identify and develop proposals for
	Community Development around Save Valley and Bubiana Conservancies
March 1994	Development of objectives of Save Valley Conservation and
	Development Trust
April 1994	This evaluation
Dec 1995	Official end of project

6) RCP has not, however, been without its problems. The most important include misunderstandings between the project and two conservancies, and an excessive workload in terms of administration, plus unforeseen extra work arising from the worsening rhino situation, for the PE. These problems are recognised by RCP and solutions are being sought actively. Furthermore, other aspects of RCP as proposed have only been partially implemented. The most important comprise ensuring sufficient security measures for rhinos, ensuring conservancies enjoy good relations with neighbouring communities and a number of research and monitoring priorities, and these aspects are recognised by RCP to be in need of consolidation.

- 7) RCP also has a balance of funds unspent, and proposals made by RCP to extend their use until June 1998 appear generally sound and warranted. The largest proposed commitment is to establish a support fund that will permit three conservancies to manage their allocation for capital or recurrent costs. This proposal is well justified given the need for flexibility in response to the evolving rhino situation in Zimbabwe, and in devolving considerable responsibility in decision-making from the PE to the conservancies. A further proposed commitment to retain the PE for this period also appears well justified, especially in view of those aspects of RCP not yet fully implemented or in need of consolidation (see 6), and in view of additional suggestions made below.
- 8) RCP already recognises, or has underway, many measures to consolidate its position with respect to tasks partially implemented. This report also makes suggestions on a number of other measures that may ease the path of RCP and ensure it achieves its objectives. These include:
- a) the strengthening of the functions of the pre-existing committees with the aim of depersonalising issues surrounding the allocation of rhinos, and providing of security and funding, to conservancies;
- b) in conjunction with the above, developing a set of clear and objective performance criteria for rhinos that will form the basis for transparent and irrefutable decisions on rhino and funding allocations by these committees;
- c) ensuring that rhinos on private land outside of focal conservancies are soon put to demographic use;
- d) that future consideration is given to any intervention or technical support that is necessary to ensure conservancies remain on a sound business footing;
- e) that the terms of reference for the PE, as Ecologist: Rhino Conservancies, are rationalised in relation to more recent appointments in DNPWLM;
- f) that emphasis is placed on ensuring that the PE is given the necessary time to write up the results of RCP.
- 9) The evaluator believes that continuation and, if necessary, the extension of financial and moral support by all parties to RCP will remain a vital component of Zimbabwe's strategy to conserve its black rhino population.

PREAMBLE

The Zimbabwe Black Rhino Conservation Strategy published in January 1992 states as its Goal:

TO CONSERVE THE BLACK RHINO

This ultimate goal requires no elaboration. The present status and trends of black rhino populations on the African continent and within Zimbabwe do not allow unnecessary constraints.

It is in this spirit that the findings of this evaluation are presented. The bottom line is the successful conservation of the black rhino. The evaluator sincerely hopes that this report will help the relevant human institutions and personalities to further consolidate their efforts related to that part of Zimbabwe's overall strategy to conserve the black rhino on private land.

1. Introduction

This report constitutes a mid-term evaluation of the Rhino Conservancy Project (hereafter 'RCP') in Zimbabwe carried out on behalf of the project manager, WWF, and the donor, the Beit Trust, during 9 to 16 April 1994. The evaluation was conducted through visits to Save Valley and Bubiana conservancies, interviews with key personnel in Harare (see Appendix A for list of persons consulted) and the study of a file of paperwork and reports provided by RCP. The evaluation was undertaken against Terms of Reference provided to the evaluator by WWF, which comprised a review section and a questions section, under the headings of which the report is structured. The report concludes with a set of recommendations for the future.

2. REVIEW

2.1 Review of the initial objectives of the project and the terms of reference of the project executant

The initial wish of the Beit Trust to provide a grant for rhino conservation in Zimbabwe was expressed in July 1989 as follows:

"To maintain as far as possible the existing herd of rhino in the Zambezi Valley in their natural habitat, whilst assisting the translocation of those rhino which could not be protected adequately."

The Beit Trust proposed granting a sum of GBP 1 million over five years to the project, which represented one of the largest ever grants made to the conservation of a single species.

The Beit Trust wished for the grant to be managed by WWF, who developed a project proposal in November 1989. This proposal focused more clearly on one particular aspect of black rhino conservation in Zimbabwe, namely the establishment of viable breeding groups in free-ranging situations on large areas of private land. This proposal encompassed one of four major objectives of the Zimbabwe Black Rhino Conservation Strategy prepared by the Department of National Parks and Wild Life Management (DNPWLM) during late 1989. This strategy, which was approved by the Director and

the Parks and Wildlife Board in January 1990, encompassed a series of fall-back positions which were to be met through the following objectives:

- Objective 1: To conserve viable populations of black rhino in the Parks and Wildlife Estate:
- Objective 2: To develop translocated breeding nuclei elsewhere in Zimbabwe and to maintain their genetic variability;
- Objective 3: To develop one or more captive breeding centres in Zimbabwe;
- Objective 4: To continue to support the international ex-situ captive breeding programme.

Both the Zimbabwe Black Rhino Conservation Strategy and the WWF proposal recognised that the objective of establishing breeding nuclei should be achieved bearing in mind certain principles of conservation biology. Breeding nuclei were to be established in areas with carrying capacities for over 100, and preferably 200, rhinos and founded with a minimum of 40 animals. These criteria would allow rhinos to range freely and breed up rapidly, thereby minimising the loss in genetic diversity and the requirement for genetic management. While the Zimbabwe Rhino Conservation Strategy recognised that breeding nuclei could be established on both Parks and Wildlife Estate and on commercial farming areas, the WWF proposal concentrated upon establishing conservancies upon the latter.

In focusing upon conservancies, the WWF proposal built upon lessons learned from the successful Kenyan sanctuaries. The proposed approach in Zimbabwe was to create conservancy areas that were considerably larger than sanctuaries, thereby to minimise costs of fencing, and the problems and costs encountered in intensive genetic management of rhinos, in Kenyan sanctuaries. Furthermore, the WWF proposal aimed to develop a financially self-supporting rhino conservation programme through development of wildlife utilisation programmes on ranch land, following initial catalytic support provided through the project. Through co-operating in a conservancy situation, neighbouring ranchers could see the advantages of grouping together to share the costs of anti-poaching, fencing and wildlife restocking while ensuring a greater variety and density of wildlife than would be possible if each ranch was fenced separately. Since operating costs of a conservancy were to be derived from various commercial activities, including cattle ranching, game cropping, live game sales, safari hunting and tourism, the long-term requirement for external funding for rhino conservation in a conservancy should be much reduced, and ultimately each conservancy should aim to become selfsupporting. In short, the WWF proposal aimed to achieve successful conservation of rhinos through changing land use on private land in Zimbabwe and shifting some of the burden of protection to the private sector.

The detailed aims of RCP, as laid out in the project proposal of November 1989, are encompassed in Table 2. The aims of RCP were very ambitious, and centred upon developing four conservancies, to acquire the necessary equipment for translocations and to translocate around 180-235 rhinos, to deploy perimeter fencing to a total length of 650 km, to provide security, to promote public relations and to undertake relevant research in and around conservancies. This proposal represented a multi-faceted approach to rhino conservation appropriate to the situation as it appeared at the time. However, the project

proposal was not regarded as a tablet of stone and was adapted to the changing situation and to evolving opportunities. On the one hand, the worsening rhino situation in Zimbabwe was not fully anticipated by all parties. This resulted both in extra work for the PE, for example due to the country-wide dehorning programme instituted in April 1992, and a relative shortage of rhinos for translocation to the breeding nuclei. On the other hand, the willingness and co-operation of certain land-owners and the 1991/92 drought has brought on the development of the conservancy concept to a degree that was not anticipated, and RCP has adapted fully to this opportunity.

Table 2: Summary of broad objectives and aims of Rhino Conservancy Project as laid out in November 1989 and its achievements to date in relation to these objectives

Objective	Aim	Achievement
Conservancy	To develop 4 conservancies	Two conservancies of 3200 and 1300
	with 40 founders and over 400	sq km developed and support given
	sq km in size	to other private land areas with rhinos
Translocations	a) To acquire 4WD capture lorry and darting equipment;	a) Acquired and fully operational;
	b) To translocate and round up	b) 74 rhinos translocated and 84
	strays totaling 180-235 rhinos	other rhinos dehorned
Fencing	To deploy two-strand electric	Fencing largely deployed around
	wire on perimeter game fence	two conservancies, including
	of up to 650 km in length	double fencing to take account
	through loans	of unforeseen veterinary requirements
Security	a) To provide conservancy with armed action;	a) Provided, together with radio network;
	b) To establish reward fund;	b) Established;
	c) To train and equip 3 small AP	c) Not implemented
	to work between ranches	
Public relations	a) To promote a campaign on role of ranches in rhino	a) To be undertaken by IUCN;
		h) Decembly not undergon
	conservation;	b) Recently set underway
	b) To permit use of natural	
	resources on ranch	
Research	a) To advise on boma	a) Achieved;
	and translocation management;	
	b) To undertake a number of research priorities.	b) Underway but in need of consolidation
	ionation bitolines.	VIIIVIIWHIVII

The WWF/Beit Trust proposal was accepted by DNPWLM in May 1991 (Table 1). In approving the project, DNPWLM required that the PE be appointed by WWF as a Technical Co-operation Officer (TCO) on secondment to DNPWLM with the title of Ecologist: Rhino Conservancies. DNPWLM agreed to provide office space and DNPWLM uniform, and to appoint the Ecologist as a law enforcement officer with the appropriate indemnities. The Ecologist was to report to the Chief Ecologist (Terrestrial) in DNPWLM and his detailed work programme was to be jointly supervised and agreed upon by the DNPWLM and WWF. Progress Reports were to be submitted to WWF twice per year and to the Conservancy Management Committees as required.

The specific duties of the Ecologist were as follows:

- To plan and co-ordinate the development of conservancy programmes including the procurement of equipment;
- To monitor and maintain records of all rhinos within designated conservancy areas;
- To provide an advisory service on the management, conservation and protection of rhinos in conservancy areas;
- To conduct research on the following aspects of rhino biology and management: census and monitoring techniques, habitat selection, diet and influence on vegetation, ranging patterns, social behaviour, demography and genetics of small populations, carrying capacity for rhinos, interactions between rhino and livestock, fencing requirements;
- To assist conservancy management staff and land owners with the maintenance of computerised records of poaching and anti-poaching and related management activities.

These terms of reference appeared appropriate to the conditions prevailing at the time. The secondment of the PE to DNPWLM was entirely the correct approach given the overall responsibility of the DNPWLM to manage protected animals that belong to the state, despite the fact that these animals may for the time being be on private land. The post was advertised publicly in September 1990 and Mr Roaul du Toit, who had been working on behalf of WWF/Beit Trust to develop aspects of RCP, was appointed. The PE commenced formal duties, and RCP can be regarded as having commenced officially, in January 1991.

In response to the changing situation and to evolving opportunities, the PE has since become much more involved in (a) general rhino management issues and in monitoring rhinos around Zimbabwe, (b) issues relating to the establishment of conservancies, than his terms of reference strictly require and (c) maintaining a national and international profile at workshops and meetings (Appendix B). The additional time spent on these tasks seems entirely appropriate, but has meant that other aspects of the terms of reference remain partially implemented or in need of consolidation (see Table 2).

2.2 Review the administrative and funding arrangements of the project

The administrative and funding arrangements that were eventually established for RCP in 1989 and 1990 were a compromise between the firmly expressed wishes of the Beit Trust to work on RCP through WWF and of some initial resistance within certain quarters to consider the move of rhinos from Parks and Wildlife Estate to private land as a top funding or strategic priority. Furthermore, this issue was hedged around with consideration of the generous sum that the Beit Trust proposed donating and of the eventual ownership of any equipment donated by Beit Trust. The administrative compromise that was reached has been implemented to the general satisfaction of all parties consulted including key members of the Directorate of DNPWLM and two conservancies who have expressed much satisfaction with RCP. Teething troubles with the duty-free import of equipment have been overcome with determination by the PE. Results from the focal conservancies to date, especially when set in the context of Zimbabwe's worsening rhino situation (see Tables 3 and 4), have fully justified the approach taken and lessened any rational resistance to the approach adopted by RCP.

One key element of RCP has been the interactions between Government, donor, NGO and the private sector. A special mention must be made of the willingness of the Beit Trust and WWF to work with the private sector, in contrast to the constraints in this regard so often placed upon, or self-imposed by, bi-lateral donors and many NGOs. Through pressing for their wish to fund RCP, the Beit Trust and WWF has been instrumental in catalysing an amalgam of the right people ready to move forward at the right time. RCP is a bold initiative that would normally not be considered for any funding, let alone for funding of the order provided, and necessary, for the successful completion of such a project. Mention must also be made of the Beit Trust's willingness to shoulder responsibility for paying for orders of capital equipment, thereby reducing the management fees of WWF International and ensuring that more money reaches the field.

A second key element of RCP has been the development of a firm legal basis upon which to establish conservancies and the laying down of ground rules for the way in which financial support has been given to private land-owners. The work undertaken by RCP, using rhino conservation as a stimulus for change, has had benefits that extend far beyond black rhino conservation per se. The development of a legally-binding constitution has been a major achievement, and it is quite clear that RCP has acted as the catalyst to persuade two groups of neighbouring land-owners to work co-operatively and to enter a legally-binding management contract that formally established their conservancies in June 1991. Furthermore, the Bubiana and Save Valley constitutions have served as models for other conservancies which are not focal conservancies in this project The major principles enshrined in the constitutions recognise the following:

- That conservancy members are jointly responsible for meeting all recurrent costs in managing the conservancy;
- That internal game fencing is limited, in order not to divide the conservancy into small sub-units that interfere with the breeding and movement of animals;
- That, in the event of any property passing into the hands of an agency whose land use and wildlife management practices are not consistent with the objectives of the conservancy, the property will be excised according to arrangements which minimise loss of assets;
- That the resources of the conservancy are managed sustainably and on sound scientific principles, in a spirit of co-operation between members.

The development of ground rules in December 1991 for the disbursement of funds from RCP has also resulted in clearly thought out proposals that address the needs of donors, NGOs and private landowners. By providing soft loans for perimeter fencing against restocking of the conservancies with wildlife, RCP has paved the way for land-owners in marginal land to make changes in their land-use practices that are of great potential benefit, both ecologically and economically, to Zimbabwe.

Certain aspects of the administrative and funding arrangements have provided difficulties. To date RCP has largely been run as a one-person show by the PE, and this has been to the detriment of tasks encompassed in the original objectives to RCP. Of note here is the amount of time the PE has had to devote to procurement and import of

equipment and early problems of the duty-free status of WWF and ownership of equipment donated for use on private land. Now that the presence of WWF in Zimbabwe has evolved from being that of a project to that of a programme, it should be possible to reduce the amount of routine administration for the PE by providing support through the programme. Other aspects of administration are dealt with under 4.1 and 4.2.

2.3 Review of the rhino situation in Zimbabwe as a whole, on private land, and in the Lowveld conservancies

The rhino situation in Zimbabwe during the course of RCP has worsened to a degree that many did not envisage as possible. Black rhino numbers have declined from an estimated 1750 in 1989 to an estimated 300 in early 1994 (Table 3). However, these figures encompass a major change in counting methods, from extrapolations based on aerial counts and correction factors to methods of individual recognition largely obtained through dehorning programmes. This change may exaggerate the actual decline that has occurred. Nevertheless, the situation for the black rhino in Zimbabwe is now at a very delicate and critical point of balance. The situation has worsened despite a large loss in life on the part of Zambians who make up the majority of the illegal hunters killing rhinos in Zimbabwe, and in the aggressive stance of DNPWLM in tackling the problem of illegal hunting on Parks and Wildlife Estate through a shoot-to-kill policy.

Table 3: Estimated numbers of black rhino land of different categories in 1989 and 1994

Land category	1989	1994
Parks and Wildlife Estate	1450	136
Private land	160	161
Communal land	140	5-10
Total	1750	c.300

Recognising the worsening situation, DNPWLM has taken further aggressive measures to conserve Zimbabwe's black rhinos. The original Zimbabwe Black Rhino Conservation Strategy published in January 1992 has evolved through the subsequent publication of Short and Medium Term Action Plans for Black Rhinoceros in April 1992 and an Emergency Plan for the Black Rhinoceros Conservation Project in September 1993. The major practical changes of the newer plans were as follows:

- To adopt a country-wide strategy of dehorning all rhinos in April 1992;
- To speed up the establishment of Intensive Protection Zones (IPZs) on Parks and Wildlife Estate. These IPZs had been first proposed in January 1990 as Objective 1 of Zimbabwe's Rhino Conservation Strategy but had not been implemented due to budgetary shortfalls within DNPWLM. The formation of IPZs is now proceeding but are fewer in number than originally anticipated due to the small numbers of rhinos now available on Parks and Wildlife Estate (Table 3);
- To appoint a Rhino Co-ordinator to facilitate the development of IPZs.

In response to the worsening situation in 1986, DNPWLM began to move rhinos away from the Zambezi Valley to areas of private land in Zimbabwe remote from Zambian

poachers. At this stage, rhinos were moved mainly to ranchers in the Midlands kindly prepared to take them. Objective 2 of the original Zimbabwe Black Rhino Conservation Strategy was designed to address this process, and the WWF/Beit Trust proposal aimed to consolidate it. Against the worsening situation throughout the rest of Zimbabwe (Table 3), this objective so far appears to have been met. However, methods of counting rhinos on private land have also improved between 1989 and 1994. Therefore, estimates for the two years may not be strictly comparable, such that they under-represent the success of RCP. Indeed, estimates made by the PE in October 1990 suggested a total of around 110 rhinos in the conservancy areas and this number has since increased considerably (Table 4). However, examination of data from particular areas of private land shows considerable differences in the performance of rhinos. At this stage, the performance of the Bubiana and Save Valley conservancies stand out. Rates of increase. corrected for numbers of rhinos translocated in, are around 9% per annum, compared with a rate of increase of 3% per annum in the Midlands. Furthermore, the large number of deaths in the Midlands has been an important component in depressing the overall performance of rhinos on private land between 1989 and 1994. DNPWLM now recognises that, in reacting quickly to their concerns to move rhinos away from the Zambezi Valley, an area of unsuitable habitat may have been selected originally in the Midlands. Therefore, in March 1993 the Director decided to consolidate the situation by moving a number of rhinos from the Midlands to Lowveld conservancies (see Table 4). Furthermore, rhinos on other areas of private land are in smaller numbers, and these topics are discussed in more detail elsewhere (see 4.1 and 4.3).

Table 4: Performance of rhinos on different areas of private land during the course the Rhino Conservancy Project

Area and Year Bubiana	Total rhinos	Successful translocations in	Births	Deaths/ Missing	Translocations out
1989	7				
1990-94	44	31	8	2	0
Save Valley					
1989	~16				
1990-94	39	14	13	4	0
Midlands					
1989	61				
1990-94	38	2	20	21	24
Chiredzi River					
1989	8				
1990-94	11	0	3	0	0
Lonely Mine					
1980	15				
1990-94	15	0	6	2	4

An integral aim of RCP was to operate entirely within the framework of DNPWLM's Zimbabwe Black Rhino Conservation Strategy. Therefore, two other areas of RCP deserve comment:

- First, the adoption of the policy in April 1992 to dehorn all rhinos in Zimbabwe resulted in additional work for the PE (see Table 2) that was outside his original terms of reference (see 2.1). While it had already been routine policy to remove the horns from rhinos that were being translocated, it now became policy to remove the horns from all rhinos, whether or not they were to be moved. The PE has been responsible for managing the dehorning of 81 black rhinos and 3 white rhinos, including of 27 black rhinos on Parks and Wildlife Estate, outside his area of responsibility.
- Second, the value of moving rhinos is lessened if they die during, or soon after, translocation. Data collected up to October 1990 noted that 26 out of 113 rhinos (23%) on conservancies had died because of translocation stress. While moving 71 black rhinos during 1992 and 1993, RCP has suffered 13 losses (18%). However, this total includes 4 rhinos that had been over-exposed to creosated posts in Boulton Atlantica and which all died upon being moved to Bubiana. With these rhinos excluded, the actual loss of 13% of black rhinos during translocation by RCP represents a considerable improvement in performance.

These two aspects of general rhino management operations by RCP fully justify the purchase of state-of-the-art equipment necessary for translocations and research into boma and translocation management (Table 2). Furthermore, the taking on of an additional workload by the PE in response to the worsening rhino situation has been noted by members of the Directorate as being much appreciated by DNPWLM.

2.4 Review of the ecological, economic and political factors relevant to the selection of areas for WWF/Beit Trust support and to subsequent implementation of the project

The project proposal of November 1989 targeted (in order of development), Save Valley, Midlands, West Nicholson and Lonely Mine as conservancies with which it proposed to work. During the course of implementing RCP various ecological, economic, and political considerations have come into play (summarised in Table 5) that have affected the order in which conservancies have been developed and supported. It is important that these are reviewed in order to place problems encountered by RCP in perspective.

The prevailing political climate since 1990 has pushed to the forefront the possibility that privately-owned commercial ranch land could well be targeted for appropriation and resettlement. This development is viewed as more likely to occur in areas of greater agricultural (crop-growing) potential. Therefore, the most secure situation in which to promote a long-term change towards game farming on private land occurs within agroecological zone (natural region) 5 (V), in which lie Save Valley, Bubiana and Chiredzi River (Table 5). In contrast, the Midlands lie within zone 3, which is more likely to be targeted for appropriation. Furthermore, ranch sizes are generally smaller in zone 3 than in zone 5. Therefore, the total potential area available for wildlife is smaller for a similar number of properties in the Midlands than in the Lowveld (Table 5). In terms of the attitudes of the landholders towards the conservancy concept, the Save Valley, Bubiana and Chiredzi River conservancies have been very receptive and reached agreement among their members to sign a constitution and to remove internal fencing. In contrast, ranchers in the Midlands have shown major internal dissension and been slower

and more reluctant to reach agreement on forming a single conservancy and unwilling to remove internal fencing (Table 5). Another highly relevant point is that the habitat of the Midlands has now been recognised to comprise many species of browse with high levels of chemical defense that are not favourable to black rhinos. Once the initial urgency to move rhinos away from the Zambezi Valley had been satisfied, the large numbers of deaths of rhinos in the Midlands (Table 4) have been attributed in part to the unsuitable habitat. This has been exacerbated by the unwillingness of Midlands ranchers to remove internal fencing and provide rhinos with the opportunity to disperse over a larger area (Table 5). These various considerations fully support RCP in its decision to target Save Valley and Bubiana. Two additional reasons support this as the correct decision. First, several Midlands ranches were already receiving on-going financial support from other quarters. Second, the Save Valley and Bubiana conservancies have been willing to set rhino conservation in the context of promoting wildlife utilisation, whereas the Midlands ranchers have not shown a concerted approach to wildlife utilisation (only the two properties of Iwaba and Twin Springs run wildlife utilisation schemes). Hence Save Valley and Bubiana better fit the philosophy of RCP, which aims to place rhino protection in the context of sustainable wildlife and land use by the private sector.

Table 5: Various considerations that have affected the choice of conservancies to receive support from the Rhino Conservancy Project

Factor	Save Valley	Midlands	Bubiana	Chiredzi River
Agro-ecological zone	5	3	5	5
Potential area for rhinos	3213 sq km	500 sq km	1275 sq km	894 sq km
Willingness to form single conservancy with constitution	Very willing	Reluctant	Willing	Willing
Willingness to remove internal fencing	All removed	No	Mostly removed	Mostly removed
Quality of rhino habitat	Good	Poor	Good	Good
Availability of other financial support	No	Yes	No	No
Rhinos set in context of wildlife utilisation	Yes++	No	Yes+	Yes++

The speed with which RCP has implemented certain of its aims in relation to the development of the conservancy concept has been more rapid than might have been anticipated. This can in part be attributed to various events and situations external to RCP, but which RCP in turn has been in a position to exploit. The two main factors in this regard have been the situation of the conservancies within Foot and Mouth Disease (FMD) zones and with the 1991/92 drought (Table 6). Cattle and buffalo occupy the same ecological niche and, as a broad generalisation, the rancher is obliged to achieve a balance between them in terms of stocking, especially at times of nutritional stress. The situation is further complicated by veterinary requirements for separating the two species

in different parts of Zimbabwe (Table 6) to preserve exports of beef to the ever-growing European Community stockpiles. The severe drought of 1991/92 in the southern parts of Zimbabwe particularly affected the Lowveld ranches. Save Valley (and Chiredzi River) were very severely affected by drought which resulted in the ranchers almost totally destocking their land of cattle. Because Save Valley is in a Half Red FMD zone, it can carry 'dirty' buffalo providing that all cattle are removed (or, if kept, they are vaccinated) and double fencing is erected. This combination of circumstances has prompted the Save Valley Conservancy to move ahead rapidly with developing its landuse options in a manner that is totally devoted to wildlife utilisation. Accordingly, Save Valley is now moving ahead with an ambitious wildlife restocking programme that includes the more readily available dirty buffalo (and elephants from the drought-affected Gona-re-Zhou NP). In contrast, the Bubiana Conservancy was less badly affected by the drought and lies in the Green FMD zone (which has now been converted to the Clear zone) (Table 6). Veterinary requirements demand that Bubiana can only be stocked with FMD-free buffalo which can range freely inside a double perimeter fence and can be kept with cattle that are herded separately. This combination of circumstances meant that, while beef from Bubiana ranches cannot be exported, it remains economically attractive to retain some cattle for domestic sale, as the conservancy cannot be restocked immediately with buffalo due to the expense and scarcity of FMD-free founder stock. The situation in the Midlands is in further contrast to Save Valley and Bubiana (Table 6). This area was least badly affected by the drought and necessitated only light destocking. Because this area has been in the Clear zone, beef exports are allowed. However, if buffalo are kept they must be FMD-free, and be herded, penned and dipped. This makes it an even more attractive option for ranchers in the Midlands to retain cattle and not move towards an option that embraces wildlife utilisation.

Table 6: Combinations of circumstances influencing the development of options relating to the balance between cattle and wildlife utilisation in conservancy areas.

Factor	Save Valley	Bubiana	Midlands
FMD Zone	Half Red	Green, now Clear	Clear
Requirements for Buffalo Introductions:			
Cattle	All removed or to be vaccinated	Can remain but herded separately from buffalo	Can keep and export
Fencing	Double	Double	Single
Buffalo	Dirty	FMD-free and	FMD-free and
		free-ranging	herded, penned and dip
1991/92 Drought	Severe with total destocking	Serious with some destocking	Bad with light destocking

The information provided on the performance of rhinos (Table 4), on the size and on political and ecological factors (Table 5), and on the economic and veterinary factors relating to wildlife utilisation (Table 6) show clearly how each conservancy has shaped the speed of implementation of RCP. Save Valley has led the way, through its willingness to form a conservancy, its large size, the good performance of its rhinos and

the virtual necessity (combined with the willingness) of the land-owners to fully embrace the option of wildlife utilisation. Bubiana, with a good performance by its rhinos, but its smaller size and the less pressing necessity to embrace wildlife utilisation as its only option has moved ahead of the Midlands in relation to the original priorities of RCP. The Midlands, with all its various rhino- and conservancy-related problems has had the least influence in shaping the implementation of RCP. Accordingly, Save Valley and Bubiana have, quite justifiably, acted as focal conservancies for RCP (Table 2). That is not to say that the conservancies other than Save Valley and Bubiana have not received attention and support from RCP. RCP has put strategic assistance into all other areas of private land, including translocation, dehorning and monitoring, and in certain cases equipment and fencing in relation to their needs and to support being provided by other donors. Unfortunately, there has been an inverse relationship between the influence each area has had in shaping RCP and the problems it in turn has caused RCP, and this topic is dealt with below in 4.1.

RCP has recognised that political reality needs to be addressed and that moves which reduce areas devoted to cattle relative to wildlife may be unpopular in certain quarters. Accordingly, RCP played a major role in catalysing the preparation of a volume of papers that set out the broad justifications for conservancies as a form of land-use. The volume, entitled "The Lowveld Conservancies: New Opportunities for Productive and Sustainable Land Use" was published in October 1993 and relied mainly on input from the PE and from Price Waterhouse. The volume should go a long way to justifying to doubters why conservancies are moving towards adopting forms of land-use that are primarily devoted to wildlife.

3. QUESTIONS

3.1 Are the project's objectives appropriate to the evolving rhino situation in Zimbabwe?

The objectives of RCP are entirely appropriate to the evolving rhinos situation in Zimbabwe. The results to date (Table 4) should provide great encouragement to DNPWLM that its Strategy to conserve its black rhino populations may eventually succeed in the face of an unprecedented losses arising from illegal hunting. It is, however, necessary to caution that it is premature to declare the conservancy concept as a long-term success. Undoubtedly the attention of illegal hunters will increasingly be drawn to rhinos on conservancies, given that black rhinos on Parks and Wildlife Estate have been so depleted in number. The resistance to illegal hunters and the breeding performance of rhinos that can be provided both by IPZs and by conservancies in the short-term will play a large part in deciding the medium-term future of Africa's rhinos. In the final (and more pessimistic) analysis, its appears likely that conservancies may hold out a better option for rhinos than IPZs because they are placing rhinos in a situation of relative wealth at minimal cost to the state.

3.2 What progress has the project shown in meeting its objectives?

This question encompasses two sets of objectives. First, the objectives of RCP with respect to rhinos. Second, the objectives of the conservancies in achieving a sustainable form of land use based on wildlife utilisation, especially where these may deviate from the rhino-related objectives.

RCP has clearly met many of its original objectives (Table 2) and, indeed, met them to a remarkable degree. In terms of the changing situation, conservancies are pleased to have a policy of dehorning in place. However, conservancies noted, as in 3.1, that it is premature to judge whether the longer-term overall objectives of RCP have been met.

Save Valley and Bubiana conservancies note that RCP has helped them achieve their own objectives, to a degree that has exceeded their expectations. The catalytic effect of RCP in providing technical support to draft a constitution, in providing donor support for fencing and in providing moral support in the form of rhinos at a time of great hardship during the drought gave private landowners the confidence to pursue their goal of collective and sustainable management of mobile resources. RCP was in the right place at the right time and without its presence, the aspirations of the ranchers to form a conservancy may not have gelled. Indeed, rhinos were likened to the award of rugby colours, giving those concerned the confidence to move ahead with their performance.

3.3 To what extent has the project deviated from its original plans, and if it has, is such re-orientation appropriate in terms of the prevailing circumstances?

The project has deviated somewhat from its original plans. This has been determined in part by the worsening rhino situation and in part by the effects of the drought and the faster than expected development of two conservancies, but particularly of Save Valley Conservancy. The worsening rhino situation has resulted in unanticipated involvement in dehorning operations while also decreasing the supply of rhinos with which to establish additional conservancies. The faster than expected development of conservancies has brought with it a whole range of unanticipated and complicated work related to constituencies, restocking, funding priorities, and addressing political reality through publication of "The Lowveld Conservancies" The re-orientation of original plans to suit the prevailing circumstances has been entirely appropriate, and all parties consulted recognised this as being considerable credit to the PE. Furthermore, Save Valley and Bubiana conservancies recognise their good fortune in having a donor which has been prepared to administer its funds and budget in a manner sufficiently flexible to meet such a rapidly evolving and complex situation. Both RCP and the conservancies do, however, recognise and appreciate that there is need for even greater flexibility in managing funds, and this topic is addressed in 4.3.1. The downside of the flexible approach adopted by RCP is that certain priority tasks originally proposed still remain in need of consolidation, and this topic is also addressed in 4.1.1.

3.4 Has the project been implemented efficiently and have funding allocations been appropriate? Is there need to alter the administrative arrangements and terms of reference of the project executant?

RCP has, in general, been administered with efficiency, though with misunderstanding between some of the key players. Furthermore, the PEs time has been viewed by the conservancies as being unnecessarily taken up with 'rhino politics' in Harare, and viewed by the PE himself as being too much taken up by routine administration. These issues are discussed in 4.4.1 while suggested changes to the terms of reference for the PE that arise from the recent appointment of a Rhino Conservation Coordinator and Counterpart, are taken up in 4.4.5.

Funding allocations have generally been felt by the conservancies to be appropriate, though as yet under-spent in relation to the schedule set out in the project proposal. The value of the radios supplied through RCP was particularly stressed by Save Valley. Furthermore, both conservancies recognised the catalytic assistance that the fencing loan provided to the establishment of both conservancies. Future proposals by RCP to change the way that funding allocations are made are also discussed in 4.3.1.

3.5 Has the project given rise to any additional conservation and development benefits, beyond those relating to rhino conservation per se?

RCP has given rise to enormous potential conservation and development benefits that are unrelated to rhino conservation. The formation of conservancies in agro-ecological zone 5 has the potential to promote sustainable wildlife- and land-use that will be of greater long-term ecological and economic benefit to Zimbabwe than devoting such land only to These conservation and development benefits have yet to be clearly demonstrated, but the rise in land value of the ranches and the confidence of the private sector in promoting a major restocking of Save Valley Conservancy are clear indicators of outside belief in this potential. This belief has been helped by the compilation of the relevant facts through the publication of "The Lowveld Conservancies" in October 1993. While wildlife industries based on the conservancies have yet to be fully developed, the building of some tourist game-viewing facilities and the selling of sport hunting to tourists are also indicators of the belief of the ranchers in the potential of Save Valley and Bubiana conservancies. The speed with which each conservancy is moving towards a wildlife option differs depending on external prevailing circumstances (Table 6), and RCP has been able to capitalise upon this situation to promote change at speeds that suit each focal conservancy.

The concept of conservancies has great potential to influence Zimbabwe's wildlife policy. Conservancies represent an extension of the CAMPFIRE concept from communal land to private land, in which private landholders take on communal responsibility for the management of wildlife resources under their custodianship. At the same time, conservancies will have to develop and consolidate a mutually beneficial relationship with neighbouring communal landholders.

3.6 Conversely, has the project given rise to any developments which may prejudice rhino conservation in particular or conservation in general?

The only negative development resulting from the implementation of RCP has been the jealousy created in certain quarters. This cannot be blamed directly on RCP, and measures to combat and de-personalise this problem are discussed in 4.4.1.

3.7 Has the project (in its concept and in its actual implementation) constituted wise use of the funds allocated for rhino conservation in Zimbabwe?

RCP has constituted very wise use of donor funds. The aim of providing donor support to catalyse a self-sustaining system of wildlife and endangered species conservation is way ahead of any other initiatives promoted by the bi-lateral agencies and conservation NGOs, few of whom could see their way to supporting the private sector in this way. As one of the largest grants made for the conservation of a single species, the money donated by Beit Trust to RCP could not be spent in a better way. Given that the bottom

line is successful conservation of the rhino (see Preamble), the results to date speak for themselves (Tables 3 & 4).

3.8 What recommendations can be made to the ongoing implementation of the project?

RCP was originally anticipated as a five year project that could be expected to end in December 1995. Indeed, upon accepting the WWF proposal in November 1989, the Beit Trust wrote to WWF International in the following terms:

"If or to the extent that the money (and the income thereof in the interim) is not fully expended (as to either capital or income) for the intended general purpose within the period of 5 years from today's date, it shall be returned to the Trust, unless the Trust shall have consented to its use as a permanent endowment for such general purpose or to its being applied for some other purpose falling within the Trust's objects."

The evaluator has been given to understand that the Beit Trust and WWF have reached an informal agreement to continue the funding of the RCP beyond its present end date. In this context, the evaluator wishes to make the following observations:

- The results of this evaluation as laid out above are very positive;
- Zimbabwe's black rhinos now find themselves at a critical balance point (Table 3);
- The focal conservancies supported through RCP request ongoing moral support at a time when they are making radical changes in their land-use and when they are likely to attract the unwelcome of attentions of illegal hunters seeking rhino horn;
- Certain objectives of the original proposal are still valid and in need of consolidation (Table 2):
- Accordingly, it is recommended that all parties reach formal closure on the issue of extending RCP.

Given the above, it would appear that the specific recommendations of this evaluation need to fall within two categories. First, specific comment upon the broad proposals already developed by RCP for use of the balance of funds and for tackling on-going issues. Second, specific recommendations made as a result of this evaluation. In order to set both categories of recommendations in context, a summary of existing and additional problems is outlined before discussing specific comments and recommendations.

4 PROBLEMS AND RECOMMENDATIONS

4.1 Specific Problems

A number of specific problems have been raised above and will now be summarised:

4.1.1 Fuller implementation or consolidation of certain objectives: A heavy workload on the PE, resulting from additional rhino management, much routine administration and rapid development of the conservancies, has left some objectives requiring fuller implementation or consolidation, as follows:

- <u>Security</u>: the internal security in terms of detection has been boosted through the provisions of radio networks and guns. However, all consulted recognise that conservancies are not in a position to protect their rhinos against, or to respond to, a concerted efforts by illegal hunters. The Directorate of DNPWLM recognise that negative attitudes towards the conservancies may have arisen in the past from lack of understanding in many quarters on the ownership of rhinos on private land.
- <u>Surrounding communities</u>: preliminary moves have been made towards promoting public relations with surrounding communities, through the hiring of consultants to make proposals for specific actions around Save Valley and Bubiana conservancies (see Tables 1 & 2). This activity needs to be built upon, as it is an integral part of providing security to conservancies.
- <u>Number of focal conservancies</u>: the original proposal suggested a total of four conservancies would be established. The wish of the PE to concentrate first upon getting two conservancies to function effectively, and of the relative lack of availability of rhinos, is fully appreciated. However, it is still clear that some rhinos are not being put to good demographic use through not breeding or occurring in small founder populations (Table 4) and that some rhinos remain in small units on various private properties (Table 7).

Table 7: Distribution of 161 black rhinos on private land in April 1994

Bubiana:	44	Lonely Mine:	15
Save Valley:	39	Chiredzi River:	11
Midlands ranches:	28	Imire:	7
Iwaba:	8	Chipengali:	5
South Sebakwe:	2	Pamuzinda:	2 (for export)

- Research: considerable progress has been made in achieving research objectives, including on types of fencing for conservancies, on exploratory aerial surveys in Save Valley and Bubiana, on vegetation surveys and rhino surveys in the Midlands, and the setting up of individual identification files for all rhinos on private land. A number of papers have also been published by the PE (see Appendix C). Genetic samples and detailed measurements have been collected from all rhinos moved, and the requirements for a dietary study are in place. This forms a good basis for consolidating the research opportunities provided by the conservancies, but the opportunity needs to be created for this to happen.
- **4.1.2 Worsening Rhino Situation:** The rhino situation has worsened to a degree that was not anticipated by many. RCP needs to adopt a flexible approach to meet the challenge.
- 4.1.3 Business Risks taken by Conservancies: While the economic potential of wildlife utilisation within the conservancies is recognised, the focal conservancies, and Save Valley in particular, have taken considerable business risks. Usually business risk remains the concern of the private sector. However, in the case of rhino conservancies state-owned assets will be placed at risk if the business folds. While not wishing to

promote donor-dependence, provision should be made to provide any necessary intervention or technical support necessary to ease the path of rhino conservancies towards liquidity.

4.1.4 Misunderstandings: Key players have misunderstood each other and, in some cases, issues have been personalised. As noted in 2.4, there has been an inverse relationship between the influence various conservancies have had in shaping RCP and the problems each in turn has caused RCP. A crisis of expectations has occurred between Bubiana Conservancy and RCP over how funds were to be allocated to certain activities in a rapidly changing situation. Issues surrounding the allocation of rhinos to different conservancies have been personalised by certain Midlands ranchers.

4.2 Additional Issues

The Terms of Reference of this evaluation did not cover an assessment of Zimbabwe's Rhino Conservation Strategy as a whole, but rather of the role of RCP within that strategy. At the risk of straying from my Terms of Reference, it appears necessary to comment briefly upon possible gaps and overlaps between the Emergency Plan for the Black Rhinoceros Conservation Project published in September 1993 and the role of RCP. The Emergency Plan is mainly concerned with establishing IPZs, but also requires for the appointment of a Rhino Conservation Co-ordinator and an externally funded Counterpart. Furthermore, the Plan requires for much more horizontal integration of functions within DNPWLM, and the strengthening of functions of Provincial Wardens. Unfortunately, neither the conservancies nor the Ecologist: Rhino Conservancies have been fully integrated into the Plan. For example, the proposed Rhino Co-ordination Group within DNPWLM does not include the Ecologist: Rhino Conservancies. Furthermore, the terms of reference for the Rhino Conservation Co-ordinator include the carrying out overall monitoring of rhino populations, including conservancies (presently within the brief of the Ecologist: Rhino Conservancies), while the terms of reference of the Counterpart include developing of meta-population management plans for rhino on IPZs (thereby not including the development of meta-population management between IPZs and conservancies).

4.3 Specific comments upon actions underway or proposed by the project or by DNPWLM

4.3.1 Proposals of RCP for allocating unspent funds: A considerable balance of funds remain unspent and the PE has made proposals for the allocation of those funds in the context of extending RCP until June 1998 (see Appendix D). The major item of expense comprises the establishment of a support fund for Save Valley, Bubiana and Midlands conservancies. Establishment of support funds was proposed for a number of reasons. First, the worsening rhino situation means that conservancies will have to face more expense in ensuring their security. Second, the funds can be managed flexibly by individual conservancies to meet their own perceived demands, whether for capital or recurrent costs. Accordingly, the funds should play a role in minimising misunderstandings between individual conservancies and RCP. Third, it will require the conservancies be more proactive in their management, and reduce the workload of the PE. The establishment of support funds is very much welcomed by the two conservancies consulted and the evaluator believes this approach to be entirely consistent

with the clause noted in 3.8 in which the Beit Trust allow for 'permanent endowments for such general purposes' of the grant. Other anticipated costs include vehicle replacements, running costs, field costs and salary of the PE. In view of the need to consolidate RCP and maintain its presence amidst a worsening rhino situation, it is recommended that the indicative budget proposed by RCP is adopted in principle, subject to detailed discussions by the Beit Trust and WWF, and to due consideration being given to any budgetary implications that may arise from the adoption of some of the other recommendations of this evaluation.

- 4.3.2 Security: The Directorate of DNPWLM recognises that the rhino conservancies must be integrated both vertically and horizontally into the national effort to protect rhinos, as has been proposed for IPZs in the Emergency Plan of September 1993. Conservancies should be provided with security information on a need-to-know basis, and must promote their ability to react through the appropriate channels of the civil defense networks and JOCs at provincial and national levels. The security staff of conservancies must be integrated into the local security network as Special Constables, and the Honorary Officer system proposed in April 1992 still needs to be introduced. Accordingly it is recommended that the aim of integrating conservancies into the national rhino protection effort is achieved with all possible haste, and that DNPWLM takes every measure possible to make all law enforcement staff in Zimbabwe aware that conservancies are protecting a national asset. It is hoped that this integration can be facilitated through participation by the conservancies in appropriate committees (see 4.4.1).
- 4.3.3 Public Relations with Surrounding Communities: RCP has moved recently towards promoting this aspect of its objectives. Given the parallels between CAMPFIRE and conservancies, and that WWF is heavily involved in providing technical support to both initiatives through the Multispecies Animals Production Systems project and through RCP, it is recommended that WWF move ahead rapidly with exploring the possible technical and funding links between conservancies and surrounding communal lands.

4.4 Specific recommendations arising from the evaluation

4.4.1 Strengthening Pre-existing Committees: The WWF Head of Programme is currently involved in efforts to resolve basic misunderstandings between Bubiana and RCP, and it is hoped that this issue will soon reach closure. It remains clear, however, that misunderstandings may arise again in future if one person is seen to be the gateway to the allocation of funds or of rhinos between conservancies. There is a high risk that decisions made upon firm technical grounds will become personalised to the point where the main objective is obscured, thereby creating more work for all concerned in defusing a potentially destructive situation. Accordingly, it is recommended that, at a critical point of balance for the rhinos, the basis for decisions on allocation of funding and rhinos (and on security) is made clear to all relevant parties in a committee situation that represents the interests of DNPWLM, conservancies and other private landholders with rhinos and donors. With the empowering of an appropriately constituted committee, all major decisions and lines of communication between parties would be routed through the committee.

The evaluator notes that there are a number of pre-existing groups and committees for rhinos including the Rhino Co-ordination Group within DNPWLM, the Rhino Co-ordination Committee which provides a forum for discussion with external partners of DNPWLM (see Emergency Plan of September 1993), and the Rhino Custodians Committee which provides a forum for private landowners. Lacking detailed knowledge of the possible inter-relationships between these groups and committees or the mandate to make any recommendations on behalf of DNPWLM, the evaluator wishes to leave the recommendation couched in these general terms, but with the following hopes: first, that the recommendation can be accommodated within a pre-existing committee; second, that the interests of the conservancies, especially with respect to security can be fully integrated into the Rhino Co-ordination Group within DNPWLM.

- 4.4.2 Development of Parameters of Expected Rhino Performance: It is clear that misunderstanding of intentions between some ranchers in the Midlands and RCP has arisen over the removal of rhinos to other areas of private land. A committee decision, as recommended above, can bring the basis for such a decision out into the open and depersonalise the situation. However, the work of that committee would be greatly helped if a set of clear criteria for the expected performance of rhinos on private land is developed that permits a transparent and irrefutable decision to be made by that committee on the allocation of rhinos to different landholders or conservancies. Indeed, such parameters will form a vital component of meta-population management within Zimbabwe as a whole. Accordingly, it is recommended that RCP proposes a set of expected performance criteria for all rhinos on private land for adoption by DNPWLM for use in making transparent and irrefutable decisions on the allocation of rhinos.
- 4.4.3 Full Demographic Use of All Rhinos on Private Land: RCP has been very successful in consolidating the establishment of two conservancies with increasing populations of rhinos. However, rhinos remain in a number of other small units that are not reproducing rapidly or, in some cases, at all, and that do not meet the objectives of being established with 30-40 founders. Accordingly, it is recommended that, through the development of expected performance criteria, it will soon be decided how to put all small units of rhinos on private land to demographic use. No specific site(s) for locating these rhinos is proposed at this time. This recommendation will require particularly careful consideration as it may have major budgetary implications for RCP perhaps through promoting the development of another conservancy. However, given that rhinos are at such a critical point of balance, the evaluator hopes that all parties including the donor will be able to accommodate this recommendation.
- 4.4.4 Business Risks: Rhinos in the conservancies will not be secure unless the businesses which support them are secure. Conservancies have taken considerable business risks upon clear and well-understood grounds (Table 6), and consideration may need to be given to catalytic interventions, such as promoting the marketing of conservancies, or possibly to technical support, that helps the conservancies to overcome those risks. Accordingly, it is recommended that RCP remains in a position to provide intervention or technical support to help conservancies overcome any business risks.

4.4.5 Terms of Reference for PE: The terms of reference for the PE were recognised as being appropriate at the time they were formulated, and the wisdom of seconding the PE to DNPWLM recognised. However, it should be noted the Ecologist: Rhino Conservancies still retains a vertical line of reporting to the Chief Ecologist, while the newer posts of Rhino Conservation Coordinator and Counterpart are encouraged to integrate both vertically and horizontally. Furthermore, there are areas of overlap as well as obvious gaps between the terms of reference of Ecologist: Rhino Conservancies (see 2.1) and Rhino Conservation Coordinator and Counterpart (see p8 of Emergency Plan of September 1993). Accordingly, it is recommended that the terms of reference of the Ecologist: Rhino Conservancy are modified slightly to take account of the need to ensure the vertical and horizontal integration of the management of conservancies into DNPWLM and to avoid overlaps and gaps between the responsibilities of the post-holder and of Rhino Conservation Coordinator and Counterpart.

This recommendation is, like that on committees, left loosely worded, as the evaluator has no mandate to make suggestions on behalf of DNPWLM. In practical terms, the recommendation is made with two objectives in mind. First, so that PE can ensure conservancies are fully integrated in the national security effort to protect rhinos through interactions with the Chief Warden and his staff (see 4.3.2). Second that metapopulation management, especially of the small units of rhinos on private land, does not fall between two stools.

4.4.6 Research: The research opportunities provided by the rapid development of conservancies as a form of land-use have been capitalised upon by RCP through the involvement of the PE in the publication of "The Lowveld Conservancies: New Opportunities for Productive and Sustainable Land Use" in October 1993. Furthermore, RCP has made use of the research opportunities provided by rhinos in conservancies. This work is of great potential importance for the future management of rhinos, and aspects of this work have already been made available through their preparation for publication (see Appendix C). Such research can also act as publicity for the achievements of the project and for those who supported it. While aspects of the research are recognised to be in need of consolidation, it is also a truism that no research is ever completed unless its results are made available through publication. Accordingly, it is recommended that the PE is given adequate time within the life of RCP to devote to the writing up of its results.

5. CONCLUSION

This evaluation has examined the implementation of a very novel and exciting project. RCP aims to place the protection of endangered species in a setting of sustainable wildlife- and land-use by the private sector. RCP has wide implications for conservation and its results to date are remarkable. Should the need arise, the evaluator hopes that all parties, and most especially the donor, will consider any necessary extensions to the project, to ensure that the momentum of the achievements to date is not lost. To return to my starting point: The bottom line is the successful conservation of the black rhino.

6. ACKNOWLEDGMENTS

I thank Dr David Cumming for inviting me to undertake this evaluation; Roaul and Deline du Toit for their arrangement of the logistics; Ken Drummond and Clive Stockhil for their hospitality at Bubiana and Save Valley conservancies; and for all those listed in Appendix A for their patience in answering my questions and sharing their opinions.

Appendix A

Persons Interviewed:

Department of National Parks and Wildlife Management

Dr W K Nduku

Director

Mr R B Martin

Deputy Director (Research)

Mr G Tatham

Chief Warden

Bubiana Conservancy

Mr K Drummond (Chairman)

Drummond Ranches

Mr G Hilton-Barber

Barberton Ranch

Mr P Abbot

Peregwe Ranch

Save Valley Conservancy

Mr C Stockhil (Chairman)

Senuko Ranch

Mr C Grobbelar

Zimbabwe Hunters' Association/Angus Ranch

Price Waterhouse

Mr D de la Harpe

Partner, Environmental and

Tourism Consulting Division

WWF

Dr DHM Cumming

Mr R du Toit

Head of Programme

Project Executant

Appendix B

WORKSHOPS, CONFERENCES, ETC:

- 1991 International Symposium on the Biology and Conservation of Rhinos, San Diego.
- 1991 WWF Workshop on Community Wildlife Projects, Hwange.
- 1991 Population and Habitat Viability Assessment for Kenyan rhinos, workshop, Nairobi (presentation made).
- 1992 national Parks Research Division Annual Workshop, Harare.
- 1992 Seminar on Browse/Browsers, Nylsvlei
- 1992 Closed workshop on Browse/Browsers, Wits Rural Facility. (presentation made).
- 1992 IUCN African Rhino Specialist Group, Victoria Falls.
- 1992 Save Valley Planning Workshop, Nyanga.
- 1993 Tanzania Rhino Strategy Workshop, Arusha (presentation made).
- 1993 Rhino Habitat Evaluation Workshop, Southern Africa Rhino Management Group, Pilanesberg (presentation made).
- 1993 Workshop to develop emergency action plan for rhino conservation in IPZ's, Harare.
- 1994 Workshop on Wildlife Conservancies: Their future in Africa. Pretoria.
- 1994 Save Valley Planning Workshop, Hwange.
- 1994 Radiotelemetry workshop (Telonics), Hwange.

Appendix C

PUBLICATIONS:

- du Toit, R (1992) Distribution and conservation status of sable antelope in Zimbabwe. In : The Sable Antelope as a Game Ranch Animal. Proceedings of Symposium arrange by Wildlife Group of Southern African Veterinary Association, Pretoria.
- du Toit, R. (1993) Chapters in : The Lowveld Conservancies : New Opportunities for Sustainable Production. Compiled by Price Waterhouse, Harare.
- Dierenfeld, E.S. & du Toit, R.F. (in press) Nutrient composition of selected browses consumed by black rhinoceros (Diceros bicornis) in Zimbabwe. J. of Wildlife Diseases.
- du Toit, R. (in press) The ecological management of large conservancies. In: Wildlife Conservancies: Their future in Africa. Proceedings of a symposium held in Pretoria, 5 February, 1994.
- du Toit, R. (in press) Large-scale wildlife conservancies in Zimbabwe: opportunities for commercial conservation of endangered species. International Game Ranching Symposium, Pretoria, 27-31 October, 1992.

Appendix D

Notes on Indicative Budget for Project Extension (Pounds)

101	4 Vehicles (replacements)	80 000.00
102	Equipment	8 000.00
103	Infrastructure/construction (Envisage developing National Parks/Conservancy Base at Umkondo Mine)	15 000.00
105	Support funds - if work on 5% interest in UK invested sum is to meet annual contributions to recurrent costs: Bubiana Z\$ 50 000.00 Save Valley Z\$ 75 000.00 Midlands Z\$ 20 000.00	242 000.00
204	Daily paid workers	14 000.00
205	Professional fees	10 000.00
206	Vehicle running costs Landcruisers Mercedes truck Aircraft Truck hire	14 000.00 15 000.00 55 000.00 25 000.00
207	Equipment running costs	2 000.00
210	Office running costs	5 000.00
211	Field costs (routine/contingency rhino ops)	50 000.00
212	Travel and Subsistence	5 000.00
	TOTAL	540 000.00

From the briefing, notes prepared by the Beit Trust UK Office for the Beit Trustees' meeting held on 30 November 1993, it appears that the uncommitted balance expected to remain in the project fund (less interest) on 30 June 1994 equals £ 560 000.00. Given the above rough indication, in which the conservancy support funds and rhino operations are necessarily the major budget items, and allowing for the project executant's salary, it is clear that even with interest the project will not extend much beyond mid-1998. the support funds will, however, remain operative in meeting the conservancies' needs on an ongoing basis. Any funds "saved" from the above indicative budget would be in immediate demand for the community projects and additional equipment needs (notable telemetry monitoring systems).

List of WWF Project Papers (September 1997)

- 1. Cumming, D. H. M. (1988) A project outline for the development of multispecies animal production systems. WWF Working Paper No.1. June 1988 (Revised August, 1988). Typescript 40pp + 2 maps and 2 tables.
- Buchan, A. J. C. (1989) An ecological resource survey of the Gokwe North proposed wildlife utilisation area. WWF Project Paper No.2. November, 1989. Typescript 25pp + 5 maps.
- Jansen, D. J. (1989) Joint venture options for wildlife utilisation in Zimbabwe. WWF Project Paper No.3. November 1989. Typescript 20pp.
- 4. Taylor, R. D. and Cumming D. H. M. (1989) Aerial census of large herbivores in pilot project areas, September/October 1988. WWF Project Paper No.4. Typescript 75 pp.
- 5. Jansen, D. J. (1989) Cattle, wildlife, both or neither? A guide to an appropriate response. WWF Project Paper No.5. Typescript 23pp.
- 6. Buchan, A. J. C. (1989) An ecological survey of Chapoto Ward, Guruve District, with reference to the use of Wildlife. WWF Project Paper No.6. Typescript 41pp + 6 maps.
- 7. Buchan, A. J. C. (1989) An ecological survey of Chisunga Ward, Guruve District, with reference to the use of wildlife. WWF Project Paper No.7. Typescript 40pp + 7 maps.
- 8. Taylor, R. D. (1990) Socio-economic aspects of meat production from impala harvested in a Zimbabwean Communal Land. WWF Project Paper No.8. Typescript 20 pp. (Paper presented at the 2nd International Wildlife Ranching Symposium, Edmonton, Canada, 4-8th June, 1990).
- 9. Taylor, R. D. (1990) Ecologist's Report for 1989. Nyaminyami Wildlife Management Trust Annual General Meeting, February, 1990. WWF Project Paper No.9. Typescript 42 pp.
- Jansen, D.J. (1990) Sustainable wildlife utilisation in the Zambezi valley of Zimbabwe: A first year assessment of CAMPFIRE in two districts. WWF Project Paper No.10. Typescript 29 pp. (Paper presented at *The Ecological Economics of Sustainability: An International, Interdisciplinary Conference*, The World Bank, Washington, D.C. May 21-23, 1990.)
- Taylor, R. D. (1990) Aerial census of large herbivores in Pilot Project areas, October, 1989. Project, WWF Project Paper No. 11. Typescript 59 pp.
- 12. Cumming, D. H. M. (1990) Wildlife and the Market Place: A view from Southern Africa. WWF Project Paper No. 12. Typescript 25 pp. (Invited paper presented at *The 2nd International Wildlife Ranching Symposium*, Edmonton, Canada, 4-8th June, 1990).
- 13. Cumming, D. H. M. (1990) Developments in game ranching and wildlife utilisation in East and southern Africa. WWF Project Paper No. 13. Typescript 21 pp. (Invited paper presented at *The 2nd International Wildlife Ranching Symposium*, Edmonton, Canada, 4-8th June, 1990)
- 14. Cumming, D. H. M. (1990) Communal Land development and wildlife utilisation: Potential and options in northern Namibia. WWF Project Paper No. 14. Typescript 34 pp. (A discussion paper prepared on behalf of Earth Africa in conjunction with the Southern Africa Foundation for Economic Research for the Ministry of Wildlife, Nature Conservation and Tourism, Republic of Namibia.)
- Cumming, D. H. M. (1990) Wildlife conservation in African Parks: Progress, problems and prescriptions. WWF Project Paper No. 15. Typescript 20 pp. (Chapter in: Lewis, D. M. and L. A. Carter. (eds.) Voices from Africa: Local Perspectives on Conservation. World Wildlife Fund, Washington, D.C.)
- Jansen, D. J. (1991) What is a joint venture? Guidelines for District Councils with Appropriate Authority. January, 1991. WWF Project Paper No. 16. Typescript 15 pp.
- 17. Annual Report for 1990. February 1991, WWF Project Paper No. 17. Typescript 74+6pp.

- 18. WWF Multispecies Animal Production Systems Project: Amended and updated proposal. WWF Project Paper No. 18. March 1991. Typescript 23 pp.
- 19. Cumming, D. H. M. (1991) Multispecies systems and rural development on Southern Africa:
 Opportunities, constraints and challenges. WWF Project Paper No. 19. Typescript 33 pp.
 (Invited Keynote address presented at "Meeting Rangeland Challenges in the 1990's." 6-10th
 May, 1991, CSIR Conference Centre, Pretoria.)
- 20. Booth, V. R. (1991) An ecological resource survey of Mahenye Ward, Ndowoyo Communal Land, Chipinge District. WWF Project Paper No. 20. August, 1991. Typescript 39pp.
- 21. Cunliffe, R. (1991) An ecological resource survey of the Communal Lands of Hurungwe District, with reference to the use of wildlife. WWF Project Paper No. 21. October, 1991. Typescript 75pp.
- 22. Cumming, D. H. M. and I. Bond (1991) Animal Production in Southern Africa: Present practice and opportunities for peasant farmers in Arid Lands. WWF Project Paper No. 22. Typescript 142 + 4 pp. (Report prepared for the International Development Research Centre, Regional Office for Eastern and Southern Africa, Nairobi.)
- 23. Annual Report for 1991. February, 1992, WWF Project Paper No. 23. (Expected completion in April, 1992, Typescript 85pp.)
- 24. Cunliffe, R. N. (1992) The Great Dyke State Land: Agricultural development or incorporation into the Mavuradonha Wilderness Area. WWF Project Paper No. 24. Typescript 46pp.
- 25. Martin, R. B., Attwell, C. A. M. and Rukuni, M. (1992) Project Progress Review of the WWF Multispecies Animal Production Systems Project. WWF Project Paper No. 25. Typescript 58pp.
- 26. Cunliffe, R. N. (1992) An ecological resource survey of the communal lands of the Centenary District. WWF Project Paper No. 26. Typescript 109 pp.
- 27. Jansen, D. J., B. Child and I. Bond. (1992) Cattle, Wildlife, both or neither: Results of a financial and economic survey of commercial ranches in southern Zimbabwe. WWF Project Paper No. 27. Typescript [203 + Annexes 68 pp.]
- 28. Taylor, R. D. (1992) Ecologist's Report for 1990. Nyaminyami Wildlife Management Trust, Annual General Meeting, February, 1991. WWF Project Paper No. 28. Typescript 15pp.
- 29. Taylor, R. D., Cumming, D. H. M. and Mackie, C. (1992) Aerial Census of Elephant and Other Large Herbivores in the Sebungwe 1991. WWF Project Paper No. 29. Typescript 31pp.
- Jansen, D., Bond, I., Child, B., (1992) Cattle, Wildlife, Both or Neither: A Summary of Survey Results for Commercial Ranches in Zimbabwe. WWF Project Paper No. 30. Typescript 45pp. (Presented at the 3rd International Wildlife Ronching Symposium, CSIR, Pretoria, October 1992.)
- 31. Kreuter, U. P., Workman, J. P., (1992) The Comparative Economics of Cattle and Wildlife Production in the Midlands of Zimbabwe. WWF Project Paper No. 31. Typescript 25pp.
- 32. Taylor, R. D., (1993) Wildlife Management and Utilization in a Zimbabwean Communal Land: A preliminary evaluation in Nyaminyami District, Kariba. WWF Project Paper No. 32. Typescript 23pp.
- Taylor, R. D. (1993) Elephant Management in Nyaminyami District, Zimbabwe: Turning a liability into an asset. WWF Project Paper No. 33. Typescript 16pp. (Paper presented at the IUCN/SCC African Elephant Specialist Group Meeting, Victoria Falls, Zimbabwe, 17 22 November, 1992)
- 34. Mackie, C. (1993) Aerial survey of large herbivores in northern Mukwishe communal land and southern Chewore area. WWF Project Paper No. 34. Typescript 9 pp.

- 35. Mackie, C (1993) Aerial census of herbivores in western Dande communal land (Kanyurira ward) 1990 1992. WWF Project Paper No. 35. Typescript 12pp.
- 36. Bond. I, (1993) The Economics of wildlife and landuse in Zimbabwe: An examination of current knowledge and issues. WWF Project Paper No.36. Typescript 53 pp.
- 37. Taylor, R. D. and Mackie, C. S. (1993) Aerial census of elephant and other large herbivores in the northern Sebungwe and western Dande 1992. WWF Project Paper No. 37. Typescript 29 pp.
- 38. Taylor, R. D., Blake, D. K. and Loveridge, J. P. (1993) Crocodile numbers on Lake Kariba, Zimbabwe and factors influencing them. WWF Project Paper No. 38. Typescript 13 pp.
- 39. Hoare, R. E. and Mackie, C. S. (1993) Problem animal assessment and the use of fences to manage wildlife in the communal lands of Zimbabwe. WWF Project Paper No. 39. Typescript 16 pp.
- 40. Taylor, R. D. and Cumming, D. H. M. (1993) Elephant Management in Southern Africa. WWF Project Paper No. 40. Typescript 23pp. (Paper presented at the European Bureau Conservation and Development Conference on Responsible Wildlife Resource Management, Brussels 29-30 November, 1993.)
- 41. Cunliffe, R. N. (1994) Assessment of the Wildlife Resources in Nyatana Wildlife Management Area, Mudzi District. WWF Project Paper No. 41. Typescript 25pp + 4 maps.
- 42. Mackie, C. S. and Taylor, R. D. (1993) A survey and census of large herbivores in the Mavuradonha Wilderness Area and Great Dyke State land and an assessment of management inputs. WWF Project Paper No. 42. Typescript 13 pp.
- 43. Leader-Williams, N. (1994) Evaluation of the Rhino Conservancy Project in Zimbabwe. WWF Project Paper No.43. Typescript 23 + 4 pp.
- 44. Cunliffe, R. N. (1994) The Impact of the Ivory Ban on Illegal Hunting of Elephants in Zimbabwe. WWF Project Paper No. 44. Typescript 66 pp.
- 45. Cunliffe, R. N. (1994) A Feasibility study for a proposed wildlife project along the Gwampa Valley within Nkayi and Lupane Districts. WWF Project Paper No. 45. Typescript 42 pp. + 3 maps.
- 46. Cumming, D. H. M. (1994) Are multsipecies systems a viable landuse option for Southern African savannas? WWF Project Paper No. 46. Typescript 38 pp. (Paper presented at *International Symposium on Wild and Domestic Ruminants in Extensive Land Use Systems*, Humbolt University, Berlin, 3-4 October 1994.)
- 47. Mackie, C.S. and Chafota, J. (1995) Aerial survey of large mammals in Magoe District (North West Tete Province) Mocambique. WWF Project Paper No. 47. Typescript 18 pp. + 2 maps. (Appendix 4 Full set of data sheets)
- 48. Mackie, C.S. (1994) Aerial census of elephant and other large herbivores in selected ares of the Parks and Wildlife Estate and Communal Lands 1994. WWF Project Paper No. 48. Typescript 24 pp.
- 49. Mackie, C.S. (1995) Aerial census of elephant and other large herbivores in the Sebungwe, Dande and Zambezi Valley Escarpment 1995. WWF Project Paper No. 49. Typescript 35 pp.
- 50. Mackie, C.S. (1997) Aerial census of elephant and other large herbivores in the Sebungwe, Dande, Zambezi Valley Escarpment and Southeast Lowveld Communal Lands 1996. WWF Project Paper No. 50. Typescript 41 + 8 pp.
- 51. Taylor, R.D. and Mackie, C.S. (1997) Aerial census results for elephant and buffalo in selected Campfire areas. WWF Project Paper No. 51. Typescript 32 pp.