

provided by the EU Leuser Project team indicated that there is very little hope of any survivors in these regions of Aceh.

Source: Catherine R. Bloxham, James A. Burton, Ir Kuswandono, James McPerson and Barney Long, University of Bristol Expedition Report Series No. 3: Faunal and Floral Survey of Beutiong, Aceh, Sumatra 1997. University of Bristol, 1999; and personal communications by the staff of EU Leuser Project.

Ujung Kulon now has Rhino Protection Units

On the Javan Rhino Colloquium the Head of the Ujung Kulon National Park expressed the need for the establishment of Rhino Protection Units to supplement the regular park staff. Although Ujung Kulon has the highest budget and largest guard force

of any National Park in Indonesia, the Park staff does not feel confident that they can provide maximum security to the 50 odd Javan rhinos (Refer also to page 8). Consequently the Indonesian Rhino Conservation Program was requested to include Ujung Kulon in the area of operation.

In the second half of 1998 the IRCP started recruitment and training and in January 1999 three new Units were established in Ujung Kulon, with funds from IRF, WWF Indonesia and the USFWS RTCF. A base camp was established at Tanjong Lama near the Park boundary. The RPU's in Ujung Kulon consist of 2 regular Park Rangers and three patrollers recruited from the local community.

In addition to the land patrols by the RPU's two teams of Park rangers are formed to patrol the eastern coastline of the Park, to prevent poachers from landing on the Peninsula.

TRADE ISSUES

Recent Prices of Rhino Parts in Sumatra

Some prices of rhinoceros horn and hoofs in the Southern part of Sumatra have been investigated.

Value of Sumatran Rhino Horn in Southern Sumatra, per 100 grams (in Rupia)

1990 (\$ = Rp 2000)	1997 (\$ = Rp 2500)	1999 (\$ = Rp 7000)
<i>Hunter's sale price</i>		
1-1.5 million	2-2.5 million	3.5-4 million
<i>Intermediary's sale price</i>		
2.5-3 million	4-5 million	no data

Value of Sumatran Rhino Hoofs in Southern Sumatra, per piece (in Rupia)

<i>Hunter's sale price</i>		
20.000	25.000	40.000

Source: Personal Communication from Arief Rubianto, RPU Regional Coordinator, Bukit Baritan Selatan, Sumatra, Indonesia.

CITES: in Need of Standardized Indicators of Success

All five species of rhinoceros have been included in Appendix I of CITES since 1977. At the Ninth

Conference Of Parties (COP) held in 1994, the southern white rhinoceros was transferred to Appendix II for the exclusive purpose of allowing international trade in hunting trophies and live animals to appropriate and acceptable destinations. At the same COP, a review of the conservation status of rhinoceroses and the impact of conservation measures resulted in the adoption of Resolution Conf. 9.14 (Conservation of Rhinoceros in Asia and Africa). This resolution directed the CITES Standing Committee to pursue actions aimed at reducing illegal trade, while ensuring that (i) all such activities are accompanied by evaluations of their effectiveness; (ii) standardized indicators of success are developed to measure changes in levels of illegal hunting and of the status of rhinoceros populations in the range states; and (iii) the policies guiding interventions are responsive to the outcome of evaluations and are modified accordingly.

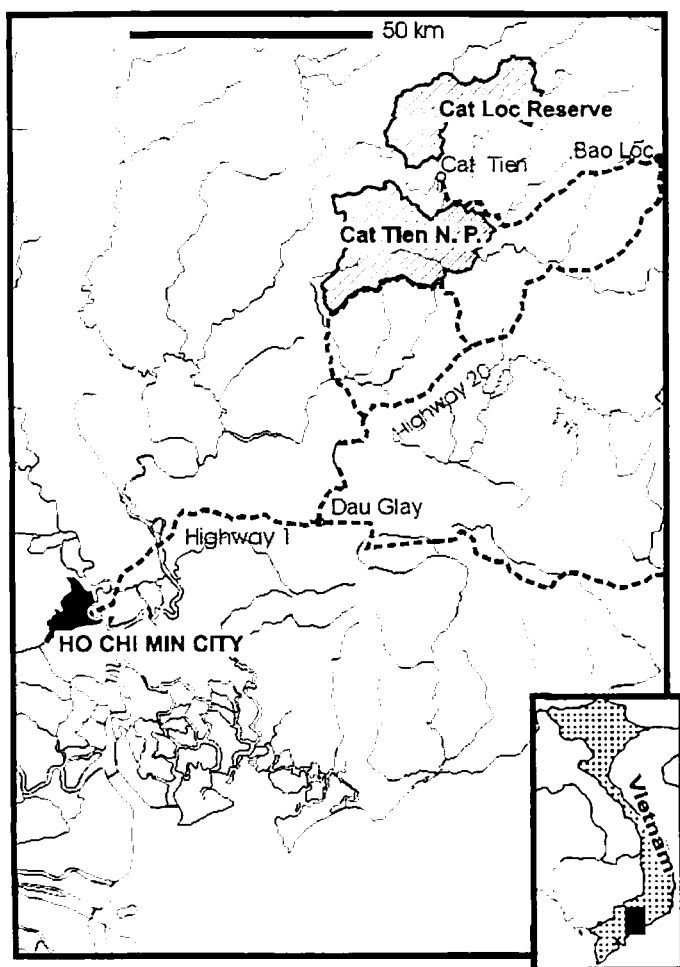
In search of these main indicators of success, a workshop was held in Cambridge on 9-11 December 1998. A large number of possibilities was discussed and evaluated. The workshop participants recommended a two-component indicator system, based primarily upon range-state indicators at the site level, which include: level of illegal killing (carcass detection, illegal activity/site data, adjusted for effort) and population status (rhino numbers, trends and number of populations). This can be strengthened by some trade or trafficking indicators,

like level and routes of trade linked to explanatory variables (e.g. supply from non-wild sources, consumer demand trends, and measures of effort, resources, and effectiveness of enforcement).

Source: Interim Report on developing indicators of success for evaluating rhinoceros conservation initiatives, compiled by TRAFFIC International, January 1999.

THE VIETNAMESE RHINOCEROS

THE 1998 CAT LOC RHINO CENSUS



As recommended by the 1997 Javan Rhino Colloquium convened under AsRSG auspices, three teams surveyed the Cat Loc Wildlife Reserve east of $107^{\circ} 30' E$ during three periods of a few days each in May 1998. A standard track analysis method was used to obtain the results. All rhino signs were recorded. From all clear footprints both the width and the length were noted and plaster casts were produced.

During the survey, rhino footprints were recorded at 29 locations. Track measurements were recorded from 16 locations, 13 casts of full prints and 32 casts of front hooves only were made. Among all the casts,

4 different types could be identified, each clearly different in size and/or form from the others. A further 19 casts were not clear enough to be identified with any of these four types, nor were they distinct enough to indicate another type. All 4 rhinos identified from the plaster casts have a narrow foot, less than 20 cm width. Measurements of considerably larger prints, about 23 cm wide, were recorded in three locations, while several prints measuring around 21 cm were also seen. The larger prints must belong to an individual different from the 4 individuals identified from the casts. Therefore, the minimum number of rhinos in Cat Loc can be set at 5.

The chosen survey area covered about 95% of the rhino area. Although the census was timed to coincide with the start of the rainy season, a late start of the rains meant that the soils were still hard and tracks difficult to find. One cannot expect to encounter good clear tracks of all individuals in a short time. Therefore, the number of identified individuals will always be an underestimate of the true number, but how much under is impossible to determine. For these reasons, and considering that the rhinos only occur in a very small area, it is considered safe to assume that probably not more than 1-2 rhinos were left unrecorded, or were not recognized as being distinct. The maximum number of rhinos in Cat Loc WR can be set at 7.

The total area currently available to rhinos in Cat Loc, about 5100 ha, is too small to support a viable population of rhino and the area is under rapid encroachment. The quality of the habitat is sub-optimal, dominated by bamboo and rattan, while good food resources are scarce and widely scattered. The poor quality of the habitat is partly caused by the heavy use of defoliants during the war. The area is rapidly being opened for agriculture. Already 35% of the eastern part of the reserve is lost to encroachment. All of the best rhino habitat, the flat alluvial areas, has been converted into rice fields. The few remaining areas of broadleaf forest are being converted into cashew nut plantations. Access to a vital saltlick has been blocked by the advancing encroachment. If the observed rate of encroachment continues, it can be expected that all the current rhino