

through Tete, Malawi, Milange, Molumbo, Gurue, Alto Molocue, Nampula, the general view on rhino in the north seemed to be positive. However, nobody seemed to be able to confirm these reports.

Judging from evidence and talking to the Mecula administrator, the population of rhino in Niassa is assumed to survive around the east and west banks of the Lugenda, stretching from the junction of the Lugenda and Metapire Rivers in the west, across to the southbound road to Marrupa. The lack of restriction on human habitation and/or settlement in the Reserve can only be undermining the present game population. Nevertheless settlement seem to have progressed in the form of large villages which could mean potential for Integrated Conservation Development Projects (ICDP) or CBNRM projects. There was no sign of permanent human settlement in the rhino area, but according to the local authorities, there is a reasonable flow of people from Tanzania and the neighbouring province of Cabo Delgado. In September 1996 the last black rhino was seen in the Niassa Game Reserve by the staff and after that it is not known if the species is still present. The rhino was seen at 11°57'S, 38°10'E.

The information from Tete Province indicates that in Angonia District there are some black rhino. A religious group reported to DNFFB from 1995 to 1996 that some people tried to sell fresh rhino horns. After the information our staff member travelled to the site and the local people who were asked suggested the existence of rhino in small numbers in the middle of the forestry area where accessibility was difficult. Unfortunately, nobody was able to verify the reports.

From Gaza safari operators, in January this year, we were informed that the Coutada 16 area has two white rhino and another one was killed last year. Also this year a report from Gaza Province showed that a man was arrested and accused of killing a rhino whose horns he was found with. There are another three poachers accused of killing rhino in the area. Near the area where they were arrested, the guards saw part of the head of a rhino and the poachers said that they burned the head with the horn, which is not true, because it was possible to see that the horn was removed before burning the head.

There are two possibilities for the survival of the Mozambique rhino gene pool.

The setting up of an intensive protection zone of at least 100 ha within Niassa Game Reserve, where black rhinos could be re-introduced. This area should be electrically fenced and have guards to intensively patrol the area in order to discourage poachers. Once boundaries have been set up, it would be beneficial to arrange for villagers from villages in Niassa, situated outside the IPZ, to be paid to guard the area surrounding the IPZ. Monitors and guards should then be hired to protect the IPZ interior.

For the white rhino in Coutada 16, as the area is under a TFCA project it is expected that it will be divided to form a protected area and concessions for ecotourism. The rhinos could be given intensive protection in the protected area.

For such projects to be successful, rhino specialists from other countries should train the locals.

3.11.5 Namibia (P. Erb and R. Loutit)

Namibia has 700 black rhino in formal conservation areas, communal land and on private farming land. This makes Namibia one of the four important range states for black rhino together with South Africa, Kenya and Zimbabwe. Namibia has 163 white rhino.

The rhino conservation goals in Namibia are:

- ◆ To establish a long-term viable population of at least 2000 black rhino in suitable habitat and similarly, 500 white rhino.
- ◆ To institute a utilisation scheme for black and white rhino to achieve and justify the above mentioned goal in accordance with CITES regulations.
- ◆ To investigate and institute a National Rhino Conservation Plan, an annual Action Plan and research projects to cover actions such as de-horning, vaccination, translocation and sale of live animals; in co-operation with regional and international organisations as far as possible.

Active rhino management in Namibia has been underway since 1966, with the black rhino population being consolidated in Etosha. Up until 1985 this subspecies of black rhino occurred in only two populations in Namibia. Since then rhino have been re-introduced into their former range in South Africa and into conservation areas and private land in Namibia. In Namibia 10 new populations have been established since 1989, when a national rhino plan was developed for both black and white rhino, with the establishment of the Wildlife Protection Service in 1989. Dehorning of selected rhino populations was undertaken to combat a flare-up of poaching around Independence in 1990. Translocations have been undertaken within or into Etosha (57 black rhino, 26 white rhino) and out of Etosha (99 black rhino).

The black rhino population in Etosha National Park currently represents the largest black rhino population in a single conservation area and 70% of all *Diceros bicornis bicornis*. Censusing and monitoring this large population effectively is a challenge. 12,360km² of Etosha seem to be good black rhino habitat with a very conservative estimated carrying capacity of 0.05 rhinos/km² (618 on 12,360 km²). Sub-population density reaches 0.2 rhinos/km².

A national Rhino Advisory Committee includes representatives from different rhino areas and MET top management, meeting every three months.

3.11.6 South Africa (R. Emslie and A. Hall-Martin)

This talk briefly described the historical successes of rhino conservation in South Africa, mentioning the overall increase in white rhino numbers up to 7,913 in 1997 (from only 20 in 1895) and black rhino numbers up to 1,043 by 1997 (from only 115 in 1930). In 1997, South Africa conserved 976 south- central black rhino, 34 or south-western black rhino and 33 out of range eastern black rhino. All white rhino in the country are southern white rhino.

Most of the details of this talk can be found in pp 51 to 55 on the IUCN African rhino status survey and conservation action plan handed out to all delegates at the meeting.

Conservation in South Africa is complicated with nine provincial conservation agencies and SA National Parks having responsibility for conservation on State-owned and -run Parks and Game Reserves. The private sector also plays an important conservation role with both black and white rhinos being owned and traded. Sales of surplus rhinos from State-run reserves generate substantial revenue that helps subsidise the high costs of successful rhino conservation.

Issues addressed in the talk included a brief overview of the rhino conservation measures being taken (concentrated law enforcement, use of intelligence networks, routine ongoing rhino monitoring and translocation with a view to increasing metapopulation growth rates, community conservation programmes, generation of revenue from conservation, plus recent heavy sentencing of convicted rhino offenders with up to ten-year jail terms).