

SADC REGIONAL PROGRAMME FOR RHINO CONSERVATION

TRAINING IN RHINO MONITORING TECHNIQUES COURSE REPORT: ZIMBABWE

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*Training in rhino monitoring techniques:
Course for Zimbabwe scouts
SADC RPRC Task 4.1-1.4*



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ABOUT the SADC Regional Programme for Rhino Conservation:

The Programme is funded by the Italian Ministry of Foreign Affairs, Directorate General for Development Cooperation (Project AID 5064).

The Programme is contracted to CESVI and implemented through a regional consortium which comprises:

- The Secretariat of the Southern Africa Development Community (SADC)
- IUCN-ROSA (The World Conservation Union - Regional Office for Southern Africa)
- The IUCN African Rhino Specialist Group
- WWF-SARPO - (World Wide Fund for Nature - Southern Africa Regional Programme Office)
- CESVI (Cooperazione e Sviluppo)

The **Programme goal** is to contribute to maintain viable and well distributed metapopulations of Southern African rhino taxa as flagship species for biodiversity conservation within the SADC region.

The **Programme objective** is to implement a pragmatic regional rhino strategy within the SADC region following the acquisition of sound information on, firstly, the constraints and opportunities for rhino conservation within each range state and secondly, the constraints and opportunities for rhino metapopulation management at the regional level.

DISCLAIMER

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**SADC Regional Programme for Rhino Conservation
Rhino Monitoring Techniques Training Course
Zimbabwe Parks and Wildlife Management Authority**

**Matobo National Park
27th - 31st October and 3rd - 7th November 2003**

Consultant: Rob Blok

Executive summary

There is little doubt that the rhino populations in the Southern African range states continue to be subjected to the selfish and indiscriminate slaughter by an extremely motivated poacher and tempted to do so by unscrupulous dealers within the borders of these range states.

Noble efforts and interventions have attempted to stem the demise of once secure populations. Scouts of the Zimbabwe Parks and Wildlife Management Authority work under the most testing of circumstances to protect and conserve the rhino stock.

The old adage of not knowing what you are losing if you don't know what you have, holds true when considering management interventions for rhino populations. It is with this in mind that the requirement to conduct training programmes for scouts to develop skills in monitoring techniques and a deeper understanding of rhino management was identified.

Two training courses were presented to 25 scouts from rhino range National Parks as well as conservancies in Zimbabwe. By all accounts the training was extremely well received and the participants left with buoyed enthusiasm and motivation as well as a greater respect for the management challenges that face the decision makers in respect of rhino management.

Participants were subjected to theoretical presentations as well as practical applications of rhino monitoring. The knowledge acquired during the formative training period was tested by a practical and theoretical evaluation. It became clear during the course of the training that the majority of the participants had a deep understanding and grasp of the basic concepts of rhino monitoring techniques and that with a little refinement could adequately apply this knowledge to field based data collection. Of the 25 participants 17 passed with merit (90% and above); 5 passed with an average score of 80% or higher and the remaining 3 attained a score of 79% or less.

It has become evident during the presentations of these training courses that the scouts in general are eager to learn and apply their acquired skills. It is recommended that follow up training, refresher courses, be conducted. These courses should be offered "in house" by a conservation manager and should be used to evaluate the impact the training has on rhino conservation in general in respect of the collection of accurate field data; the processing of the field data to produce sound reports on rhino population dynamics and the consequent decisions regarding the individual rhino populations.

It may be prudent to consider offering advanced training courses to middle management to hone their skills in basic rhino management principles. It appears that the best intentions to motivate and train junior staff are often negated by apathy and a lack of understanding at middle management level.

The training programmes are well structured and offer insight into the dynamics of rhino management and conservation. There remains little doubt that the impact of these training interventions, will translate to higher degree of commitment from the scouts in pursuing the collection of accurate information of the rhino populations in the areas of their responsibility.

Training programme evaluation:

Two training programmes were conducted and were structured to take place over five days over a two-week period (Annex I). A total of 25 scouts participated in the training during this period and were from diverse conservation backgrounds.

The table below details the particulars of the participants:

Table 1: Course participants ~ 27th to 31st October 2003

Name	National Park or Conservancy
Israel Ngarira	Barberton Ranch
Tebe Moyo	Thetford Estate
John Mvula	Sinamatella ~ Hwange
Augustine Gomba	Sinamatella ~ Hwange
Anderson Munkhuli	Sinamatella ~ Hwange
Henziby Chimanikire	Matusadona N.P.
Isaac Chihosana	Matusadona N.P.
M.A. Ncube	Matusadona N.P.
M. Mawoneke	Matusadona N.P.
Shepherd Machona	Matobo N.P.
Isaac Dhemba	Matobo N.P.
Raphael Phuthi	Sinamatella ~ Hwange

Table 2: Course participants ~ 3rd to 7th November 2003

Name	National Park or Conservancy
Alexius Shoko	Sinamatella ~ Hwange
Enock Ndlovu	Sinamatella ~ Hwange
Sibuzo Ndlovu	Sinamatella ~ Hwange
Bongani Ndlovu	Matusadona N.P.
Douglas Kuramba	Matusadona N.P.
Richard Ndlhovu	Sinamatella ~ Hwange
Edward Ncube	Matusadona N.P.
Kennedy Chimusono	Matusadona N.P.
Themba Sibanda	Matusadona N.P.
Nelson Mandukuse	Chipinge Safari Area
L.T. Sazu	Chipinge Safari Area
Passmore Mlambo	Chipinge Safari Area
Obediah Mutepfa	Chipinge Safari Area

The two scouts from Chipinge Safari Area who were elected to attend the first training course failed to arrive and joined the second training course with the remaining Chipinge scouts. These scouts arrived on the evening of the second day of the training and consequently missed a large portion of the theoretical training. It was agreed that Israel Ngarira, (contracted to be trained as a course

instructor: report attached as Annex II), would allocate the third day to bring the new arrivals up to speed with the course content whilst the balance of the trainees conducted practical exercises in the IPZ.

The training course focused on discussing the theoretical techniques in respect of rhino monitoring techniques as well as practical applications of these techniques *in situ* with students practicing on white rhino in the IPZ at Matobo N.P. (Refer to annexure 1 for course programme). The results from the first encounters with live test cases were a cause for great concern. The concept of accurate and consistent data collection was emphasized and after the first practical exercise the scouts were shown the variations in the data collected from the same rhino. The impact of this exercise was astounding as the scouts related the theory to the practical and clearly understood the ramifications of poor data collection.

Common errors encountered in respect of the above include the following:

1. Left and right ears are swapped.
2. Notches are not drawn accurately or not seen.
3. Details in the field notebooks are insufficient. Detail is either lacking or incorrect.

Scouts who had little or no experience with white rhino displayed an air of caution when approaching the animals. The concept of approaching rhino to within a safe distance for the observer as well as close enough to minimize the disturbance to the animal was discussed. The essential tool for monitoring rhino accurately is a pair of good quality binoculars. One simply cannot monitor rhino without this item. It became evident during the training courses that some scouts were suffering from poor eyesight. The detail on the field data forms indicated an uncoordinated attempt to transfer visual data to the note book. An attempt should be made to secure funds and resources to assist these staff members as they have a tremendous amount of field experience to offer the rhino management programme.

The quality of field data collection improved dramatically during the course and the inclusion of a practical evaluation at the end of the training period forced the scouts to concentrate and apply their knowledge in improving the quality of the collected data. All field exercises were evaluated on an inter-personnel basis, where an opportunity was created to highlight individual errors.

Field exercises furthermore focused on the techniques for approaching black rhino on foot and an early start paid dividends for participants on the first training course when four black rhino were successfully tracked and monitored. The behavioural differences between the two species of rhino were noted and the scouts realized the refinement of monitoring techniques to assist in the collection of adequate detail for black rhino. The techniques of using binoculars effectively; drawing ear notch configurations and horn design and shape accurately; confidently sexing and ageing the animal within a matter of seconds was overstated during the course presentations.

The results from the theoretical test as well as the practical evaluations were encouraging. The scouts applied their newfound knowledge to the evaluation process and the majority successfully passed. Minorities of scouts however do require more attention and follow up training. With these scouts it is critical that follow up training is conducted in order to hone their skills and develop their knowledge base so that they too could contribute to the rhino management programme.

The results of the theoretical and practical training are detailed below.

Table 3: Evaluation results ~ 27th – 31st October 2003

Name	Theoretical mark	Practical mark	Total	%
Israel Ngarira	80/84	20/20	100/104	96%
Tebe Moyo	67/75 (adjusted)	14/20	81/95	85%
John Mvula	83/84	20/20	103/104	99%
Augustine Gomba	83/84	20/20	103/104	99%
Anderson Munkhuli	78/84	20/20	103/104	99%
Henziby Chimankire	82/84	20/20	102/104	98%
Isaac Chihosana	81/84	18/20	99/104	95%
M.A. Ncube	74/84	19/20	93/104	90%
M. Mawoneke	71/84	15/20	86/104	82%
Shepherd Machona	80/84	19/20	99/104	95%
Isaac Dhembha	65/75 (adjusted)	18/20	83/95	87%
Raphael Phuthi	58/84	14/20	72/104	70%

The adjusted marks for the two scouts above were to compensate for their lack of understanding of basic map work.

Table 4: Evaluation results ~ 3rd – 7th November 2003

Name	Theoretical mark	Practical mark	Total	%
Alexius Shoko	81/84	19.5/20	100.5/104	97%
Enock Ndlovu	64/84	16/20	80/104	76%
Sibuzo Ndlovu	84/84	18/20	102/104	98%
Bongani Ndlovu	83/84	19/20	102/104	98%
Douglas Kuramba	84/84	20/20	104/104	100%
Richard Ndlhovu	77/84	18/20	95/104	91%
Edward Ncube	72/84	18/20	90/104	86%
Kennedy Chimusono	78/84	16/20	94/104	90%
Themba Sibanda	83/84	18/20	101/104	97%
Nelson Mandukuse	77/84	17/20	94/104	90%
L.T. Sazu	77/84	18/20	95/104	91%
Passmore Mlambo	36/84	15/20	51/104	50%
Obediah Mutepfa	55/84	15/20	70/104	67%

Douglas Kuramba attained a 100% pass mark for the course. This is a superb achievement and should be noted by his supervisors. The remaining top contenders in this group however came in as close seconds to Douglas and their contributions to improving the quality of data and information of rhino populations in their respective areas of responsibility will be highly regarded and valued.

Recommendations and observations:

The following recommendations should be considered in respect of future training courses in rhino monitoring techniques:

1. The course programme and duration should adequately cater for theoretical and practical lectures.
2. The theoretical and practical evaluations as well as the awards ceremony on the final day contribute positively to desired outputs of the training programme.
3. Minor alterations to the course content will be attended to. These include the following:
 - a. Poster of the map of Africa detailing the rhino distribution.
 - b. Update information regarding rhino population statistics.
 - c. Minor alterations to the field data booklets.
 - d. Include a module on basic GPS techniques.
 - e. Include the concept of rhino notch configurations to the manual.
 - f. Include more examples of common errors to the module on field data collection.
4. It is recommended that the scouts are adequately screened prior to their selection to attend training courses in respect of their academic and literacy qualifications.
5. *In situ* training at the various rhino sanctuaries may be more beneficial as scouts are trained to track; monitor and record rhino in a familiar environment. Comments are often muted regarding the relative benefits the Matobo scouts have over scouts from other areas in terms of rhino monitoring. The logistics of offering this type of training would have to be explored.
6. It has become abundantly evident that an advanced training course should be offered to the middle management conservation as well as ecological advise personnel. The lack of commitment and apathy as well as a clear lack of understanding of the concepts of rhino conservation may negate the entire scout training initiative. The following modules are recommended for the above course:
 - a. Background to the National Rhino Management Strategy
 - b. Rhino monitoring techniques training
 - c. Rhino database and programme management
 - d. Scene of crime
 - e. Counter intelligence
 - f. Security threat analysis
 - g. Advanced GPS
 - h. Introduction to GIS
 - i. Rhino horn stock pile management
 - j. Development of contingency plans
 - k. Basic tracking skills
7. The mentoring and training of Israel Ngarira exposed a number of opportunities that require further discussion. After consulting with the said person it was agreed that the following recommendations be considered.

- a. He has to refine and master his presentation and teaching skills to a level where he feels confident that the intended transfer of knowledge would be facilitated.
- b. He is in receipt of the version 5 of the Sandwith training manual as well as a set of posters and should study these to familiarize him with the course content. A fundamental aspect to bear in mind is that the imparting of knowledge in respect of rhino monitoring is broader than that described in the manual. Field based experience is essential in refining these skills and relating to these in the classroom.
- c. It is recommended that Israel be instrumental in conducting follow up training courses with those participants who have passed the course. This is a critical flaw in the entire initiative as no follow up evaluations and training is conducted. It is envisaged that Israel would spend one day re-capping the theoretical instruction and evaluating the skills on the second day. This should take place at least on an annual rotation and should be conducted *in situ* at the relevant National Parks. He should furthermore evaluate the data capture and analysis at these stations during the visits.
- d. I have no doubt that Israel has the potential and attributes to contribute to this initiative. He is dedicated; hard working and has a good sense and acumen that complement his quiet demeanour.

Acknowledgements

The value of this type of training intervention should not be underestimated neither should the financial and logistical support that are employed to facilitate this type of training.

All accolades should go to Verity Bowman who single handedly managed to arrange all the logistical support required for the training. A special thanks to the Marwell Trust for contributing financially to the travel and accommodation requirements of all the participants.

Furthermore special thanks are extended to the SADC Regional Programme for Rhino Conservation for their financial support of the training course.

ANNEX I

TRAINING COURSES IN RHINO MONITORING TECHNIQUES

MATOBO NP

27th - 31st October and 3rd - 7th November 2003

PROGRAMME

Day 1	08h00	Welcome and introduction
	09h00	Introduction to rhino conservation
	10h30	Tea
	10H45	Training course background and desired outcomes
	12h30	Lunch
	14h00	Rhino biology and basic ecology
	15h30	Tea
	16h00	General discussions
	17h00	End of day 1
Day 2	08h00	Recap on previous days discussions
	08h30	Basic map work and patrol techniques
	10h30	Tea
	10h45	Ageing and sexing rhino
	11h30	Identification features ~ ears and horns
	12h30	Lunch
	14h00	Introduction to field note books
	14h30	Practical ~ IPZ
	17h00	End of day 2
Day 3	05h00	Practical ~ IPZ (Approaching black rhino)
	12h30	Lunch
	14h00	Introduction to rhino condition assessment
	15h30	Tea
	16h00	Theory of clean rhino and the rhino programme
	17h00	End of day 3
Day 4	05h00	Practical ~ IPZ (Approaching black rhino)
	12h30	Lunch
	14h00	Practical evaluation ~ IPZ white rhino
Day 5	08h00	Written test
	10h30	Tea
	11h00	Course conclusion and award ceremony
	12h00	End of final day

ANNEX II

TRAINING COURSE IN RHINO MONITORING TECHNIQUES REPORT BY ISRAEL NGARIRA (Trainee for Course 1, Assistant Instructor for Course 2)

The Rhino Monitoring Techniques Training was carried out in the Matopos National Park based at Maleme Rest Camp with practicals held in the nearby Wovi area IPZ. The workshop comprised 2 one-week sessions held from October 27th -7 November 2003. Mr Robert Block from South Africa conducted the same training programme each week so as to transfer skills to a larger number of our local game scouts. Scouts from different National Parks were there, 4 from Sinamatella IPZ in Hwange National Park, 4 from Matopos National Park and 2 from Matusadona National Park-Scouts from Chipinge were allocated 2 places in each week but due to transport difficulties did not arrive until the middle of the second week. The workshop was so informative, impressive and comprehensive as far as rhino monitoring is concerned.

The rhino monitoring techniques, which were presented, are practical and applicable. We were taught that it is important to gather consistent and accurate data concerning sex ratios, age groups, condition of the veld in relation to the animals (rhinos) and identifiable features according to individual members of our family (rhinos) for better management. It was so clear as to how you can gather this data in the field and the following equipment was recommended to enhance accuracy in management; binoculars, data collecting booklets, pencil and rubber, Maps, GPS," and sometimes a camera. During the training session we learned practical ways of how one can collect data in the field. Some aspects, which can adversely disturb your monitoring mission" such as wind, alarming agencies like birds, other animals, and personal noise were practically demonstrated. Possible places one can find a rhino were given, and practically demonstrated in the White Waters Game Park (Matopos). All the practical sessions were carried out after everyone had understood the basic theory of monitoring techniques.

The biology, cases of the animal to highly threatened with extinction and CITES regulation on the trade in rhino was well explained. Since rhino extinction from poaching was considered a hot issue, it was suggested that we should involve community in the management of this special specie where possible. Close monitoring on the following aspects in rhino management were stressed; carrying capacity, breeding rate, stocking rate, and interaction with other animal species since lack of correct information on some of the above aspects can be detrimental to the ecosystem.

After this training, which I was a trainee in the first week and partly a trainer in the second week, I obtained a certificate of attendance as well as a merit certificate after writing an exam. From the outcomes of this training I realized that there is a lot of work, which need to be done here in Zimbabwe as far as rhino management is concerned and that the training opportunity for Scouts is long overdue.

Many of the Scouts commented that they now knew why they were asked to patrol for rhino, as previously they had no background information on the reasons for monitoring critically important to make right management decisions. Wardens need to receive some training for better data analysis. Information relating to rhino data and monitoring must flow in both directions between Scouts and

Management to ensure that appropriate quality of work is maintained and that stakeholder interest contributes to good levels of morale and appropriate activity.

Enough equipment for monitoring like, binoculars, maps, GPS and data collection booklets must always be available to game scouts when ever in the field for monitoring.

A module, which can provide information on how to look after boma-managed rhinos and how to track radio collared rhinos, must be disseminated to all who are involved in rhino management through out the country.

I enjoyed being a trainee but it was a big challenge for me to be part of the trainer. I was pleased with how the trainer was interacting with the trainees. Rob Block was innovative and capable of changing anyone's mind towards a new idea in conservation. He was so factual and could conduct the training session professionally according to the pace of a slowest learner regardless of our different levels of education. It was a privilege and honour for me to have that opportunity to attend such a workshop. I still need more exposure in this field of rhino management.

Acknowledgements

My grateful thanks to Mr Rob Blok and Dr Rob Brett for the opportunity to attend this course and to Parks and Wildlife Management Authority and Marwell Zimbabwe Trust for providing logistical support to the course participants.

Coming together is Beginning
Keeping together is Progress
Staying together is Success

ANNEX III

PHOTOGRAPHS



COURSE 1 PARTICIPANTS



COURSE 2 PARTICIPANTS