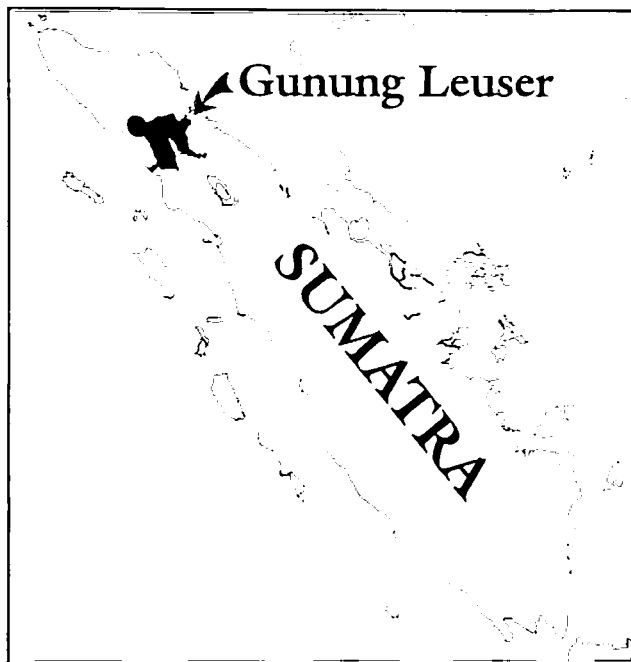


## EUROPEAN UNION GUNUNG LEUSER PROJECT: FULL STEAM AHEAD!



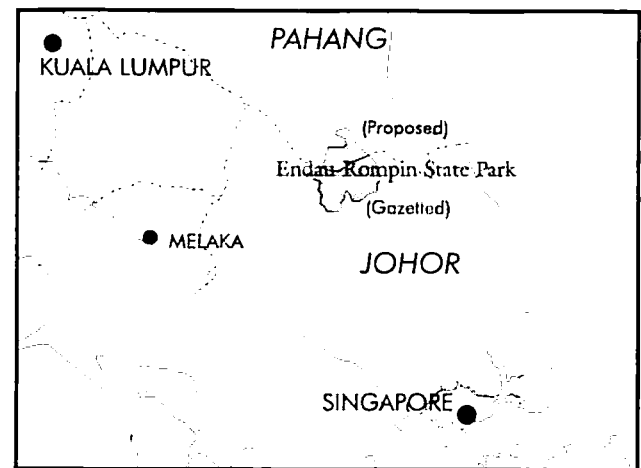
The European Union has approved a 32 Million ECU grant (~ US \$ 43 Million) to support a technical partnership of 7 years for conservation of the Leuser Ecosystem. The Leuser Ecosystem covers ~ 19 000 sq km of State forest land, including the current Gunung Leuser National Park (~ 9 000 sq km).

Conservation of the Leuser Ecosystem will be achieved through an Integrated Conservation and Development approach. Conditions for locally desired, ecologically sound developments will be established in a "quid pro quo" exchange of commitments, in covenants, by local communities, to support protection of the ecosystem. To facilitate the programme, a special "Conservation Concession" has been issued to the Leuser International Foundation, who delegates management to a joint Indonesian-EU Management Unit.

Currently, the EU is recruiting international staff for the Management Unit through a inter-union tender procedure. Leuser is the most important area for the Sumatran rhino. Protection of the population in the Central Leuser Rift is a high priority of the project.

Source: H.D. Rijksen, M. Griffiths.  
*Leuser Development Programme. Masterplan 1995.*

## MALAYSIA ENDAU ROMPIN SURVEYS



In 1994 and continuing in 1995, a number of surveys have been conducted in Endau-Rompin in Pahang and Johore, Peninsula Malaysia. This area has been considered to contain one of the largest rhino populations in Peninsula Malaysia, perhaps as many as 20-25. However, there has been much disturbance in the area and delays in properly gazetting major parts of the Park on the Pahang side. Results of these surveys will be assessed further at the Malaysia Rhino PHVA Workshop, but the preliminary reports are cause for concern. Adequate protection and management of this rhino area is vital for the species.

## VIETNAM WHY THE CAT LOC (VIETNAM) RHINOS ARE JAVAN

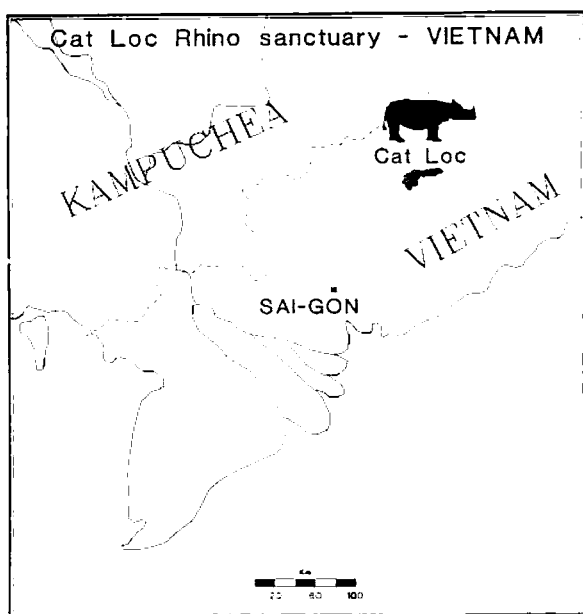
In response to the Editor's query in *ASIAN RHINOS 1*:

- (1) Schaller et al. (1990, *ORYX*, 24:71) were "shown the horn and a piece of skin" of a rhino killed in 1988 by a Stieng hunter in Bao Loc district (west Lam Dong Prov., i.e. in Cat Loc Reserve). The skin is entirely characteristic of *Rhinoceros sondaicus*. The horn differentiates the genera *Rhinoceros* and *Dicerorhinus* well. If Schaller et al. were at all familiar with rhinoceros morphology, this would have been adequate for identification.

- (2) In August, 1994, I was able to measure the partial skeleton of a rhino found dead in Lam Dong in 1978, and now displayed in a glass case in the Ministry of Forestry building, Hanoi.
- (a) The skull showed the features of *Rhinoceros* as opposed to *Dicerorhinus*, for example: nuchal surface slants forward; outline of nuchal surface, in rear view, widens markedly inferiorly; dorsal outline deeply concave; subaural fusion of postglenoid and posttympanic. In addition it showed the following feature diagnostic of *R. sondaicus*: premaxillae free from maxillae
- (b) The skull showed features which tend to characterize the Vietnamese subspecies *Rhinoceros sondaicus annamiticus* (Groves & Guérin (1980, *Géobios*, 13, 2:199-208):
- Antorbita width 204, cf. subspecies means:
 

<i>annamiticus</i>	217.7 (n=3)
<i>inermis</i>	198.8 (n=5)
<i>sondaicus</i>	187.3 (n=15: Java)
	188.8 (n=5: Sumatra)
  - Ratio width to height of occiput 175.6, cf.:
 

<i>annamiticus</i>	181.0 (n=4)
<i>inermis</i>	165.0 (n=4)
<i>sondaicus</i>	186.0 (n=16: Java)
	176.0 (n=5: Sumatra)
	171.0 (n=4: Malaya)
- Unfortunately the maxillary alveolar ridge was missing, so the low facial height of *annamiticus* could not be checked.



## A Comment on Haryono et al.'s Report

Schenkel & Schenkel-Hulliger assigned age/sex categories to the Ujung Kulon rhinos using Indian Rhino standards. This was of course a "faut de mieux" strategy, and I have never been entirely convinced about it. The biggest Javan rhinos would be about equivalent in size to Indian females (about 1500 kg): the fully mature Indian male weighs >2000 kg, a figure equalled among rhinos only by *Ceratotherium simum simum*. Hoogerwerf always maintained that age measurements would be a little lower; footprints of 24-25 cm would belong, according to him, to animals of 2-3 years old (whereas the Indian female Nanda in Basel Zoo, used to set the standards by the Schenkels, already had a forefoot diameter of 26 cm at 2 years, 8 months). The Cat Loc census would, if this were correct, record two full adults, and probably 1-2 subadults, plus 4-5 young. The age ratio is still odd, but not quite as odd as before.

Possible explanations: (1) Haryono et al. report that 10 were poached since 1981. I'm not sure whether one could suppose that adults predominated in this total; they do not give the dates when the poaching incidents took place but, if some had been only shortly before their census in 1983, this might account for the shortage of full-sized adults. (2) The well-documented phenomenon of an expanding population breeding at younger ages than one at carrying capacity?

The Schenkels assumed that, like the Indian rhino, the Javan rhino is sexually dimorphic so that the largest footprints would be those of males. This is definitely not correct. Hoogerwerf thought that females are the larger sex; Guérin agreed with him. I am not so certain about that, but my craniometric data show clearly that there is no male hypermorphosis such as occurs in the Indian rhino; to all intents and purposes the two sexes are the same size.

Nothing is known about whether the female of *R.s. annamiticus* is/was well-horned or not; but on the analogy of the other two subspecies, it might be supposed that decent horns in females are vanishingly rare. I would suppose that females got shot for the same reason as African poachers shoot dehorned rhinos: they want to eliminate an unproductive set of tracks.

*Submitted by Colin Groves*