Chief LKASAONA (Traditional leadership), Warmquella area: During the presentation the figures indicated the increase of rhino numbers in Etosha is faster in comparison to Kunene. What is the reason for this discrepancy?

pdPREEZ (MET), Rhino Co-ordinator: The increase in Etosha is more because of the increased knowledge of all the people involved. Mike will explore this issue further in his talk.

rdTOIT (WWF), Zimbabwe: As an outsider, the issue that growth is slowing in Kunene is a not a failure, it is an indication that the programme has been an incredible success. Management is an active process that all those involved can be proud of.

rLOUTIT: (SRT), Trustee: Also, to add to Pierre, and give further clarity to the Chief, Etosha has been the main donor population and the stimulation of the population has resulted into the increase in numbers.

2.3.3 Kunene Status and Results of SRT Study

2.3.3.1 Presentation by Mr. Michael Hearn, SRT Director of Research

This presentation disseminated the results of the report: Assessment of Biological and Human Factors Limiting the West Kunene Rhino Population, Semester 4-5 Task 5.3-1.1 (Hearn, 2003). A background of the conservation efforts was presented, discussing the suite of approaches undertaken by community, government and private sector stakeholders in the successful conservation of the Kunene black rhino. Unique aspects of this population were outlined. This included this population representing one of only four unreconstructed populations of black rhino in the world – where no rhino have been reintroduced to supplement the population – others include: the remaining animals in Cameroon; the Masai Mara population in Kenya; and, the Hluhluwe-Umfolozi Park population in South Africa.

Current monitoring methods used to assess population performance and distribution were outlined, highlighting the role of SRT teams in gaining access to the often rugged terrain by often innovative means, such as the Camel team based from the village of Khowarib. This highlighted the role of community-based teams in undertaking patrols to monitor the black rhino, emphasising the important role of community members in this conservation programme.

The distribution of rhinos across the range was presented, indicating the ecological factors that impact the population. Home ranges of rhinos were described, how these reflect the distances rhinos must travel in search of food and water, and the availability of these resources in Kunene. Criteria to monitor population performance were described: calving intervals; calving ratios; and, sex ratios of the population and how these are used to monitor population performance. The results of these analyses were presented. (See Appendix Five).

The objectives of biological management for the Kunene population were reaffirmed: to manage rhinos in the current population for good growth; to provide animals to repopulate other arid areas of the historical range; to manage rhinos (and remove) to minimise inbreeding; and, to manage rhinos to maintain good veld conditions for other browsers & rhinos. Also, activities in support of these objectives were outlined, such as research by the SRT/DICE Darwin Initiative Programme and the MET/SADC Rhino Programme training of MET, SRT and community monitoring team. For a summary of the slides used in the presentation see Appendix Five.

2.3.3.2 Questions

In response to the presentation, the following questions, comments and answers were entertained:

dLIEBENBERG (Tourism Concession Holder), Etendeka: How does birth rate relate to infant mortality amongst rhinos?

mHEARN (SRT), Director of Research: Calf mortality has been very high in the southern range (50% of calves lost up to 2000), amplified by limited resources in that area. Also, looking at Zone 4 (only 6 animals), a series of deaths was recorded, but there is now decreased calf mortality. Zone 2 also had poor calf mortality over the same period. The highest calving mortality was recorded in Zone 1 in the late 1990s. Here we have reduced rainfall; low food availability; large home ranges; compounded by human-induced disturbance (HID), though this factor is hard to quantify. Patrolling has increased in this area, but need to explore further what the impacts are. SRT now have data captured over 20 years.

dLIEBENBERG (Tourism Concession Holder), Etendeka: when is a birth successful – up to which age?

mHEARN (SRT), Director of Research: Not enough data in Zone 4. mHEARN explains difficulty where calf mortality can decrease calving intervals.

Question 3: Are there other factors that affect breeding?

mHEARN (SRT), Director of Research: Need to understand what HID effects are: e.g. low flying aircraft, tourism. Need long periods to evaluate these factors and their potential effects.

Question 4: Study of possible reintroduction areas (e.g. Sanitatas, Orupembe) – what are your preliminary results?

mHEARN (SRT), Director of Research: Darwin Initiative Programme is carrying out this research. These areas are part of many that are being assessed. Six conservancies will be assessed as part of this study (in historical range). Too early to interpret findings at this stage.

pdPREEZ (MET), Rhino Co-ordinator: SRT not deciding on these areas. We all need to set criteria, even though SRT research is ongoing. Direction on the criteria to be used will have to come out of this room.

pKAPI: (Field Officer), Ehirovipuka Conservancy: Behaviour of rhinos: do males and females stay together from birth? Is there inbreeding if the same animals stay together in same area?

mHEARN (SRT), Director of Research: More than one male in each area who is doing the mating. This can change depending on population dynamics. There may be "sneaky rutters", where a younger animal may cover a receptive female. SRT are collecting DNA in order to use genetic studies to determine which males are breeding.

uNAIBEB (Field Officer), Dora !Nawas Conservancy: It was said that some of the deaths may be due to exceeding carrying capacity e.g. Z1 and Z8. Is this true?

mHEARN (SRT), Director of Research: Hard to say which of the associated factors are the exact cause of death. Okongwe: high mortality in all categories. Very stressed zone due to

limited water availability. Also the possible tourism induced stress in Zone 1. Compound the poor habitat with HID and there will be deaths. We need to invest in biological management in these areas to get the best potential population growth.

fNASEB (Traditional Leadership), Fransfontein: Carrying Capacity, one clarification. As a farmer I have goats, cattle and donkeys. "While some animals are grazing, the cattle are wasting grass". We are now dealing with rhinos, next will be elephants, and the next springbok? Need clarification on what is the carrying capacity for each species?

pdPREEZ (MET), Rhino Co-ordinator: Very difficult, need to look at rhinos first. Elephant will play future role. E.g. Springbok, already in conservancy plan, and utilisation options are already dealt with in this process. Rhinos can not be hunted as it is a special species and therefore require a unique management plan..

Senior TC jJAPUHA (Traditional Leadership), Omatendeka area: I greet you all; I am Chief in the Omatendeka conservancy. I am with Alfonse, who is one of my committee members, to take care of conservancy issues. He appreciates this workshop, a meeting which is tackling all the rhino issues, which they have heard about before. I thank you all that we are all still together, with the conservancies and their partners. He is now glad to see that we are all partners in rhino management, and glad that the issue of disturbance to rhinos is being recognised. Our traditional grazing system may affect the rhino management, but we are still all together. That's why they did zone their conservancy areas (e.g. game only, cattle areas, etc) and they have already started with their conservation measures.

2.4 Does the Case for Biological Management Exist in Kunene?

2.4.1 Opinions Towards Biological Management

With facilitation by bKRUGER, following a review of the presentations, a question was posed for delegates to answer: "From your own perspective, would you like to see rhino numbers in the Kunene Region increase at maximum rate?"

Participants were each given a blue dot to vote on this question. The choices to be made were "Yes", "No" or "don't know"

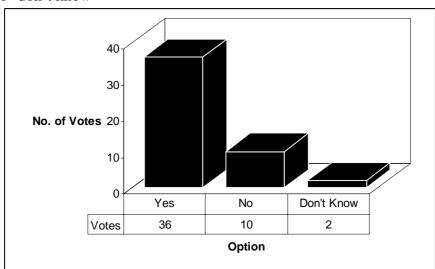


Figure 4. Results of the question posed for delegates to answer supporting, or not, biological management of black rhino in Kunene.