



CONSERVATION IN MALAYSIA

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THE RHINO EXPORT DEAL

THE WORLD'S MOST EXCITING WILDLIFE BREEDING EXPERIMENT BEGINS ...

"We at the IUCN consider this a most important occasion, where precedents may be set for other species and other regions of the world."

Mr Robert F Scott, Executive Officer, IUCN Species Survival Commission (SSC), at the ad hoc Sumatran Rhinoceros Meeting, convened October 3-4 1984 by the SSC/IUCN, in Singapore and hosted by the Singapore Zoological Gardens.

After six years of agonising debate, Malaysia has decided to allow American zoos to breed its endangered Sumatran rhinoceros in captivity.

The two parties were due to sign an agreement to this effect at the end of July 1985. But not without driving a hard bargain to ensure American assistance for conserving wild rhino and transferring breeding technology to Malaysians, says Malaysia's Wildlife Department. The Americans will commit about US\$1 million to the project in its initial three years.

The decision is likely to trigger a row in Malaysian and international wildlife conservation circles. Many nationalistic Malaysians will not like the idea of exporting their rare rhinos to the USA. They resent the implication that they cannot handle captive-breeding themselves, at home. Even the experts are divided as to whether captive-breeding is a good thing in the first place, or whether it can work. Most conservationists believe rhinos belong in the forest and should stay there, to breed naturally.

Dr Kiew Bong Heang, a zoologist at the University of Malaya in Kuala Lumpur, and also a conservation activist in one of the country's leading non-govern-

ment organisations, the 44 year-old Malayan Nature Society, said when he first got wind of the plan:

"I will kick up an international fuss if it is true. The idea of capturing any of the rhinos for export is a serious cause for concern."

The Department of Wildlife and National Parks in Peninsular Malaysia and the State Wildlife Section of the Forest Department in Sabah are well aware of the risk of controversy. Nonetheless they intend together to sign an agreement at the end of July with the Sumatran Rhino Trust (SRT) set up by the American Association of Zoological Parks and Aquariums (AAZPA).

This follows hot on the heels of a similar Sumatran rhino captive-breeding agreement recently reached between the Indonesian government and the Howletts and Port Lympne Estates Zoo of UK.

HOW MANY?

The Malaysian agreement envisages the capture of a total of TEN pairs of rhino: FOUR pairs from Peninsular Malaysia, to be captive-bred at the Malaysian Wildlife Department's own Malacca Zoo, and another SIX from Sabah, where the Sumatran rhino is the Bornean sub-species. Of the SIX pairs captured in Sabah, the first TWO will be kept for breeding at Sabah's own Sepilok research station near Sandakan. The remaining FOUR pairs will be sent for captive-breeding to the Los Angeles, San Diego (San Francisco), Bronx (New York) and Cincinnati Zoos in the USA.

American animal-capture expert Tony Parkinson, as Field Supervisor, will be the man in charge of the rhino capture operation in Malaysia. Africa-born, but now based in the Philippines, he is widely considered the world's best for the job.

There are now only an estimated 800 or so Sumatran rhino left in the world. Most of these are too isolated from one another to breed. The Swiss-based International Union for the Conservation of Nature and Natural Resources (IUCN) last year listed the Sumatran rhino as one of the 12 most endangered species of animals in the world.

Khan bin Momin Khan, Director-General of Malaysia's Wildlife Department. Encik Mohd. Khan began by being opposed to the exportation of Malaysian Sumatran rhinos for a captive-breeding project, partly for reasons of national pride. But he has since revised his views.

Schenkel, former Chairman of ARSG, however remains opposed in principle to the concept of captive-breeding, preferring options such as natural rhino reserves in the wild and translocation of isolated rhinos to such reserves.

THE SITUATION IN SABAH

One of the main reasons for the Malaysian change of heart has been the specific case of Sabah, where the Sumatran rhino is in serious trouble. Estimates have been made of a total population of anything from 28-38 Sumatran rhinos in Sabah, but it is feared that in reality, the figure may be much lower. (In Peninsular Malaysia, there may be anything from 50-100 of the rhinos). In any case, Sabah has only one small breeding population, in the Tabin Wildlife Reserve (formerly Silabukan). The remainder are isolated individuals without any hope of breeding, says the Wildlife Department.

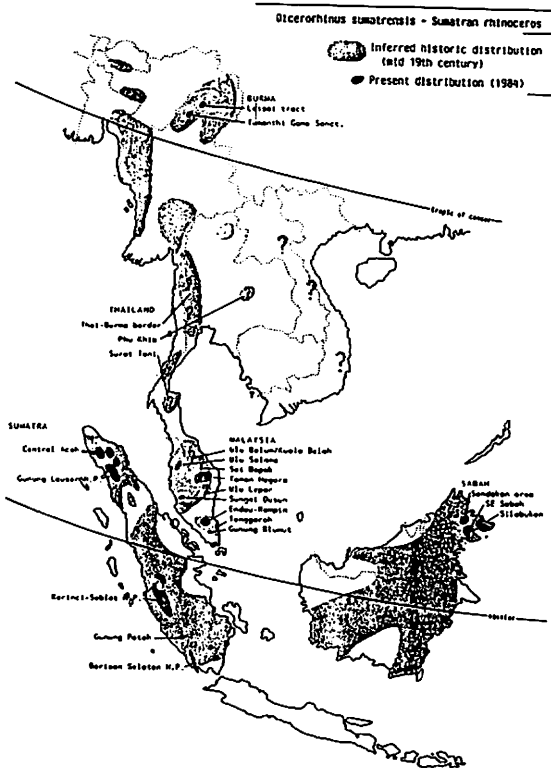
Even the Tabin rhinos hardly satisfy the concept of a "viable population" as defined by the IUCN and other parties attending an *ad hoc* Sumatran Rhino Meeting in Singapore, in October last year: 50 rhinos for short-term, 500 for long-term survival.

Only three reserves in Malaysia also match the meeting's requirements for "carrying capacity" for the rhino - a total area of about 70,000 hectares (700 square kilometres) for a viable population of 70 rhino. Sabah's 122,000 hectare Tabin Wildlife Reserve is one of these, but the other two are in Peninsular Malaysia.

Poaching is another factor which has persuaded the wildlife authorities to sign the American zoos' agreement: illegal hunting claimed three Sumatran rhino in Sabah last year, and already two have been killed this year. In Peninsular Malaysia, only one has been killed in the past two years - the Wildlife Department is expected to bring the culprit to trial soon.

The peculiarities of Malaysia's geo-political structure often mean that Sabah acts almost like an autonomous state in many respects. This fact too has affected the rhinos. The Sabah wildlife authorities operate independently, without benefiting from the Federal budgets allocated to the peninsular Wildlife Department: whereas the peninsular Department can

MAP OF RHINO DISTRIBUTION



The feeling amongst most members of the IUCN's Species Survival Commission (SSC) Asian Rhino Specialist Group (ARSG) is that talk and still more talk will not save the Sumatran rhino; only action such as the AAZPA agreement will. The ARSG has since early this year been chaired by Encik Mohd.

contemplate captive-breeding on Malaysian soil, Sabah cannot, for reasons of both restricted finance and manpower.

THE AGREEMENT

The AAZPA agreement is the answer to the problem, maintain the various signatories. The features of this agreement which seem positive to Malaysia's Wildlife Department are—

* The rhinos are considered to be *on breeding loan* to the American zoos — the agreement states "*All rhinos captured in the project shall remain the property of the Malaysian government in perpetuity subject to the conditions of this agreement.*"

* Malaysia will retain six pairs for its own captive breeding programmes — four at Malacca, and two at Sepilok;

* The American zoos' SRT, through a proposed Sumatran Rhino Foundation to be set up (comprising representatives of the IUCN SCC Captive Breeding Specialist Group, Peninsular Malaysia, Sabah, the American zoos' SRT, Indonesia, and Howlett's Port Lympne Zoo), will disburse substantial amounts of money as well as expertise for—

1. Development of the breeding centres at Malacca and Sepilok;
2. Transfer to Malaysians of capture and breeding technology — possibly including American expertise in artificial insemination and embryo transfer — both by means of attaching foreign experts to Malaysia, and by sending Malaysians for training courses abroad;
3. Helping with the Malaysian Wildlife Department's own proposal for a "gene pool" project at the Sungei Dusun area, Peninsular Malaysia — this would entail fencing off and strictly patrolling large area within which rhino could breed naturally;

* No export of rhinos from Peninsular Malaysia is intended;

* Only isolated, "doomed" rhinos will be captured, not those already with a viable breeding group — for instance, the agreement specifically excludes capture of rhinos within Sabah's known main Sumatran rhino habitats, Tabin and Danum Valley.

* Study of the little-known, shy Sumatran rhino in captivity may add to our knowledge and help conservation of the remaining wild populations.

* The agreement can be reviewed in three years' time by all parties.

OPPOSITION

The conservationists opposed to the agreement are cynical about the AAZPA's real motivations: their only concern, says this lobby, is public display of the coveted rare Sumatran rhinos at their zoos and the gate revenue, as well as prestige, which they can expect as a result. Neither the American zoos nor the Malaysian side hide the fact that, naturally, the AAZPA is not offering "something for nothing." The zoos do want display and prestige as the return on their capital investment. But, they maintain, this is a deal which is mutually beneficial and which may be the only way of saving the Sumatran rhino.

Another argument against the breeding project is that, no matter how highly developed is American technology, breeding of the Sumatran rhino in captivity has never been attempted before and very little is known of the animals. The chances of success may therefore be quite low, whereas the chances of trauma to the animals through capture, transportation and incarceration in zoos may be quite high, say the critics.

In reply to some of this, zoo officials would point to the Malaysian Wildlife Department's experience with the female Sumatran rhinos "Jeram", captured in Peninsular Malaysia last year, and "Melintang", captured a few months ago, which are now at the Malacca Zoo. These two have settled down very well in captivity, despite this species of rhino's usual need for a complex diet of many varieties of deep-forest foliage. A baby male captured in poor condition last year, however, died this year.

In addition, foreign zoos have successfully bred the white and black rhinos, and the Indian rhino — seven of ten Indian rhino in American zoos are now pregnant, in fact.

Perhaps the opposition's strongest arguments are:

1. That it will prove impossible to re-introduce the rhino into Malaysian forests once they have been taken to, or bred in, zoos. Professor Schenkel himself takes this line;
2. That taking the rhino to zoos so that they can "survive" will be used as an excuse for destroying their natural habitat meanwhile.

Once out of the wild, what dignity does a species have? What does such "survival" — as a virtual museum display — really mean? What possible benefit can survival for its own sake have, except as a curiosity for future generations of goggling schoolchildren?

It must also be added that the process of catching the rhinos will be difficult and tedious, possibly

stretching at least over the next six years — particularly as the agreement has denied itself the more obvious hunting grounds of Tabin and Danum Valley. And the breeding programme, even if almost immediately successful, which seems rather unlikely, will be prolonged: rhinos produce only one offspring about every two years (the gestation period is about 16 months).

The babies produced in the captive-breeding projects are to be divided equally between the Americans and the Malaysians, only after the total American zoo population reaches 25, so the immediate benefits to Malaysia — indeed, to the world — are certainly a long way off from now, maybe as much as 20 years.

Men like Professor Schenkel, who is something of an idealist, feel that humans must change, learn to live with rhinos and give them space. The captive-breeding lobby on the other hand, says time is too short to find out whether this is possible. And unfortunately, human nature does not give not much hope for this idea.

This is what the whole dilemma boils down to, really — should humans change, or should rhinos? If the agreement is signed, it is rhinos that will have to change.

Isa Sharp

(This article appeared in *The Sunday Star*, 14 July 1985)

FLASHBACK

Dept to watch over Sumatran rhinos

Action will be taken against those who capture the endangered Sumatran rhino for export, the Wildlife Department said today. A spokesman said the areas where the rhino were found, such as Endau-Rompin in Johore and the National Park, were being monitored.

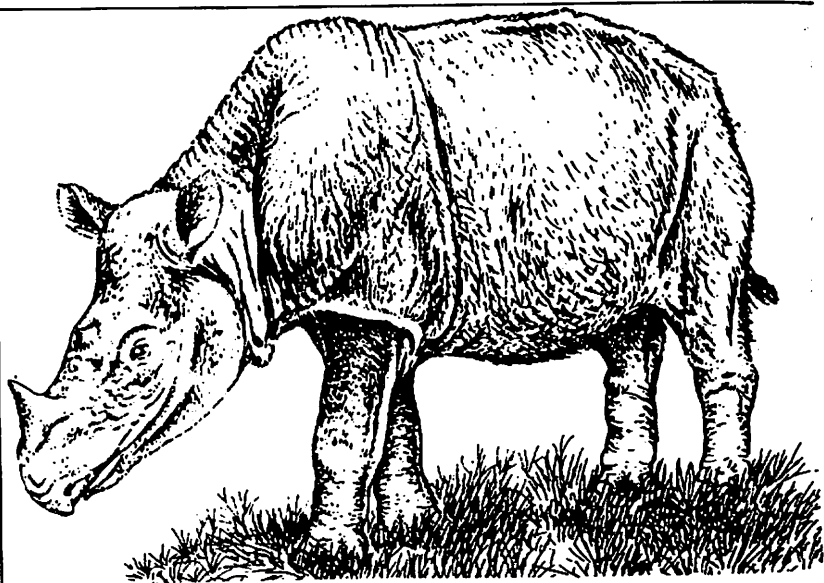
Commenting on a news report that several American zoologists were planning to capture the rhino and rear them in the United States, she said the department had yet to receive any reports on the matter. However, she said, Malaysia had agreed with the Association of American Zoological Parks and Aquariums to conserve the Sumatran rhino in its natural habitat. Subsequently, many zoologists had come here to conduct studies on the animal but none had so far stated their intention to capture the beasts for export, the spokesman added.

Star, 13 March 1985

from 'The Capture for Export of Rhinos from Malaysia' in *Malayan Naturalist* 8 (4) 8-10.

New hope for 'woolly' rhino

For years conservationists have been anxious about the fate of the elusive Sumatran rhino — sometimes known as the 'woolly' rhino. But their day may now have been saved by a bold conserva-



tion plan involving the Indonesian and Malaysian governments and several zoos in Britain and the United States.

Under the programme, the rhino will receive better protection in sufficiently large areas of its natural habitat. There will be a captive breeding programme to preserve its genetic diversity in its home countries, as well as in North America and Europe. An education programme will be launched to enhance public awareness of the rhino's plight and to generate support for its conservation.

IUCN Bulletin Vol 16 No 4-6, April/June 1985

Breed Rhinos Locally, say Nature Lovers

The endangered Sumatran rhino should be allowed to breed in nature reserves rather than exported to American zoos where the chances of success and survival

were less, according to local conservationists.

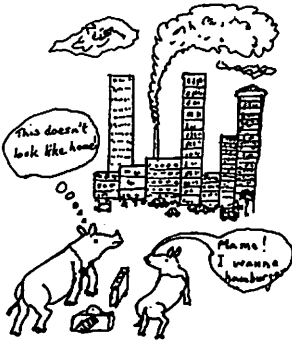
Wildlife Conservation Foundation (WCF) chairman Tun Tan Siew Sin said that the foundation was willing to consider funding efforts to group the isolated rhinos in a protected area. The World Wildlife Fund (WWF) has also said that it would consider the project.

Conservationists argue that it would be unwise to export the animals because there were no existing statistics on the number of male and female rhinos. With about only 30 rhinos left in Sabah, it would be wiser to concentrate them in protected areas here where they could form viable breeding populations, they said.

Zoologists argue against the wisdom of the terms of the contract because:

* ANIMALS in zoos have a higher mortality rate than those in the wild and are highly vulnerable to diseases;

- * CAPTIVE breeding technology of artificial insemination and embryo transfer has remote chances of success. The technology had never been performed on the Sumatran rhino – the operation is delicate and requires a technology as sophisticated as that needed for humans;
- * THE RHINO would be shared among four zoos, thus reducing their chances for success;
- * ANIMALS bred in zoos are ill-adapted to rehabilitate the wild.



Conservationists also fear that taking animals to zoos where they can survive may be used as an excuse for the continued logging of our forests.

The Star, 25 July 1985

Delay Rhino Export Deal

In view of the reservations expressed by local conservationists on the viability of captive breeding and export of Sumatran rhinos to American Zoos, the Environmental Protection Society Malaysia (EPSM) urges both the Federal and Sabah Governments to delay signing the proposed Agreement with the Sumatran Rhino Trust of the American Association of Zoological Parks and Aquariums. We believe that this delay is vital to allow public discussion among all interested sectors of the Malaysian population so that a mutually acceptable and sustainable solution is arrived at. In the meantime any imminently threatened rhino should be captured and translocated to a safe Malaysian nature reserve with the funding promised by the Wildlife Conservation Foundation and the World Wildlife Fund.

EPSM would like to stress the following points:

- * Although a 14 July 1985 press report claimed 6 years of agonising debate on the topic, EPSM was only given

basic background information on 16 July;

- * The total 3 year agreement input for both Sabah and Peninsular Malaysia committed by the Trust, amounts to US\$½ million while the International Union for Conservation of Nature and Natural Resources (IUCN) Rhino Co-ordinator will be paid around US\$75,000 over the same period;
- * Capturing and exporting the rhinos is very likely to undermine our present efforts to preserve the natural ecosystem (especially forests) as it is very likely that other important components of the ecosystem could also be subject to capture and removal;
- * Neither the scientific nor environmental community are convinced that such zoo breeding is the most viable option.

While EPSM is willing to listen to arguments by the project proponents, we wish to state that we are certainly disappointed at the secrecy with which the agreement was drawn and the present attempts to rush it through. We urge Malaysian officials not to be stampeded by the agreement between Indonesia and some British Zoos. We must allow some democratic participation in this decision-making. The Sumatran rhinos can never survive without Malaysian public support. Let us go about getting it in the correct way!

Gurmit Singh,

-President of EPSM,

Press Statement, 25 July 1985

Rhino breeding project should be initiated in Malaysia and not the USA

Sahabat Alam Malaysia strongly opposes the launching of this project. The Rhinoceros is a National Heritage of Malaysia. Instead of embarking on a breeding programme in the USA, efforts should be concentrated instead on the problems faced by the rhino in Malaysia and attempts should be made to breed them within Malaysia.

The Controversial Breeding Project.

Sahabat Alam Malaysia recognises the precarious position our rare rhino is in and calls for captive breeding to be carried out in Malaysia. To allow the export of rhino "on loan" to zoos would contradict the recent banning of the

monkey export. The rhino is totally protected and considered an endangered species whilst the monkey is not.

The use of zoos for conservation of wild animals is a recent venture. As a number of animals breed quite happily in zoos it is commonly believed that zoos can be the solution to endangered species. However, it should be recognised that zoo animals are highly vulnerable to epidemic diseases as was witnessed in the case of the gorillas at the Singapore Zoo. Animals bred in zoos have difficulty in rehabilitating to the wild and animals taken from habitats that have been destroyed, if successfully bred in zoos will have no natural home to go back to.

Capture techniques for the rhino species are not tested and the long journey to the States might prove fatal. Modern techniques of embryo transfer and captive breeding technology have remote chances of success – the operation is delicate and requires sophisticated technology. With the odds against captive breeding in the United States, Malaysia should breed the rhinos here with money and technical assistance offered. Malaysia with its own veterinary services has been able to carry out artificial insemination of cows thus producing the world's first Selembu.

Recommendations

1. Captive breeding should be carried out locally by local scientists and zoologists as Malaysia has its own scientific expertise, personnel and zoological facilities to carry out the project.
2. Poaching should be checked and heavier penalties imposed on persons who have committed the act against any endangered species. More staff should be recruited to monitor the rhino areas and to check on poachers.
3. Forest clearing and development activities should be done with understanding and knowledge of the impact it will have on wildlife and the environment. Lack of experience and poor coordination and planning in opening up forests for agricultural development has resulted in unnecessary loss of wildlife. Often animals are trapped in pockets of forest and they later cause damage to crops.
4. There should not be any further delay in implementing the National Park Act so as to protect the remaining national parks and reserves.

S. M. Mohd. Idris

President of Sahabat Alam Malays'

28 July 1

Minister: Don't export the rhinos

Science, Technology and Environment Minister Datuk Amar Stephen Yong said today that the Sumatran rhino, an endangered species, should not be allowed to be exported to the United States. He said the animals should be relocated in sanctuaries where they could breed in safety and had a better chance of survival than in American zoos.

He said, however, the Federal Government could not stop the Sabah Government from allowing American zoos to capture the animals in Sabah and take them back for breeding. The rhino

in Sabah belonged to the Sabah Government and the Federal Government had no direct say in the matter. However, those in Peninsular Malaysia would never be exported abroad, he said.

Datuk Amar Yong said that his Ministry was informed of the plan after all the details had been worked out. "I have not been given a copy of the agreement," he said.

The Star, 27 July 1985

Pairin: No rhinos to be exported

The State Government has decided not

to allow Sabah rhinos to be exported. Chief Minister Datuk Joseph Pairin Kitingan said that if there is any research or propagation to be done it should be done in Sabah.

"The State Government will definitely not approve the export of any endangered species of animals including the rhinos. Their best chance of survival is in their natural habitat," he said.

Datuk Pairin said the State Government would welcome advice and assistance in research and propagation work and would render any available assistance.

New Straits Times, 6 August 1985

Since this scheme was mooted the estimated rhino population in Sabah has officially risen from 10 to 30 animals but, whatever the number, the captive breeding programme will involve a very high proportion of that Bornean population, which belongs to the smaller subspecies *harrissoni*.

This is a cause for great concern among conservationists in Malaysia for several reasons:

- * this multimillion dollar programme does not propose any study of animals in the wild nor the setting up of protected areas in the rhino's homeland.

- * capture and long-distance transport is likely to result in deaths as no one has any experience in handling this species.
- * the biology of this animal is largely unknown and only one birth has ever occurred in a zoo - in Calcutta in the 1890s.
- * taking away the rhino to be bred far overseas is a great loss to national pride while foreign countries gain kudos for breeding endangered species and the possession of an extremely rare animal. The plight of

- the species in the wild may be eclipsed as a result which will further endanger the survival of the species.
- * The optimistic promises of successfully breeding rhinos overseas will seriously undermine the long-term safety of the rhinos habitat as it may lead to the rounding up of rhinos for captive breeding from areas that would then become "available" to log or clear-fell rather than conserving these areas as national parks. As a result all the plants and animals in that area will be lost as well.

Sabah: no plan to save rhinos

The Wildlife Section of the Sabah Forestry Department admits that it has no alternative plan to save the State's rhinos, following Datuk Joseph Pairin Kitingan's decision not to allow four pairs to be sent to the United States on a breeding loan. Members of the section fear that the 30-odd rhinos left in Sabah will now be at the mercy of uncontrolled poaching.

The Borneo Bulletin, 17 August 1985

Move to save Sabah rhinos should be supported

I am writing to you in my capacity as chairman of the Asian Rhino Specialist Group of the International Union for the Conservation of Natural Resources (IUCN) as a result of the publicity that has recently been given to the Sumatran rhinoceros in the Malaysian Press. This publicity, while highlighting the precarious position of this species in this

country, especially in Sabah, also discussed a proposal by a consortium of American zoos to finance the protection, capture and breeding in captivity of individuals isolated by development.

There has been significant opposition to this latter proposal because it involves the transfer of some animals to North America. I believe that the opposition is due mainly to an incomplete understanding of:

- * the actual nature of the American proposal and
- * the circumstances that led to the proposals being seriously entertained, i.e. the situation in Sabah.

I would, therefore, wish to raise the following factors for consideration. The three basic considerations are:

- * The situation in Sabah is critical. Five years ago it was estimated that there were about 30 rhinos left in Sabah. Since this estimate was made, about half of them are known to have fallen to poachers, six within the last 18 months. This population is, therefore, close to extinction and it may

be just a matter of months before all is lost.

The Game Branch of the Sabah Forest Department just does not have the physical capacity to protect the remaining animals.

- * The immediate costs of protecting and capturing the remaining isolated animals for a captive breeding project will run to one to two million dollars, which would be extremely difficult if



A case for keeping the rhino here

We do agree that the plan to capture and export the rhino does have its merits, but we believe that there are sufficient grounds for requiring the project to be carried out locally. The original plan has several points in its favour, chief among them that the rhino population has dwindled to a dangerously low level, and that drastic measures may be necessary in order to prevent its imminent extinction.

The primary problems in preserving the animals locally involves protecting them from a deadly combination of habitat destruction and persistent illegal hunting. Measures are very difficult as the areas are remote and still rather extensive. Another problem is actually bringing culprits to book as rhino killings are sometimes regarded as relatively minor crimes. Thus the transport of a number of animals out of Sabah would certainly ensure their safety from poaching by irresponsible people whose prosecution might prove difficult.

A second positive aspect of the export plan is the potential application of advanced techniques to artificially increase the rhino's reproductive rate in the controlled zoo environment. New methods, such as embryo transplants, could eventually enhance the reproductive output of the species and serve to build up their numbers more rapidly to a safe level, overcoming the problem of a naturally slow reproductive rate. Though still experimental, such techniques have already proved successful in several cases involving other endangered large mammals, such as the rare antelope.

Dangers of the Export Plan

With these points in its favour, why then should the rhino export plan not be adopted? We at the university feel that there are overriding considerations relating to the interests and needs of the rhinos in particular, and Sabah (and Malaysia) in general.

Firstly, the point has been made on many occasions, and is still valid, that the capture and transportation of large, sensitive animals such as the Sumatran rhino is likely to result in the death of a certain percentage of the captives. The stress involved from the time of capture to eventual arrival in a zoo some 12,000

miles distant could take a substantial toll from an already alarmingly small remnant of the species.

Exposure to a strange physical and biotic (pathogenic) environment could further enhance the risks. Unlike other large mammals such as the ungulates (antelopes and their kin) rhinos particularly the Sumatran rhino do not show nearly so good a survival record in zoos.

The Sumatran rhino's reproductive rate is particularly low, and as the species is not social, it probably is much more difficult to maintain in breeding condition in an artificial environment. Thus, a direct and favourable comparison with the reproductive capabilities of ungulates is not valid.

Captive Breeding in Sabah

The most reasonable compromise we feel, as has been suggested earlier, is to set up a breeding facility in Sabah and import the expertise. There should be substantial savings on the original amount budgetted for transport of such a huge but delicate cargo, and both foreign and local scientists/administrators can achieve their goals of saving the species. Besides, there would also be the added benefit of transfer of expertise to local institutions/agencies.

Finally, the setting up of a local facility would not rule out the possibility of export at some future date should rhino numbers be successfully increased.

Credit must certainly be given to the formulators of the original plan, export or not, as the initiative to save the species is long overdue, and time critically short. The concern of the planners is much appreciated and should be applauded. Otherwise, the problem would never have come to the attention of the majority of Malaysians, and the possibility remains that no steps have been taken until too late.

Local Participation

Now, more broadly-based co-operative measures can be taken in mounting a rescue attempt. It is hoped that the recent decision concerning Sabah's responsibilities in the matter will be a step in the direction of more local participation in both the planning and execution of such projects.

Too often the role of local administrators and scientists is merely to give their consent to proposals formulated entirely from outside the country and presented in a more or less complete form at first viewing. In extreme cases, funds are collected and channeled to projects planned and implemented almost entirely by foreign scientists. The result has been to generally retard the development of local expertise in the area of wildlife conservation in particular, which simply feeds back once more to prolong the "need" for direct foreign participation in such ventures.

No one is suggesting that foreign expertise is unnecessary, but that the manner in which it is used be restructured to promote and accelerate local involvement in tackling difficult problems such as rescuing the Sumatran rhino from extinction.

The Kenyir dam rescue operation organised and carried out entirely by Malaysians was a historical development along these lines. We hope the latter's success will become an important first step towards Malaysians shouldering the often heavy responsibilities of preserving the country's natural heritage.

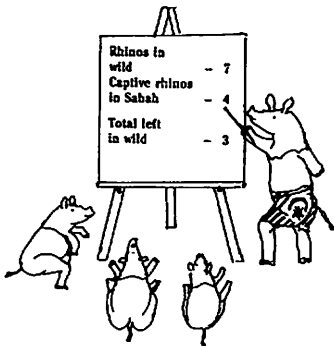
In conclusion, we reiterate that we understand the necessity of drastic measures to save the few remaining individuals of *Dicerorhinus sumatrensis*. We also deeply appreciate the good intentions of all concerned in mounting a rescue attempt. We do however feel compelled, for the reasons stated above, to fully support the stand taken by the Sabah Chief Minister and many others, that the rhinos remain in Sabah. Finally, we hope that a concerted and co-operative effort by all concerned, and as soon as possible, that the population in Sabah will be put on the road to recovery.

Dr Murtedzu Mohamed
(Associate Professor and Dean)
and Mr Robert Stuebing
(Senior Lecturer),
Universiti Kebangsaan Malaysia
Campus Sabah
Daily Express, 16 August 1975

not impossible to raise locally. (Impossible within the time constraints).

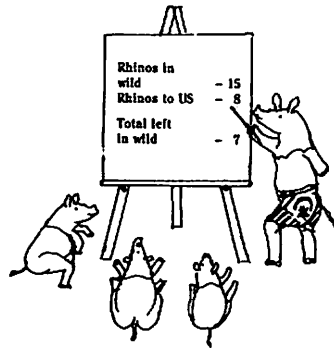
* It is imperative that in any capture attempt the best available expertise in the world should be involved to minimise the risks of mortality. The loss of even one animal is to be regarded as tragic.

The proposal by the American zoos (AAZPA) is the only proposal able to meet the above requirements immediately. This includes Mr Tony Parkinson who is generally recognised as the best and most experienced wild animal trapper in the world, especially where sensitive, delicate and endangered species are concerned. An impression has unfortunately been created that AAZPA's sole interest is in gaining possession of Sumatran rhinos for their zoos. This is far from being the case as the agreement that has been worked out is basically designed for the conservation of the Sumatran rhinoceros. The four pairs to be placed in North American Zoos will remain the property of Sabah.



These animals, although placed at different facilities, will be scientifically managed as a single population of the subspecies in Borneo together with the two pairs that remain in Sabah.

One primary aim of the project is to create a captive pool of the species which can be tapped some time in the future to provide animals for reintroduction back into the wild in Sabah when that State has both areas of suitable rhino habitats set aside as reserves and the capacity to police and protect them. The agreement with AAZPA specifically provides for the young born in captivity in North America to be available for this purpose in numbers at least equal to the number sent to the US.



To me, the single most important result of the AAZPA proposal is that in Sabah with immediate effect, 15 to 20 project personnel will begin working in rhino areas. This should greatly reduce if not stop the present tragic rhino losses to poachers.

It should also be noted that in Sabah all rhinos in the relatively safe Tabin and Danum areas will not be involved in the capture programme.

Funds will also be provided for local scientists to carry out a survey of the rhino population in Sabah. There will be transfer of experience and technology not only for the capture of rhinos both in Sabah and the peninsula, but also for post-capture handling and subsequent husbandry of the species. There will also be transfer of breeding technology not only for the rhino, but also for the seladang and banteng and assistance for conservation work on the proboscis monkey. Assistance will also be provided for the establishment of a rhino gene pool in Peninsular Malaysia.

Finally, I wish to add that the IUCN is not only aware of this project but has been present at most of the planning for it. In fact the project is designed to be carried out under IUCN supervision, with a senior rhino scientist playing the role of a full-time co-ordinator and overseer. The intention of the IUCN is to see that the project is a genuine part of a global strategy to save this species from extinction.

As chairman of the Asian Rhino Specialist Group this project has my full support because I see it is the only alternative to saving the rhino population in Sabah. It is clear that this project is designed as a long-term plan for the survival of this species and therefore

should enjoy the full support of all Malaysians.

Mohamed Khan Momin Khan*
New Straits Times,
24 August 1985

*En Mohamed Khan is also the Director General of the Department of Wildlife and National Parks.

A Survival Kit for the Rhino

They are all agreed on the nature and magnitude of the problem and they also share a common objective, but some of them are strongly divided on the question of how best to save that species of rhino whose existence in Sabah is being threatened. And they are also keenly aware that they must find a solution before the problem disappears. Conservationists are also agreed that urgent efforts are needed to ensure the survival of the species. Conservationists also know that the animal's biggest enemy is man and that existing legislation has hardly been successful in stopping the wanton killing of the animals. Except for two European planters who were fined by a court in Malaya in 1948 for killing the protected animal, there have been hardly any prosecutions against rhino poachers. It has been reported that Malaysia is now considering introducing the mandatory jail term for poachers, but the chances of tracking them down are as remote as a chance to photograph a one-horned rhino.

So, what are they quarrelling about? They cannot agree about which survival kit to use. Some nature lovers - notably the Wildlife Conservation Foundation, the Sabah Society and the Sahabat Alam Malaysia - are objecting to a plan which, *inter alia*, calls for captive breeding of the rhino in sanctuaries in Malaysia and North America. The plan was being hatched by the Sabah Forestry Department and a body set up by the AAZPA but before the final agreement could be signed the Sabah Government, obviously reacting to fears expressed by some quarters, slammed a blanket ban on the export of rhinos. The question now is should we sit back and let history decide whether or not the decision was a wise one? No, the risks are too great.

Of course, the best solution would be to leave everything to nature. But man has too often interfered with nature that he cannot be trusted alone with nature.

The alternative is to listen to the experts. A strong advocate of the proposed agreement is Encik Mohamed Khan Momin Khan. He is convinced that the project is the only alternative to saving the Sumatran rhino. He should know. He has considerable experience in wildlife management.

In matters of conservation, there is little room for parochial attitudes and for meaningless slogans about national heritage. Malaysia holds in trust for the whole world some of the rarest and most interesting wildlife. It's not a responsibility to be taken lightly. Malaysia cannot take the risk of unwittingly allowing it to have the dubious distinction of being known as the last place on earth where the Sumatran rhino roamed.

Editorial,

New Straits Times, 11 September 1985

Letter to the Editor

I would like to congratulate you on your excellent editorial on the Sumatran Rhino in Malaysia. I would like to take this opportunity to emphasize some aspects of this proposal that many have been insufficiently considered during the recent spate of publicity on this subject.

Firstly, it would be wrong to regard this as basically an American-based project. While up to four pairs of rhinos will be placed in North America, a greater number will be established in captivity here, both in the peninsula and in Sabah. Attempts to breed these animals in captivity will be made both here and in the US. The sharing of technology and expertise will enable equal efforts to be made in both countries.

The total Malaysian rhino population to be bred in captivity is estimated to be at least twelve. There will be two pairs in Sabah, at least two pairs at the newly-completed rhino facility at the Malacca Zoo, and a minimum of two pairs at a special gene pool to be established at the Sungai Dusun Wildlife Reserve.

We can expect the present rate of land development, especially in known rhino areas of Johore, Pahang, Perak, Kelantan and Trengganu, to continue. This will create more and more isolated animals in situations of high risk that will have to be caught and kept in captivity. At the rhino facilities in Zoo Malacca and in Sabah the breeding potential of the captive animals will be maximised using levels which will be continuously monitored to establish the optimum time for pairing.

Serious attempts will also be made to establish whether other rhino species can serve as surrogate mothers for Sumatran Rhino embryos. If this is found to be feasible, the females in captivity will be superovulated and mated. The embryos formed can be flushed out and implanted in prepared females of the other species. This will lead to several pregnancies in surrogates from a single Sumatran Rhino pair. Should natural mating prove to be difficult or risky the breeding programme will utilise artificial insemination techniques.

In the meantime a gene pool of Sumatran Rhino will be established in the Sungai Dusun Wildlife Reserve. This will call for fencing of a large area (ultimately several thousand acres) where several rhinos will be released and allowed to breed under conditions as natural as possible. This pool is being established as a backup of the group in zoo captivity to enable some monitoring and observation of the species' behaviour under less restricted conditions. It is also envisaged that the offspring from this group may be more easily reintroduced into normal natural habitats, at some future date when such reintroduction becomes practical.

It should also be noted that the American zoos are also committing themselves to providing all technical (including veterinarian and animal husbandry) aid for the project in addition to funding the training of a number of local zoo personnel in the US.

*Mohamed Khan Momin Khan
New Straits Times,
16 September 1985*

Let the rhinos be bred in America

I have just returned from overseas and feel that it is time for me to express my views on the important and urgent matter in my capabilities as president of the Malaysian Zoological Society and president of the World Wildlife Fund Malaysia.

Speaking as a Malaysian my natural response to the proposal to move several rhinos from Sabah to North America is most certainly unfavourable. However, I am at the same time a conservationist and as such have a concern for any particular species that are on the endangered list, especially those that are to be found in this country.

I realise that as Malaysians we have

a duty to the world to see that any species that falls within our sphere of responsibility is given the maximum chances of survival. This means that we have to look beyond the narrow and sometimes inadequate restrictions of the national context and see the problems in the international context.

I have spent some time studying this matter and have the following observations to make:

1. The Sumatran Rhino is the most endangered large mammal in this country and its situation in Sabah is critical.
2. The estimated number of the animal left in Sabah is now about 15 and the known rate at which they are being lost to poachers means that unless concrete steps are taken immediately the rhino population in Sabah may be completely wiped out. This very tragic situation is partly due to the extremely small staff the Sabah Game Department has at its disposal.
3. The only immediate solution to this problem is for the animals to be captured and bred under protection in captivity. However, such a programme, in order to succeed, entails a large sum of money not only to catch the animals but also to maintain them in captivity under the best possible conditions. Clearly money is not the only requirement. Far more important is that there must be adequate expertise involved in the capture and later husbandry/breeding of the animals.
4. I note that the proposal made by the AAZPA seems to meet both the above requirements and that the AAZPA is ready to implement the project immediately.

I also note that the Malaysian honour will be more than satisfied as the greater part of the project will in fact be carried out in this country.

Finally, as the rhinos will be maintained and bred as a single population regardless of whether they are in Sabah or North America, this appears to me a good opportunity for us in this country to learn to carry out our work and responsibility on an international plane. Therefore, in conclusion, I wish to express my strongest support for the AAZPA plan and urge the Government of Sabah to reconsider its position and

give this very important project its urgent support.

M. Khir Johari,
New Straits Times, 4 October 1985

Support for plan to ship rhinos to US

The Malaysian Wildlife Conservation Foundation wants the Sabah Government to allow the AAZPA to capture Sumatran rhinos in Sabah to be taken back to North America. Its chairman Tun Tan Siew Sin said that although the foundation initially opposed the move, it now felt this was one way to prevent the rhinos from becoming extinct.

"Let us not go down in history as having stood watching on the sidelines while a species became extinct," he said.

Tun Tan said among the reasons for the foundation's change of heart are:

- * COST of the project would involve millions of dollars and the only immediate source of funds is AAZPA.

The Star, 5 October 1985

Pairin: Sabah will have its own rhino breeding programme

The Sabah Government will develop its own conservation programme for Sumatran rhinos with foreign co-operation and will not permit the export of the animals. Sabah Chief Minister Joseph Pairin Kitingan said that a State committee would be set up to work out the programme quickly and to mobilise local resources and expertise. Datuk Pairin said AAZPA would be invited to assist the committee.

"If the local breeding programme proves successful, the State Government may consider letting the AAZPA have some pairs of rhinos for captive breeding outside the State," he said.

Earlier, Datuk Pairin received a report on the conservation of the rhinos from the Dean of the Science and Natural Resources Faculty, Universiti Kebangsaan Malaysia (Sabah), Prof. Madya Dr Murtedza Mohamed.

The Star, 10 October 1985

Export of Rhinos

This issue has become of such public interest that there was even an editorial on it in the New Straits Times (11 Sep-

tember 1985). Unfortunately it missed the point that groups who oppose the export do not oppose a captive breeding programme *per se*.

MNS stated our stand over a year ago in this newsletter (July, 1984) and it remains unchanged. The "survival kit for the rhino" (as the editorial puts it) should:

- * First and foremost be based on total protection and giving National Park status to areas where there are already breeding populations of rhinos i.e. Endau-Rompin in Peninsular Malaysia and Silabukan Wildlife Reserve and Danum Valley in Sabah.
- * Second best is to round up solitary individuals from isolated areas and introduce them into protected areas where there are existing rhinos but in low numbers. PERHILITAN suggests Sungai Dusun in Selangor as one such area.
- * In absolute desperation, solitary and isolated rhinos can form a breeding group in artificial conditions within Malaysia e.g. at Malacca Zoo, which is run by PERHILITAN and already has two captive females, one of which was too badly injured to be returned to the wild.

Until these three possibilities have been exhausted, export should not be contemplated. There is a fear that mortality will be higher in transit to, and living in, temperate regions where the climate and diet is different and where the animals may surcome to disease for which they have no resistance. See what happened to the rare gorillas in the Singapore Zoo that were killed by a soil organism previously thought to be harmless!

We therefore support Datuk Amar Yong (Minister of Science, Technology and the Environment) and Datuk Joseph Pairin Kitingan (Chief Minister of Sabah) for opposing the export of our extremely scarce rhino.

If, as IUCN and the American Zoos say, their main aim is to ensure the survival of the species, they will show their sincerity by financially supporting and lending their expertise to a Malaysian based programme.

Conservation Watch
MNS Selangor Branch Newsletter
October 1985

Yong: Let the US breed our Sumatran rhinos

The Sabah Government should consider various options to save the rare Sumatran rhino from extinction, including breeding by American zoos, Science, Technology and Environment Minister Datuk Amar Stephen Yong said. He said that the State Government should not regard captive breeding of the rhino in North America as "exporting" the animals because they could be brought back once the country had the expertise and the facilities to carry out such an undertaking. He was glad the Sabah State Government had set up a task force to deal with the matter but said: "Good intention is not enough for a successful operation as sufficient funds, manpower and expertise will be required. We do not want the rhinos to be only put on exhibition in the US, we also want them to help us breed the animals to prevent them from becoming extinct."

The Star, 23 October 1985

Export of Rhino from Malaysia

Letter to:
Mr Kenton R. Miller
Director General, IUCN.

Thank you for your letter of 30 May 1985 which enclosed information on the IUCN meeting held the previous October (1984).

The Malayan Nature Society is extremely worried about the precedent set by IUCN in allowing the export of an Appendix 1 (CITES) animal. The grounds for allowing the export of the rhino appear to be that it stands a better chance of survival in artificial conditions in a foreign country (i.e. in zoos in the West) than in its own homeland because "developing" countries cannot ensure protection in its natural habitat. In which case the 12 animals declared by IUCN as the most endangered in the world become an immediate shopping list for zoos!

In addition, the statement in IUCN Bulletin April/June 1985 page 51 that the rhino breeding programme included a component for "better protection in sufficiently large areas of its natural habitat" which have breeding popula-

tions of rhino and the launching of an education programme appears to be without foundation (see page 3 of the Agreement* and Borneo Bulletin August 17).

This scheme has shaken the foundations of conservation in Malaysia by not emphasising and pressing for total protection of the rhino in its natural habitat and by creating a loophole in CITES regulations.

We therefore request clarification from IUCN as to its involvement and support of this programme.

*Dr Kiew Bong Heang,
Conservation Member,
Malayan Nature Society.
24 September 1985*

* However, since the expertise and resources of the SRT, Sumatran Rhino Trust, are largely oriented toward captive propagation, their contributions must concentrate on this part of the strategy while providing other limited support for the *in-situ* conservation efforts.

Thus, the major objective of this specific cooperative conservation project is to develop a program of captive propagation for the Rhino.

Reply from:
Director General, IUCN

Thank you for your letter of 24th September 1985 requesting clarification from IUCN as to its involvement and support of the Sumatran rhino conservation programme involving Malaysia, Indonesia, and certain zoological gardens in the U.K. and U.S.A.

I am pleased to provide this clarification. I am also pleased that you and your organization are alert to important development of this sort in the conservation field, and are prepared to monitor and question any such actions that are being proposed.

However, I should make it clear from the start that IUCN *does* support the proposed Sumatran rhino conservation programme, after having invested considerable effort in helping achieve agreement among the variety of interests involved. We believe the proposals that emerged can establish a powerful new precedent in the conservation of en-

dangered species and in developing a new and positive cooperating role for the zoological gardens of the world. I hope that after considering our explanation you will agree and will join us in supporting the undertaking, directing your monitoring efforts to assure that the programme is indeed conducted as agreed. This is quite a challenge in itself. First I should remind you that IUCN has much experience in "pressing for total protection of (a species) in its natural habitat", to use your phrase. We would prefer to see all of the world's biological diversity preserved in this way. But we also have much experience which demonstrates that optimism about this approach alone being sufficient has often been a serious mistake.

Just last month, the IUCN/SSC African Elephant and Rhino Specialist Group, meeting in Zimbabwe, received evidence that two more subspecies of black rhino in Africa had become extinct during the last year while being "protected in their natural habitat". In contrast, the southern white rhino of Africa, through captive breeding of the last few surviving animals some years ago, now is represented by a thriving world population with many successful reintroductions to natural habitats throughout its former range.

IUCN was also involved not too long ago in the decision to take into captivity before it was too late some of the last few surviving wild Arabian Oryx. Again, a thriving world population was established, and within the last few years the species has been reintroduced to the wild in Oman where it not only is doing well but is also serving as a national focus of conservation in action and helping local tribesmen acquire a new attitude toward the necessary husbandry of wildlife.

I could go on, listing other species saved from extinction by captive breeding and reintroductions. The Species Survival Commission (SSC) of IUCN considers this important enough to maintain a Captive Breeding Specialist Group (CBSG) to advise on such matters. Their principal advice is: "do not wait until the species is genetically depauperated and reduced to a few individuals before starting captive breeding". We believe that, as a matter of policy whenever it is practicable, every major threatened species should be undergoing captive

breeding in more than one location, taking advantage of both the most modern technologies of reproduction and the most advanced principles of genetic management. This is not to say that a species such as the Sumatran rhino has a "better chance of survival in artificial conditions" to use your phrase. Rather, it is to suggest that the prudent course is to insist upon having an adequate breeding population in captivity as an additional safeguard while the fight to preserve the species in nature goes on. It would be irresponsible to do otherwise.

In our view, a successful conservation programme for a threatened species will therefore often involve both captive breeding and *in situ* preservation, with a mobilisation of efforts and of finances to accomplish both. Here is where the potential new partnerships with the zoo world can be so important and where the Sumatran rhino programme can establish such a valuable precedent if carried out successfully.

IUCN was brought into this issue when, at the request of several of the parties involved, the SSC was asked to evaluate and endorse parts of the proposed actions. Quite properly, the SSC refused any such endorsement until it could be demonstrated that all actions would, amongst other things:

- 1) Be in the interest of long term survival of the Sumatran rhino as a species in nature,
- 2) Be conducted as part of a comprehensive and agreed programme dealing with both *in situ* and captive breeding measures, and
- 3) Represent a coordinated approach among all of the parties involved.

Such an agreement (summary enclosed) was pieced together at Singapore after some initial skepticism. We recognize that, in addition to some altruistic impulses, various kinds of self interest are the dominant motivations. But this does not concern us unduly since they do work for the benefit of the species.

We are pleased to see zoos willing to invest scarce funds in conservation practices on the ground in the countries of origin, and to enter into cooperative agreements through which their resources can provide much broader support for conservation. This is a trend

we wish to encourage, and I hope you will perceive it that way as well. This is quite different from the buccaneering days of unscrupulous animal traders that CITES was designed to combat. (I am enclosing also for your information a copy of the conditions of the UK CITES permit governing import of the Sumatran rhinos coming from Indonesia under the cooperative agreement).

It appears to us that the sooner all of the cooperative agreements go into effect, the sooner will new resources become available for additional *in situ* protection, public awareness programmes and the like. And we would hope that your organization could help see to it that these efforts do materialize as agreed.

In closing, let me say that I can appreciate the reaction that anyone might have to reports implying that "they want to take away our last rhinos because they don't think we can take care of them", or "they are selling out our last rhinos in spite of CITES".

I hope I have convinced you that neither of these interpretations is correct in the view of IUCN, and that you will not only agree with the rationale for IUCN's involvement, but will do your part in helping the programme become a success.

Kenton Miller,
21 October 1985

Special Conditions of Import Permit

A. The animals held in captivity, and their progeny, shall be jointly owned by the Indonesian Government and Howletts and Port Lympne Foundation;

B. The animals taken into captivity shall be isolated non-viable animals, and their selection, capture and transport shall be independently monitored to the

satisfaction of the Indonesian CITES Management Authority and the IUCN;

C. The animals held in captivity and their progeny, shall be managed in consultation with IUCN (as part of the programme agreed at Singapore in October 1984, and accepted (with conditions) by the Species Survival Commission (SSC) of IUCN on 1 November 1984) and to the satisfaction of the Indonesian and UK CITES Management Authorities;

D. Progress reports shall be made to the UK CITES Management Authority, with copies to the Indonesian CITES Management Authority and IUCN, at yearly intervals;

E. The animals shall be transferred to other accommodation within the UK or elsewhere, if, at any time, the UK CITES Management Authority (after consultation with the Howletts and Port Lympne Zoo, IUCN and the Indonesian CITES Management Authority) considers this necessary as a last resort in the interests of the welfare of the animals;

F. The animals shall be returned to Indonesia, at the expense of the Indonesian Government, if, at any time, the Indonesian Management Authority (after consultation and agreement with the Howletts and Port Lympne Zoo, IUCN and UK CITES Management Authority) considers this necessary in the interests of the conservation of the species or the welfare of the animals;*

G. The animals shall not be sold and shall not be displayed to the public for commercial reasons, except in accordance with the terms of any exemption which may be granted from the prohibition in that respect in Article 6 of European Council Regulation No. 3626/82;

H. The Howletts and Port Lympne Foundation shall contribute funds and

expertise, as may be agreed with the Indonesian Government, to help protect and conserve the population of the Sumatran Rhinos in Indonesia.

**Who will pay the expenses involved in returning the rhinos on breeding loan to their homeland? Ed.*

\$3 MILLION GRANT TO SAVE A DYING BREED

The Sabah Government has allocated a launching grant of \$3 million for the Sumatran rhinoceros breeding project to be sited in a 30,000-hectare area in the Tabin Forest Reserve on the State's east coast.

State Rhino Task Force Technical Sub-Committee chairman Dr Murtedza Mohamed said the project, to begin in January, would involve the fencing up of an 800-hectare area for breeding the rare Sumatran rhino in captivity. He said efforts to capture the isolated rhinos would be carried out by experts and staff of the Wildlife Division of the State Forestry Department. Three pairs of the animals might be initially kept in the area and the number increased when necessary. He said the State Government welcomed any international organisation wishing to co-operate and offer its assistance in conservation technology as long as the animals were kept in their natural habitat. He stressed that the Government had, at no time, rejected offers from AAZPA in helping conserve endangered species.

Dr Junaidi Payne from the World Wildlife Fund of Malaysia said the State Government had earmarked 141,200 hectares of land as a wildlife reserve in Tabin.

The Star, 25 November 1985

