

### 3.2 Conservation Activities in Nepal

Crisis to Biological Management: Rhinoceros, grassland and public engagement Nepal Darwin Initiative Project 2007-2010

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Greater one-horned rhinoceros are restricted to small protected areas (PAs) primarily in north-eastern India and Nepal (Chitwan National Park-CNP, Bardiya National Park-BNP and Suklaphanta Wildlife Reserve-SWR). These rhinos are highly vulnerable due to intensification of agriculture and habitat loss, a burgeoning human population and poaching. Furthermore, Nepal has been facing dramatic socio-economic and political challenges over the last decade that negatively impacted the recovery of rhino; which had occurred during the latter half of the 20<sup>th</sup> Century after near extinction previously. Numbers in CNP increased from 100 animals in the early 1980s to 544 in 2000 allowing establishment of founder groups in BNP and SWR (83 and 4 rhinos were translocated between 1986 and 2003 to BNP and SWR respectively). However, these declined by 2005 to less than 370 in CNP and less than 40 in BNP, with only 7 in SWR. Nepal still holds the second largest population in the world and for this and its other endangered species, such as the Ganges dolphin (also in severe decline), Bengal tiger (also in decline) and Asian wild elephant, and CNP has been designated a World Heritage Site.

The project was launched at a time of opportunity, the armed conflict in Nepal was coming to an end and a political process towards democratic government had been initiated. The proximate causes for rhino declines were poaching and loss of grassland habitat from encroachment and invasive alien plant species (IAPS) reducing available forage and causing risky migration of rhino outside of the PAs and reduced health and productivity. The underlying causes were weak anti-poaching systems and law enforcement, ineffective security, inadequate biological management of rhino and habitat, and a failure of the buffer zone community initiatives to provide an effective buffer from encroachment. There was inadequate awareness of the rapid deterioration of the situation with a lack of transparency at many levels. The uncertain political situation was also reducing the effectiveness of government agencies and public engagement was superficial. New policies to address changing circumstances and/or innovative strategies were also lacking.

The first two years of the project were focused on the rhino, habitat and public engagement mainly in BNP with some activities initiated in CNP and SWR and including a National Rhino Count which was a major exercise involving 50 elephants and 200 staff over a month. Our main partners, Nepal Trust for Nature Conservation and Department of National Parks and Wildlife Conservation were eager to implement and were more than receptive to our ideas. The project was productive in areas of policy (initiating new Anti Poaching Systems and the Sanctuary approach – the latter focused on Suklaphanta Reserve where there are only 5 rhino and here a link with the zoo community would be beneficial to source rhino for reinforcement), public engagement based on community village theatre which was also taken from local levels to National and International stages, departmental staff training, establishment of standardised systems for monitoring and census, establishment of baselines on alien invasive plant species, developing a growing health partnership to address disease and veterinary capacity issues in the Parks and buffer zones, a strong educational programme in Bardia with extension addressing the remote village

communities which were allied to poaching. Poaching and other pressures continued to take their toll of many species but most significantly rhino, which gave urgency to the work. By the end of year 2 a major poaching gang had been caught in Bardia, astonishingly it was involving rogue elements from the Army which are mandated to protect to rhino and this caused a storm. It was the community engagement with led to this exposure and since this drama no rhino have been lost from the park in over a year and a silent revolution is taking place in the way the Army functions in the Parks. Now the project is focusing more on Chitwan where the larger population of rhino exists and where poaching continues unabated. Here another big challenge is dealing with alien invasive plant species (*Mikania sp.*) and the project has mapped the distribution and is now researching the drivers for this plant which is destroying the habitat. There is only a year left but we hope the project momentum will take our partners on to solving the crises in Chitwan as well.

In summary; the project was set up to 1) strengthen and increase the capacity (particularly monitoring and surveillance of rhino and in anti-poaching) of Nepal's existing wildlife department officials, rangers and communities across the network of PAs (CNP, BNP, SWR); 2) strengthen metapopulation approach (including a feasibility study on sanctuary approach in SWR and/or community areas); and 3) facilitate improved governance of rhino conservation, improved public engagement and integration of politicians, stakeholders and local communities in conservation efforts and decision-making. It is achieving these goals and more but will continue to need support from the international community to conserve this vulnerable charismatic species, the Greater One Horned Rhino.