

Sumatra:

The horns of a dilemma: Captive breeding programmes for conservation of Sumatran rhinos

The recent catastrophic death of seven captive Sumatran rhinoceros in Peninsula Malaysia in 2003 has revived the debate on whether captivity has a constructive role in the conservation of endangered species like the hairy rhino.

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CINCINNATI ZOO & BOTANICAL GARDEN

Any true conservationist knows that the wild is the best place to conserve species as integral parts of their ecosystems. However, sometimes the task of protection in situ is so challenging and uncertain, even impossible, that captive propagation has been attempted to rescue species: e.g., the Asian Wild Horse, Arabian Oryx, California Condor, Black-Footed Ferret.

The Sumatran rhino has been a critically endangered species for at least the last 30 years because of massive destruction of its habitat and rampant poaching for its horn. Therefore, in the early 1980s, this species seemed to be a candidate for the captive option. Efforts to protect in situ were failing and a substantial number of wild Sumatran rhinos seemed to be doomed. They either could not be protected with available resources or were not part of populations large enough to be viable (e.g. in some cases, they were lone animals in remnant patches of forest). So captive propagation programmes for this species were launched in Peninsula Malaysia, Sabah, and Indonesia, with cooperation from zoos in the United States and Europe which had reasonable experience and success reproducing three other species of rhinos (the Indian, the White and the Black, the latter now being reintroduced from captivity to the wild).

Unfortunately, the Sumatran rhino has proven the most difficult species of mammal to propagate and even to maintain successfully in captivity.

Only seven of the 40 rhinos captured survive, notably the pairs at Cincinnati Zoo and at the semi-natural Sumatran Rhino Sanctuary in Way Kambas National Park, Sumatra.

Initially, the vicissitudes of capturing so rare, elusive, and widely dispersed a species hindered getting adult males and females together at the same place and time. Moreover, the reproductive biology of the rhino is very complex. Even among the rhino family, the Sumatran seems more complicated than others, being the only rhino to be an induced ovulator. A particular problem with Sumatran and other rhinos is that when females do not reproduce for long periods of time, they develop tumors in their reproductive tracts that render them infertile. (This phenomenon may also be occurring in the fragmented populations in the wild.)

We finally saw some success with a calf born at Cincinnati Zoo in 2001. Now, the female there, Emi, is two-thirds of the way through a second pregnancy. Regrettably, as knowledge about the art and science of maintaining and reproducing the Sumatran rhino in captivity has been painfully acquired, many, especially female, Sumatrans have grown older and more vulnerable to the various afflictions of age. A further reality is that small populations, whether in captivity or the wild, are subject to chance or catastrophes, such as occurred at Sungai Dusun, when five rhinos died in autumn 2003. Evidence

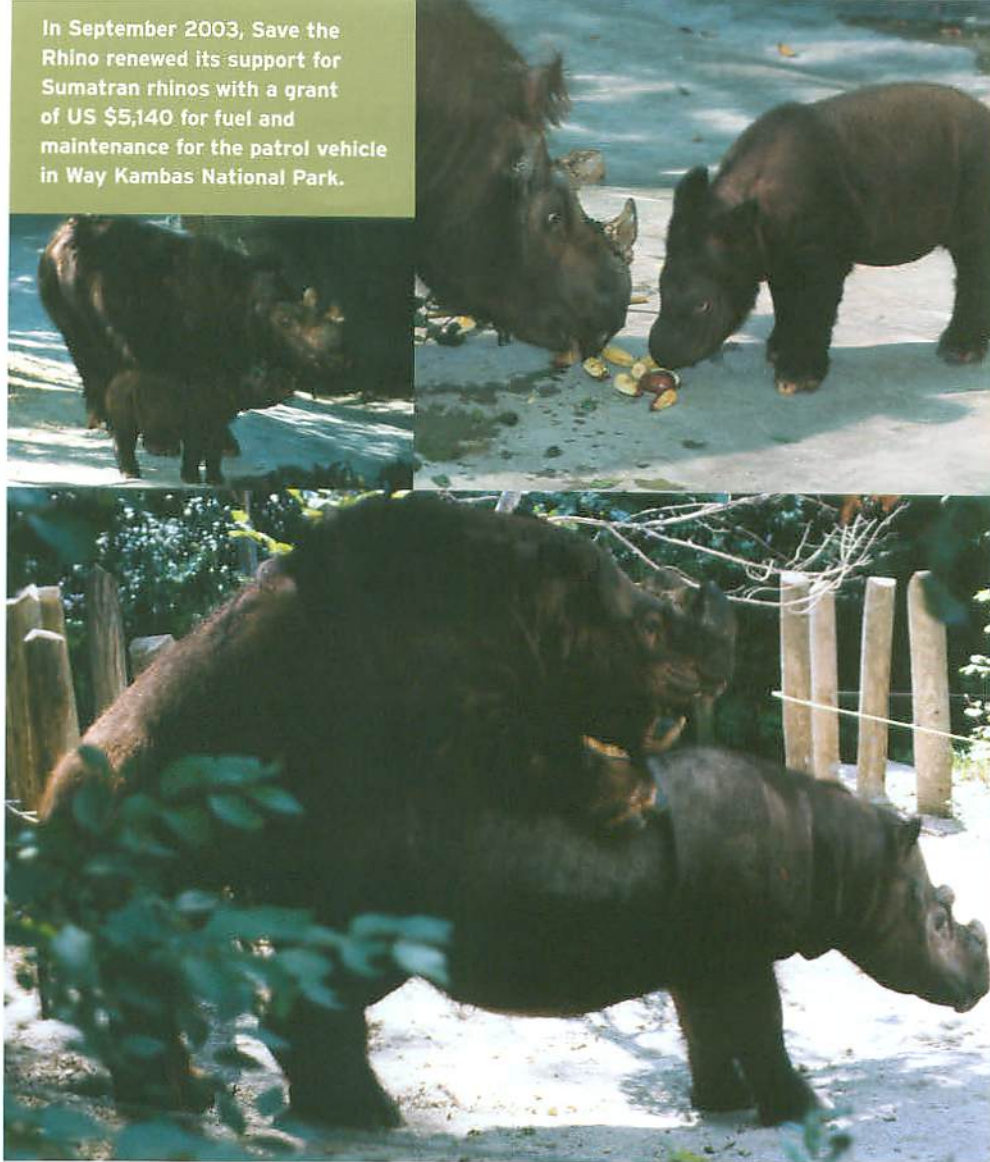


In September 2003, Save the Rhino renewed its support for Sumatran rhinos with a grant of US \$5,140 for fuel and maintenance for the patrol vehicle in Way Kambas National Park.

suggests that these deaths were caused by a freakish outbreak of trypanosomes (common in Africa but not Malaysia) and not by bacterial infections caused by poor hygiene as media reports contended.

Nevertheless, after 20 years of effort, the captive programme has had many failures and very limited success. Proponents of the programme argue that it is not certain or even likely that in situ protection, even if it had all the money it needs, can save the species. Opponents argue that the record so far indicates the captive programme will never be a significant benefit. It is truly, almost literally, a case of the horns of a dilemma.

Despite the setbacks, but with more and increasing knowledge, rhino conservationists in Indonesia and United States will persevere in the attempt to develop a viable captive propagation programme as a supplement and back-up to the primary effort of protecting the species in the wild. For now, the conservation programme for Sumatran rhino in Peninsula Malaysia (where perhaps 75 individuals or 25% of the world population survive in the wild) will concentrate on in situ protection.



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Rhino Mayday: Thursday 20 May 2004

The UK Rhino Group (UKRG) is an informal forum for the discussion of rhino conservation issues, which also undertakes some fundraising, publicity and lobbying activities. Our main concern is to disseminate information within the conservation community as widely and effectively as possible.

After several years of chairing the UKRG, Ian Redmond decided to stand down. I decided to offer myself as Chair in his place, and was duly elected; Ian returns as Vice Chair. One of my first tasks was to find speakers for this year's Rhino Mayday on Thursday 20 May. We've got a great line-up:

10.30 Registration:

11.00 - 11.45 Claudia Schoene: "Rwanda's last rhino"

11.45 - 12.30 Kes Hillman-Smith: "War and the northern white rhinos"

12.30 - 1.30 Break for lunch

1.30 - 2.00 Nan Schaffer or Cindy Salopek: "The Borneo Rhino Challenge: The importance of stakeholder commitment"

2.00 - 2.30 Sky Alibhai and Zoe Jewell: "Spoor identification techniques"

2.30 - 3.00 Nick Lindsay: "Ex-situ rhino programmes in Europe"

3.00 - 3.30 Felix Patton: "Identifying individual rhinos: the Aberdare experience"

3.30 - 4.00 Break for tea

4.00 - 4.30 Nico van Strien: "Javan

and Sumatran rhinos: past, present and future"

4.30 - 5.00 Esmond Martin: "Rhino poaching in Nepal"

5.00 Thanks and close

The Rhino Mayday will be held in the Huxley Conference Theatre at the Zoological Society of London. Tickets are available in advance for £10 per person. Please send a cheque made out to "Friends of Conservation" to Nathalie Nickson, FoC, 16-18 Denbigh Street, London SW1V 2ER.

For more information on the talks or speakers, or to download a ticket order form, please visit www.rhinogroup.org.uk

Cathy Dean, Chair, UKRG