
CHAIRMAN'S REPORT: AFRICAN RHINO SPECIALIST GROUP

Martin Brooks

PO Box 13053, Cascades 3202, KwaZulu-Natal, South Africa

Not that I have anything against elephants, but it is nice to have an edition of *Pachyderm* that is dominated by rhino papers from both Africa and Asia. The African Rhino Specialist Group (AfRSG) is very grateful to WWF for sponsoring the publication of this edition. Black rhino monitoring is a particular focus of this edition, and a number of papers should be of use and interest to black rhino managers and researchers on the ground. In recent years the comparison and synthesis of standardised performance data from populations within rhino metapopulations has facilitated improved biological management decision-making, contributing to the maintenance of high rates of population growth. The paper on standardised black rhino condition assessment scoring adds another useful technique to assist in the ongoing assessment of black rhino population performance. To allow us to draw comparisons between areas I would encourage everyone to standardise and use this condition scoring system. Getting a radio-collar to stay on a black rhino has also proved to be a problem for many years. Fortunately a much improved radio-collar has been developed and has proved itself in the field. Those interested will find more details in this edition. A further paper summarises and discusses the history of one of Africa's best monitored and important black rhino populations.

RHINO HORN FINGERPRINTING FOR SECURITY

In this report, I would like to focus my attention on a major project the AfRSG is co-ordinating so that law enforcement staff will be able to source confiscated rhino horn. To do this it was necessary to build upon successful, pilot horn fingerprinting projects and undertake a major project to determine the chemical composition of rhino horn from as many as possible of the major rhino populations in the African Range States. Statistical analysis in the pilot studies were limited and undertaken in isolation, and there was also a need to develop these analyses further so that horn fingerprinting can become a practical field tool. For this reason the AfRSG is undertaking a major horn fingerprinting for security project with funding from WWF.

After much effort, significant progress has been made by the AfRSG office in getting samples for analysis from as many of the Continent's key and important rhino populations as possible. Additional samples left over from early pilot studies at the University of Cape Town were also secured by the AfRSG's Scientific Officer to increase sample sizes and coverage. After thorough consultation and investigation it was decided to analyse the raw horn samples using three different techniques.

Firstly, Inductively-Coupled-Plasma-Optical-Emission-Spectrometry (ICP-OES) is being used to quantify trace elements in preference to the more old-fashioned, time consuming and more expensive Neutron-Activation-Analysis (NAA) used in the pilot studies. The ICP-OES analysis measures concentrations of 31 elements (measured in low parts per million) and 13 element ratios.

Secondly, samples are also being analysed using Laser-Ablation-Inductively-Coupled-Plasma-Mass Spectrometry (LA-ICP-MS). This technique is routinely used to fingerprint gold and recently has been successfully used to investigate stock theft. LA-ICP-MS is a qualitative technique with horn being sampled using a laser, and analysed in a Mass Spectrometer. The detection limits are in the parts per million and parts per billion region, and data are being obtained on 131 isotopes of 56 elements.

Thirdly, the horn samples are also being analysed for the lighter carbon and nitrogen stable isotopic ratios at the University of Cape Town.

Both the ICP-OES and LA-ICP-MS work is being undertaken by Anglo American Research Laboratories who have tailor-made statistical software which has the capacity to analyse the raw horn fingerprinting data from all three techniques.

The decisions on how and where to analyse the samples were made on the grounds of cost, time and labour needed both to prepare and analyse samples, continuity of analytical methodology, modernity of techniques, a preference to be able to do the analyses locally in Africa, the credibility and professionalism

of the labs and institutions involved in sample analysis, and the availability of tailor-made statistical software that can be used to analyse the data.

All horn samples in the AfRSG's possession have been prepared for analysis and both the Anglo American and Cape Town labs have been sent the first batch of samples.

This project will be completed during 1999, and the results are being eagerly awaited by law enforcement officers and wildlife investigators.

CONCERN FOR SITUATION IN CAMEROON AND THE DEMOCRATIC REPUBLIC OF CONGO

The situation in both the Democratic Republic of Congo (DRC) and Cameroon - homes to the few remaining animals of the two rarest African rhino subspecies remains critical and of concern. Lack of any real high level government will and commitment to rhino conservation in Cameroon continues to be a major problem hampering conservation of the last western black rhino (*Diceros bicornis longipes*); the unrest in the DRC, and poaching from Sudan continues to pose a threat to the remaining northern white rhino (*Ceratotherium simum simum*) in Garamba National Park.

STATUS CONTINENTAL ACTION PLAN

A copy editor is incorporating the comments of a number of reviewers of the revised updated Action Plan before it is scheduled for final acceptance by the AfRSG in June. 1,300 copies of the Action Plan will be published by IUCN in November 1999, with the revised plan being made available shortly afterwards on the World Wide Web. This plan establishes rhino conservation management priorities, and promotes strategies and approaches most likely to succeed, encouraging their adoption by conservation agencies.

AFRSG MEMBERS ACTIVE IN NATIONAL AND REGIONAL RHINO CO-ORDINATING BODIES AND WORKSHOPS

As usual, the AfRSG has facilitated co-ordination and co-operation throughout the continent, through regular

sharing and networking of information and research findings. This is promoted by the many AfRSG members who are active members of, or interface with, national and regional rhino management groups, co-ordinating committees and governmental and non-governmental conservation agencies.

In an important development, a black rhino workshop was held in Morogoro, Tanzania. This workshop was attended by the AfRSG Scientific Officer and four other AfRSG members, and led to the drafting of a fully revised and improved updated Tanzanian black rhino conservation plan.

Four AfRSG members also took part in a workshop in March 1999 which developed a draft national white rhino conservation strategy for South Africa. A wide range of stakeholders were represented at the workshop from both the State and private sectors (which now manages 22% of South Africa's white rhinos). The draft strategy produced by the workshop is being sent to the South African Department of Environment Affairs and Tourism which will seek comments prior to adoption.

Drawing heavily on deliberations of an "Indicators of Success" working group at the 1998 AfRSG meeting in Namibia, the AfRSG's Scientific Officer prepared a background document for the CITES workshop of experts to develop the indicators process further as called for by CITES Resolution Conference 9.14. This workshop was held at TRAFFIC headquarters in Cambridge in early December 1998, and sought greater input from both TRAFFIC and the Asian Rhino Specialist Group. The workshop was attended by the Scientific Officer and four other AfRSG members, and a report on progress and recommended future approaches has been submitted by TRAFFIC to the CITES Secretariat.

EMPLOYMENT OF THE SCIENTIFIC OFFICER

While lack of funds precluded the full-time employment of the AfRSG's Scientific Officer during 1998, thanks to support from IRF, WWF and the USA (via a grant to IUCN), he will be able to be employed at least till the end of November 1999.

POSTSCRIPT

Finally I would like to take the opportunity of commending the outgoing editor of *Pachyderm*, Greg Overton, for all the excellent work he has done, and on behalf of the AfRSG, to wish him well in his new job.