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Final Report on the 1977 fieldwork.  
Tenth Mamas expedition.

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## Introduction

In the second part of 1977 one more expedition to the Mamas was made, as well as trips to Malaysia (Endau Rompin) and to Java (Ujung Kulon). From May 17 until June 4 we went via Singapore and Malaysia, to meet Mr. Rodney W. Flynn, who studies the Sumatran Rhino in the Endau Rompin area for the Malaysian Game Department, and we made a trip to his study area.

The tenth Mamas expedition was held from June 16 until July 5, again without the help of a helicopter. Mr. Flynn joined this expedition the last few days.

On July 29 we went to Bogor and Jakarta, after a few days vacation on Java, to discuss current affairs, and from August 6 until 9 we visited Ujung Kulon. On August 13 we departed for Ketambe with the new Toyota Landcruiser, donated by WWF and delivered with the help of the Netherlands Embassy in Jakarta.

The Mamas expedition, planned for September/October, could not go through because it was impossible to charter a helicopter. All machines left Medan after the contracts with the oil companies expired. Going there on foot was impossible because the stock of food and of other essentials was completely finished in June. Also the rainy season started rather early this year, with exceptional heavy and frequent rains. The results of an expedition in this time of the year would have been very poor and the stay in the Mamas very unpleasant. Instead of making an expedition, considerable time could be spent on the evaluation of the data, especially on the identification of the plastercasts.

From October 8 until October 15 the regular field-assistants were sent to the Mamas to bring home the collections made during the last three expeditions.

During the first half of October the attention gradually shifted from the rhino research to the drafting of a management plan for the Gunung Leuser National Park and after October 15 work on the management plan started full-time.

## Visit to Malaysia

May 17 - June 4, 1977

Via Singapore we travelled to the town Segamat in southern Malaysia where we met Mr. Flynn. The next day we started on a seven days' trip to the Upper Selai valley, the core area of the rhino distribution in the Endau Rompin area. After crossing the watershed we followed the Selai river

for about 20 km downstreams and the same way back. We met a few fresh tracks and many other signs of the presence of rhinos. The rhinos occur here at much lower elevations (between 300 and 1000 meters) than in the Leuser, where they are now found only above 1000 meters of altitude. In Malaysia the montane and submontane zones are found at much lower elevations than on Sumatra. Despite the lower elevation, in many aspects, the forest here is rather similar to the forest in the Mamas area.

Density, distribution and habits of the rhino did not appear to differ from those in the Leuser. Only regarding the food some differences could be noted. The lush cover of succulent herbs, found in damp and rather dark valleys in the Leuser, which form the major part of the rhinos diet, is not found in the Selai area, where the animals are probably largely dependent on the leaves and twigs of small trees.

The rhino area can be reached in only a few hours walking from the road and the last village. It is surprising that rhinos are found so close to civilization. Although Singapore, where rhinohorn is openly traded and displayed in chinese druggist's, is very close, the local people do not seem to be interested in rhino poaching. Although the decline of the rhino in Malaysia is certainly caused by excessive hunting in the past, the rather high standard of living nowadays probably makes people much less interested in this very precarious trade. On Sumatra, in an area like this, the rhinos would have been wiped out by poaching already many years ago.

This decrease in hunting pressure might brighten the future somewhat for the rhino in Malaysia, the destruction of its habitat by logging and plantations is still a very serious threat to its survival. The opening up of the last large forested areas proceeds with enormous speed and soon there will be no areas left that can support more than a very small number of rhinos. Even in the Endau Rompin area, probably the "best" rhino area in Malaysia, the number of rhinos is very small and logging concessions are further reducing the suitable habitat. The number of animals may soon become so low that succesful breeding will be impossible and the rhinos will vanish silently.

After the fieldtrip the progress of the rhino survey and the problems of rhino protection were discussed with the staff of the Malaysian Game Department in Kuala Lumpur.

Tenth Mamas expedition

June 16 - July 5, 1977

Initially arrangements were made for a helicopter flight on June 14. The contractor of the road-improvement project, P.T. Hutama Karya wanted to make air-photographs of the road to Blangkejeren, and when the helicopter was in Kutacane, we could make our flights to the Mamas. On June 14 the weather in the Alas valley looked perfect, but the helicopter did not show up. In the afternoon, when we phoned to Medan, we heard that the helicopter took off from Medan in time but that it appeared impossible to cross the mountains of the Serbolangit chain. It was tried for more than two hours, as far south as the Toba lake, but everywhere the mountains were reaching to the clouds and the helicopter was forced to return to Medan. The following day another attempt was made, this time more to the north but again the Alas valley could not be reached because of clouds in the mountains. Again the weather in the Alas and over the Mamas was perfect for flying.

Then it was decided that the making of the photographs would be postponed a few weeks and we decided to go to the Mamas on foot. When the helicopter would come to Kutacane later it could bring a new stock of food and plaster to the Mamas and the collections back to Kutacane. About two weeks later a successful flight over the mountains took place, but then it appeared to be impossible to land in Kutacane because of low-hanging clouds, and after five failures it was decided to abandon the plan of making air-photographs. We now realize that we have been extremely lucky, making eight flights to the Mamas without ever being forced to return with nothing achieved.

On June 16 we started to walk to the Mamas with the usual party. The stock of food in the Central camp was largely depleted during the previous expedition, but with some additions, carried by ourselves, there was just enough left for a short expedition. Towards the end we ran out of plaster and of several tracks not enough casts could be made.

On June 18 camp Central was reached and on June 20 the party moved to camp Aceh, on June 23 to camp Uning and on June 26 back to camp Central. On June 28 camp was moved to camp Pinus and on July 1 to camp Pawang. There was no time to move to camp Lukluk; this camp, (as well as the other camps), was undamaged. Elephants had not been in the area since the last expedition.

On July 2 we met Mr. Flynn and Mrs. Connor in camp Pawang. They were brought there by Pawang Husin along the southern route to camp Pinus. The Pawang returned the same way and the guests returned with us to Kutacane on July 5.

The weather was rather favourable and several good tracks were found. Due to the shortage of plaster the results were not optimal. Both cows with

their calves were found, in the same areas as before. In the area around camp Pinus tracks were found of two animals, full-grown specimens, wandering around together. This was the first time we found this and, once, we heard both animals fleeing from a wallow. Both animals were already known from previous expeditions. One of them is always found in this area; the other, a rather small animal, has its haunts more to the north.

#### Visit to Java

June 29 - August 25, 1977

In Jakarta and Bogor current affairs were discussed with PPA, members of FAO/UNDP-team, LIPI, Universitas National; several institutes were visited. Much time was spent on getting permission to buy the air-photographs of the Leuser area.

From August 6 until 9 a short visit was made to the Ujung Kulon Reserve. Although only two days were spent in the reserve, several good rhino-tracks were found and many other animals and their tracks were seen. Compared to the Leuser Reserve wildlife in Ujung Kulon is much more abundant and the animals are much easy to see. Densities are certainly much higher and the animals are losing much of their shyness after many years of effective protection.

#### Recovery of the collection

Because no helicopter could be used for the last two expeditions, all the material collected during 1977 remained in the Central camp. The regular assistants, together with two men from the group of Pawang Husin, were sent to the Mamas in order to carry the collection down to Kutacane. They managed to transport the whole collection, 17 big tins with 110 kg of plastercasts and faeces, in only eight days. Probably due to exhaustion two man developed symptoms of hepatitis on the last days of the trip and had to be medicated for some time.

#### Preliminary results

After the visit to Java several weeks could be spent on elaborating the data. Most of the time was used comparing the plastercasts with each other, in order to identify the individual rhinos. Several methods were tried to facilitate comparison of these rather unhandy and heavy items. Many drawings of nails, measurements and photographs of nails and whole casts were made, but finally the best results were obtained by sorting out on general appearance, with the form of the nails and the stand of the nails

as main characteristics. After some time it proved to be rather easy to recognize the differences between the casts and to identify most of them. Both these differences are very difficult to quantify and to visualize on paper.

During 1975 and 1976 eight individuals were found in the Mamas, seven adults and one calf. Five of them are regularly present in the study area, their home-ranges coinciding for a large part with the study area. One animal lives north of the area, but visits the northern saltlick now and then, and another is occasionally found in the Lukluk area, probably living in the south-east corner of the rhino habitat. All animals live in rather well defined areas of about 50 km<sup>2</sup> or more, which they tour with a certain regularity.

After the 1977 collection was recovered, the plastercasts were repaired, mounted on wood, cleaned and varnished by one of the assistants, M. Jasa.

In 1977 only one new animal was found, the second calf. Its mother, as well as the mother of the first calf, were already found in the same area, before they gave birth to their calves. The two animals, which do not have their regular haunts in the study-area, were not found again.

Later work on this subject had to be stopped because of the urgency of a management plan for the Gunung Leuser National Park. It is hoped that during the next months some time can be found to check the individual identification again very carefully and to publish more detailed results.

#### RHINO-POACHING IN GUNUNG LEUSER

In July 1977 the anti-poaching unit from Pawang Husin found new rhino-traps. On game paths leading to a saltlick in the upper reaches of the Kompas river three pitfalls were found, constructed some six months before. Obviously no rhino had been caught in these traps.

The walls of the pits were enforced with poles and they were very skilfully camouflaged. They were about 2½ meters deep; on the bottom there were no pointed sticks. It was probably intended to catch the rhino alive, and the traps were most likely not built by one of the local rhino-poachers, who only use spear-falls. It is not known who made the traps. Perhaps Singapore animal dealers were involved, since they still offer for sale live Sumatran rhinos and other protected animals.