

The Sumatran Rhinoceros In The Endau-Rompin National Park of Peninsular Malaysia

by Rodney Flynn

INTRODUCTION

Malaysia's only living rhinoceros is the Sumatran rhinoceros (*Dicerorhinus sumatrensis* Fisher). This rhino is Malaysia's rarest large mammal and dangerously threatened with extinction by the end of the next decade in Malaysia and indeed, the entire world. Once widely distributed throughout Southeast Asia, this rhino species has been greatly reduced in numbers and distribution during the present century as the result of heavy poaching and habitat destruction. The point has now been reached where there are very few viable breeding populations remaining in the world. The Endau-Rompin area contains the only known viable breeding population in Peninsular Malaysia and therefore this area is the most important wildlife conservation area in the country today.

BACKGROUND

The serious plight of the Sumatran rhino has been reported over the years by various authors (Metcalf 1961, Milton 1963, Hislop 1965, Stevens 1968, Groves and Kurt 1972, McNeely and Cronin 1972, Van Strien 1974), but until recently the only field study of the species was done by Strickland (1967). However, during the past few years two field studies have been conducted in Sumatra (Borner pers. comm., Van Strien pers. comm.), as well as the present study in Peninsular Malaysia.

The Malaysian study was initiated in January 1975 by the Department of Wildlife and National Parks under the direction of Mohamed Khan, Director General and Louis Ratnam, Chief Research Officer. The majority of the field work was conducted by the author with excellent assistance from Department personnel and Orang Asli from Kampong Juaseh. The objectives of this study were to determine the present distribution, status, movements and habitat use of the rhinos in the Endau-Rompin area and to collect additional information on their ecology and behaviour.

The major method used in this study was a series of ground surveys through the study area. Once the primary rhino areas were determined, a system of trails was cut

and several base camps were established deep inside the forest. On each survey all rhino sign encountered was recorded. Rhino sign consists of tracks, defecations, urinations, wallows and instances of feeding. The rhinos were almost never seen due to their extreme shyness and the thickness of the forest. Direct observation was possible only twice even though rhinos were encountered at close range ten additional times. Whenever fresh rhino tracks could be found and tracking conditions good, the rhinos were followed. An attempt was made to census the rhino population by using seven survey teams covering pre-selected routes simultaneously and systematically throughout the study area. This was done in March 1977 and May 1977. The majority of the data from this study has not yet been analysed completely and will be presented at a later date.

The Sumatran rhino is very difficult to study because it is so rare, solitary, very shy and lives in remote tropical rainforest areas. The results of the above studies have yet to be published, but they promise to add greatly to the knowledge and understanding of this relatively unknown species. Studies of the other rhino species have been recently completed increasing the understanding of rhino distribution, ecology and behaviour. The other Asian rhino studies includes the Javan rhino (*Rhinoceros sondaicus*) Schenkel and Schenkel 1969) and the Indian rhino (*Rhinoceros unicornis*) (Laurie pers. comm.). The African rhino studies includes the black rhino (*Diceros bicornis*) (Goddard 1967, 1970, Schenkel and Schenkel 1969) and the white rhino (*Ceratotherium simum*) (Owen-Smith 1975).

As previously stated the Sumatran rhino was at one time widely distributed throughout Southeast Asia from the hills of eastern Assam in India through Burma, Thailand, Indochina, Peninsular Malaysia, Sumatra and Borneo. The present world population has been estimated at 100-170 animals (IUCN Red Data Book). This population estimate does not include recent information from Sumatra, Malaysia, or Thailand, but is probably still a reasonable guess. Censusing such an animal worldwide in tropical forest is an almost impossible task. Many of the remaining animals are only scattered individuals, or very small sub-populations in remote forested areas.

Hunting pressure and habitat disturbance are the major reasons for the drastic decline in the numbers and distribution of the Sumatran rhino. The rhino has been pursued for centuries by local hunters because of the widespread belief in the medicinal and magical properties of the animals' body parts, especially the horn. Today these beliefs are still strongly held and a profitable market is available. The species has not been able to adapt to this level of exploitation or to changes in its habitat. Even though officially protected by law throughout its range, law enforcement is not adequate in most countries and the financial return is high enough to encourage people to risk arrest. In Peninsular Malaysia poaching still remains a problem. The Sumatran rhino is totally protected under the Wildlife Act of 1972, but the

maximum fine is only M\$3,000 and/or 2 years in prison. The price of a good horn has been reported to be about M\$3,500 and today may be even much higher. Poachers are very difficult to locate, capture and convict. Maximum fines are seldom given.

Only two areas in the world are known to contain viable breeding populations of Sumatran rhinos, the Endau-Rompin area of Malaysia and the Gunong Leuser Reserve of northern Sumatra, Indonesia. These two areas may represent the only hope of survival of the species. The Gunong Leuser Reserve is large (7,500 sq. km.), mountainous, inaccessible and officially protected under Indonesian law. It has been the location of two recent studies by Markus Borner, a Swiss zoologist (1972-1975) and Nico Van Strien, a Dutch zoologist (1975-1977). The author briefly visited the area in June 1977. In this area the rhinos are found over about 2,000 sq. km. of the reserve and there are estimated to be 40-60 animals (Borner pers. comm.). At least two young rhinos have been reported (Van Strien pers. comm.). It is not known how much longer this reserve can be protected from exploitation and poaching has been a serious problem. It cannot be assumed that the rhinos will survive in this area, and from the worldwide perspective the Endau-Rompin area becomes even more important as possibly the last refuge for the species.

THE ANIMAL

The Sumatran rhino was first described from a specimen collected from Sumatra in 1793, thus the common name "Sumatran" rhino. It belongs to the order Perissodactyla and family Rhinocerotidae, and is one of the three living Asian rhino species. The Javan and Indian rhino are both single-horned, and even though the Sumatran type is double-horned it is more closely related to the Asian Species (Groves 1967). It is believed that the allied species originally inhabited the forests of Central Europe during tertiary geologic times based on fossil remains discovered in Germany. The Sumatran rhino is probably a recent immigrant to the tropical forests of Southeast Asia where it is found today. It is probably very similar to the original primitive form.

The Sumatran rhino is much smaller than the other rhino species standing only 1.1-1.5 meters at the shoulder with body lengths varying from 2.4-3.2 meters. No animal has yet been weighed. The skin is usually dark grey, smooth, sometimes granular, and may be covered with varying amounts of bristly hair. There are two major skin folds, one encircling the trunk just behind the fore-legs and the second over the belly and flanks but not on the back. This is in contrast to the Javan rhino which has three complete skin folds. The horns are actually derivatives of the skin, being composed of a closely matted mass of horny fibres of epidermal origin. The horn is not connected to the skull and may occasionally break off from the body. The front horn usually does not exceed 50 cm. in length and the rear horn is much less

developed, usually only a small knob. The largest recorded rear horn is 8.8 cm. The very small rear horn has often resulted in confusion in the identification of species when spotted in the wild. The rhino's feet are wide, flat, and bear three round nails each (see figures 1 & 2), leaving a very characteristic foot-print. The distance between the outer edges of the two lateral toes



Fig. 1: The author and Kang Kong examining rhino tracks along the Sungai Endau.

has been used to identify individual rhinos. The width of the front toe has also been useful. The smallest track recorded in Malaysia is 15.5 cm., the largest 23.5 cm. The majority of the tracks fall between 18.0 - 22.5 cm.

The breeding biology of the Sumatran rhino is not yet very well understood but information on the other rhino species is available and assumptions can be made based on this information. The reproductive potential of this species is very low. Sign of young rhinos is almost never found. Individuals develop very slowly reaching sexual maturity probably at 5-8 years of age. The gestation period is long, approximately 15-16 months, and only a single young is born. The young rhino stays with the mother for about 2½-3½ years. Therefore, under ideal conditions, 2½-4 years will pass between births for a reproductively active female. Further more, breeding is characterized by the lack of a definite breeding season. The heat or estrous period of the female may occur at any time probably only a few times each year. Also, within one estrous period the female may be receptive for only a few days.

The rhinos feed primarily on the upper leaves and

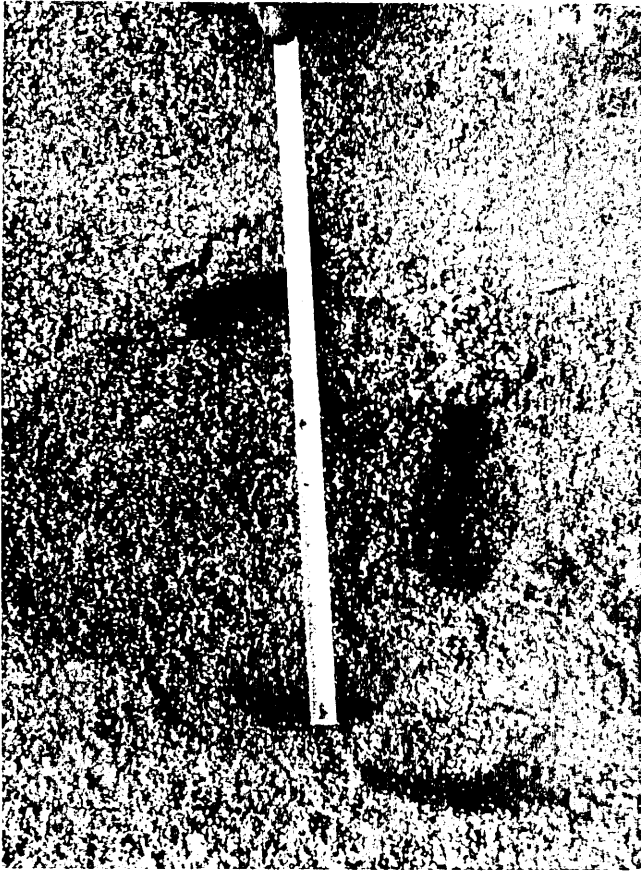


Fig. 2: Recent adult rhino track in sand showing the proper measurement method.

stems, occasionally bark, of the young saplings of a wide variety of mid-canopy forest trees. The saplings are found in the understory of the forest and range from 2.0-10.5 meters in height and 0.8-8.0 cm. in diameter at breast height (DBH). In feeding the rhinos usually push the sapling over to the ground by walking over it and bites off the leaves and stems. In the next most common way of feeding the rhino breaks off the sapling 0.-1.8 meters from the ground by grasping and twisting the trunk of a sapling by using its teeth. Each sapling is usually not heavily utilized, but may be severely damaged. Fruits are occasionally fed on and the rhino eats them from the ground. A preferred fruit will be heavily consumed. After feeding, the rhino may travel a considerable distance before feeding again. During a typical bout of feeding, a rhino may travel 400 meters or more from one instance of feeding to the next. The author has followed rhinos for more than one mile at a time and not found any sign of feeding.

Rhinos use mud wallows to cool themselves and to coat their skin with mud. These wallows are definite evidence of the presence of rhinos in an area since rhino wallows are very characteristic. The wallows are usually found

along the flood plain of small streams or along ridgetops. Rain water collects in these places and a rhino will lie in the water and roll in the mud that forms. Most wallows are 2.5-3.5 meters long and 1.5-2.0 meters wide. Sometimes they are located next to a high bank and the rhino will use its horn to cave dirt from the bank into the wallow. Frequently used wallows are usually shaded by palms or thick undergrowth and may be difficult to locate. Thirty wallows have been located in the Endau-Rompin area. Most wallows are used only a few times, but a few are used several times. In hot lowland areas wallows appear to be used more than in hill areas where the air temperature is cooler. During drier periods the wallows become dry and are not used.



Fig. 3: Rhino wallow along the Sungai Selai being recorded by Game Ranger Abdullah bin Ibrahim.

The social organization of this rhino species appears to be one of a basically solitary animal, except for cow/calf associations, which occurs naturally in low densities and widely-spaced throughout the habitat. The animals have large overlapping home ranges and travel extensively. Even though home range areas overlap in space (spatially), they seem to be separated in time (temporally); or in simpler terms, if a rhino is in an area you will not find any other rhinos in the immediate area

at the same time. The species use a spacing mechanism based on social communication by scent-marking through urinations and defecations. This system probably evolved as a response to a limited exploitable food resource thus keeping animals evenly spaced throughout the habitat and in low densities.

Urinations are probably the most important means of scent-marking. Urination spots are usually found along a game trail. The rhino typically walks to one side of the trail, breaks off a sapling and/or may rub the trunk of a sapling with its horn. Next the rhino urinates on either the broken sapling or a sapling nearby. The rhino may either spray the spot with urine by a backward, upward motion (squirt-urination) or let it fall downwards. The squirt-urination is done by a male and in other rhino species by only a dominant male. The urine has a very strong smell and, unless it has rained recently, can be easily detected by the human sense of smell. After urinating, the animal usually scrapes dirt back towards the spot by using its rear feet, leaving a very noticeable mark (see figure 4). In this way, the animal not only leaves a cue that can be smelled but also a visual cue in the broken saplings and scratch mark.



Fig. 4: Rhino urination area showing broken saplings and scratch mark in foreground.

The deposition of dung is confusing because it is usually dropped into water, as if the animals are trying not to make a scent-mark. The most common spot to find rhino dung is in about 15 cm. of water along the edge of a small stream. The dung is usually very fibrous and composed of 4-12 boluses 7.5 cm. x 7.5 cm. to 9.0 cm. in size. Stems are usually bitten into pieces 1.7-2.0 cm. long. "Dung heaps", commonly reported in the other rhino species, have never been found here.

THE HABITAT

The Endau-Rompin area lies approximately 240 km. southeast of Kuala Lumpur capital of Malaysia, and 160 km. north of Singapore. It lies between 2° - 3° north latitude and 103° - 104° east longitude. The area straddles the state borders of Johore and Pahang and gets its name from the Endau and Rompin rivers which drain the majority of the area. The Sungai Endau drains east into the South China Sea which lies 56 km. to the east, and its upper watershed forms the majority of the area. The Sungai Rompin drains the northern and northwestern areas and also flows into the South China Sea. The western areas are drained primarily by the Sungai Muar which flows into the Straits of Malacca 96 km. to the west.

A north-south range of low granite mountains (600-1,020 meter peaks) rises abruptly from the western coastal plain (150 meters) and is the dominant feature in the western section of the Endau-Rompin area. The highest peak is Gunong Besar (1,020 meters). The entire area is generally hilly, locally quite steep, and elevations range from 45-1,020 meters. Within the hilly areas there are some high valleys. The most important of these is the upper reaches of the Sungai Selai. At one point this stream flows for 10.6 km. at an altitude between 390-480 meters, then drops 280 meters in the next 1.6 km.

The geology of the region has a major influence on the landscape and vegetation. Three major geological formations are found in the region. To the west is massive mountain range of up-thrusted granite which culminates in the peaks of Gunong Besar (1,020 m.), Gunong Chabang Tiga (1,016 m.), and Gunong Pukin (952 m.). These three peaks are clearly seen from the Kuala Lumpur-Singapore highway 19 km. south of Segamat. There is a central north-south belt of volcanic rocks, while to the north and east are a variety of sedimentary rocks. Prominent among the latter are hill ranges of sandstones which form distinctive plateaus and escarpments lending to the region a landscape unique in Peninsular Malaysia.

The rainfall pattern changes as you go from the east coast to the west with the largest change as you cross the highest mountains. Mersing, on the east coast, averages 130 inches (330.2 cm.) of rain per year and is strongly influenced by the monsoon rains, while Segamat averages 78 inches (198 cm.) per year and is more characteristic of an inland form of climate. Mean



Fig. 5: Rhino habitat in the Ulu Selai area of the Endau-Rompin area.

monthly temperatures remain quite constant, ranging in Segamat from 79°F to 84°F. At 450 meters elevation at the Sungai Selai Base Camp the monthly mean temperature drops to around 72° with less variation.

The vegetation in the area is tropical rainforest typical of southern Peninsular Malaysia. The majority of the area is covered with mixed lowland dipterocarp forest with hill dipterocarp forest on the ridges and at higher altitudes. On the high peaks edaphic hill forest is found. The forests are primary and undisturbed for the most part except for recently logged areas. In Johore, according to Gyekis (1966), a large portion of the forest in the western mountains is of the Meranti-Keruing Hill Mixed Forest type, with a Seraya-Keruing Ridge Forest predominant on the ridges and well drained sites. The understory has not been sampled and is quite variable with an abundant growth of palms, sapling, and rotans. These forests have generally good to average timber volumes. In the eastern section the forests are generally not as well developed and variable. In Pahang the forests are very variable in the mountainous areas and are generally poor, composed primarily of edaphic hill forest, some Seraya Hill Forest, and Limestone-Kelat-Kedondong Forests (Lee 1966). Just west of the mountains are lowland dipterocarp forests of the Chengal-Red Meranti-Keruing type.

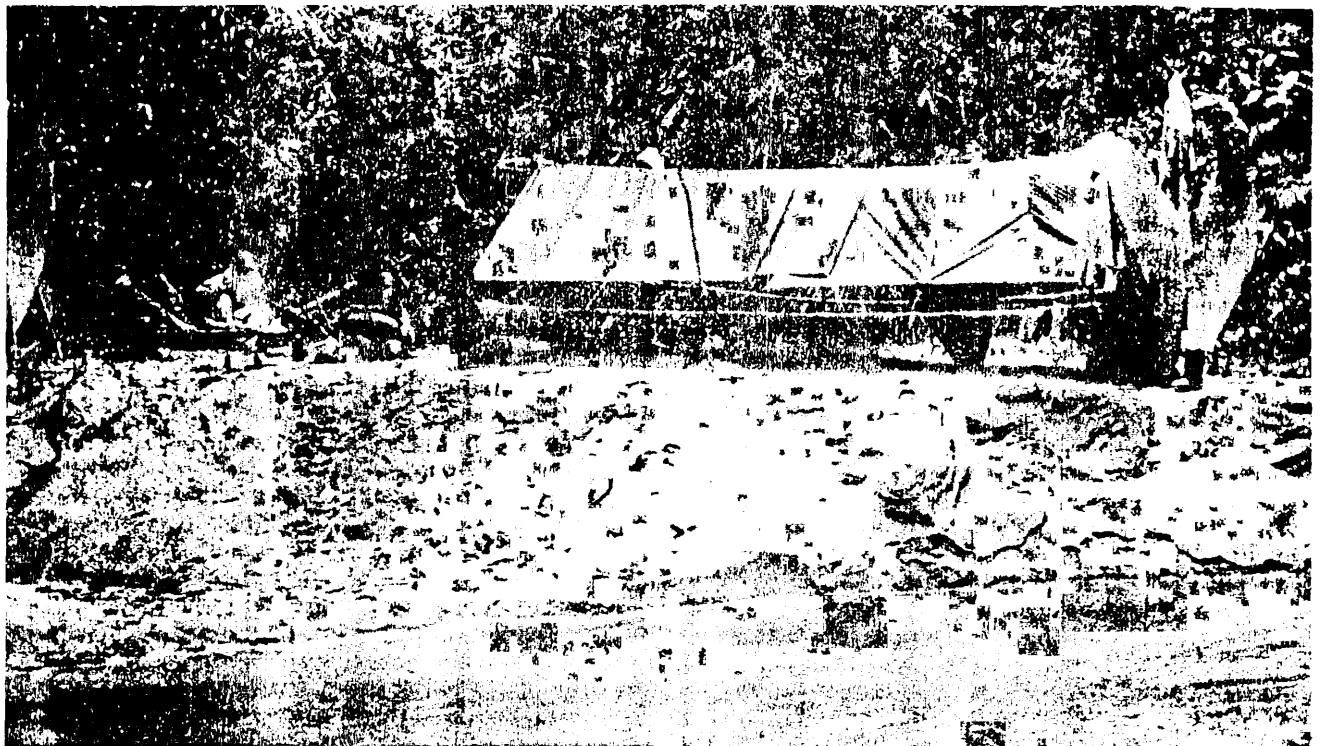


Fig. 6: Temporary camp along the Sungai Selai.

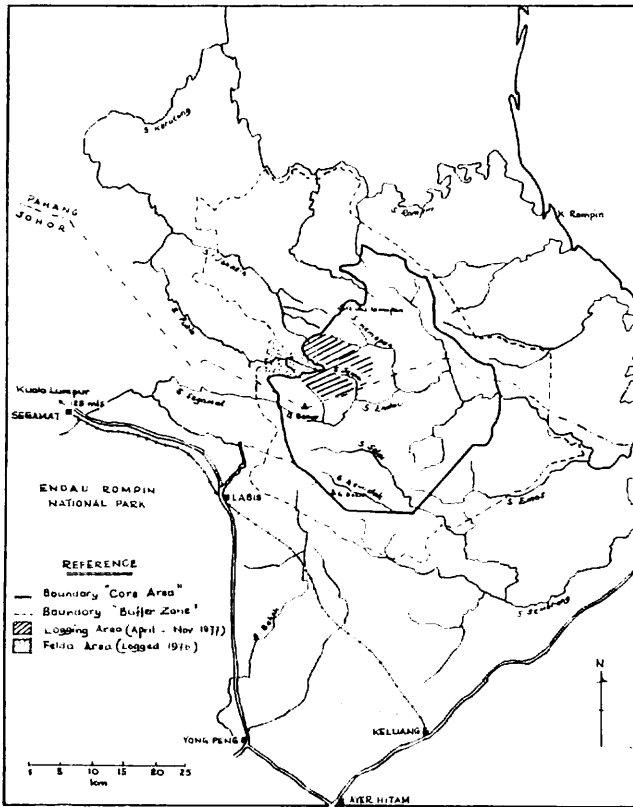


Fig. 8: Logging and disturbance areas in the rhino-occupied areas in the Endau-Rompin area (1976-1977).

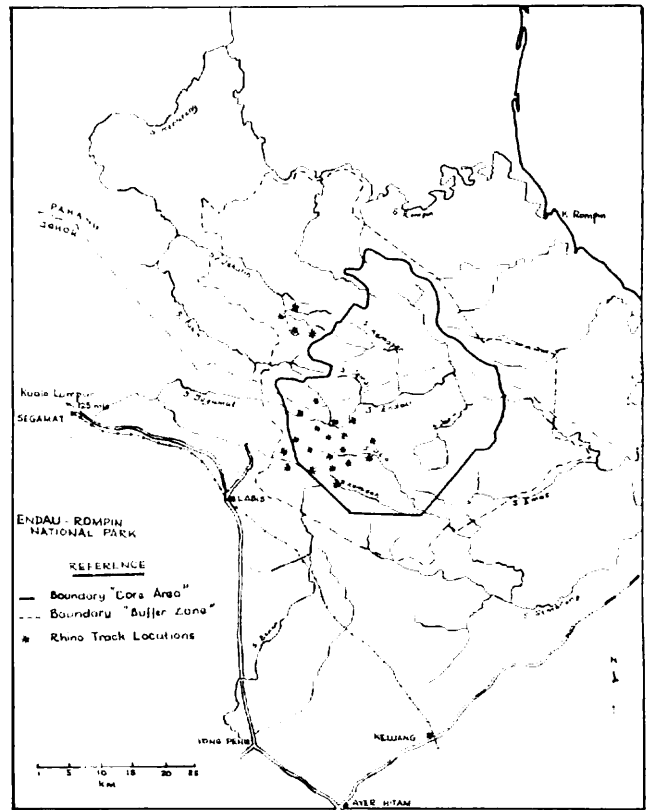


Fig. 9: Rhino track locations in the Endau-Rompin area during March-August 1977.

sign in the Sungai Jemai, Sungai Kemapan and Sungai Pukin areas; the nearest recent sign was 6.5 km. away from the logging activity. This is positive evidence that the rhinos were no longer found in the logging area.

DISCUSSION

The habitat requirements of the Sumatran rhino are not very well known, but recent research has shown where the animals are now found, the type of habitat in which it presently occurs, and how it has reacted to changes in that habitat. It can be assumed that the few areas where the rhino still occurs is suitable habitat and where it occurs in higher densities is probably preferred habitat. Rhino areas that are vacated after any change in the habitat indicates habitat that has been created unsuitable.

The term "habitat" encompasses not only the vegetative cover, but the entire environment. Many factors interrelate to determine if a particular area can be utilized by a particular species. The human disturbance factor is very important and must be considered as part of the habitat. Human disturbance

may be in the form of physical changes to the habitat (logging, etc.), or may be in the form of human presence (harrasment).

In the Endau-Rompin area, rhino habitat consists of undisturbed primary rainforest in hilly area above 250 meters in elevation. These areas seem to be preferred because of the following:

- 1) The rhinos like a closed-canopy area because it is highly shaded and the air temperature is cooler.
- 2) There is an abundance of sapling growth in the understory,
- 3) Suitable areas for wallowing are available,
- 4) Human disturbance is minimal.

The disturbance factor is very important. The animals seem to be completely intolerant of any human disturbance. When animals are encountered, they immediately run away and continue for a long distance. If a rhino area is entered, the rhinos will avoid the immediate area. This is a factor of the animals' disposition.

The impact of the two logging areas discussed above has already been felt by the rhinos, and the long term effect could be very detrimental to the future of the rhino population. Not only is critical habitat being removed,

but this activity is fragmenting the rhino population into several small sub-populations. These small sub-populations will probably not be reproductively viable. Reproduction may have already stopped since no new young rhino tracks were found during 1977. Furthermore, there is presently no way to control illegal hunting in the area with the vast network of roads and the large number of logging camps that are deep in the forest.

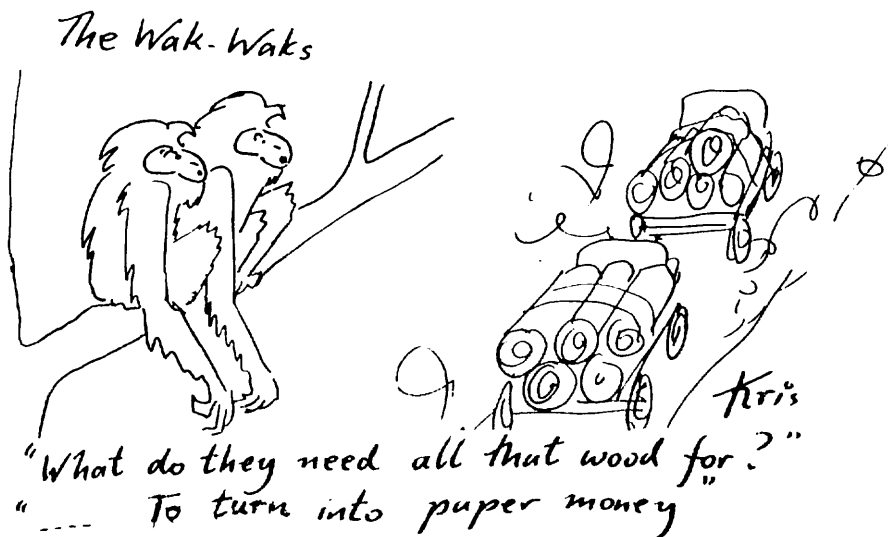
Recommendations that should be implemented immediately if the Sumatran rhino is to survive in the Endau-Rompin area as follows:

- 1) Logging in the "Pahang" concession stop immediately, all men and equipment removed, and the road access closed,
- 2) The eastern-most arm (10,000 A.) of the Bukit Selanchar FELDA scheme not be developed and left in permanent forest that would be added to the Endau-Rompin N.P.,
- 3) The Endau-Rompin area be gazetted a wildlife sanctuary immediately until suitable national parks legislation is passed.
- 4) A system of ranger patrols/guard posts be initiated to protect the area from poachers and human disturbance.

The Sumatran rhino is rapidly disappearing from this country and the world. Unless a major conservation effort is made in the Endau-Rompin area the species will vanish and an important part of Malaysia's natural heritage will be lost forever. The Javan rhino has already disappeared from Malaysia. Is the Sumatran rhino next?

Literature Cited:

1. FOENANDER, E.C. (1961). The occurrence of rhinoceros in Pekan District. *Dept. of Wildlife and National Parks Files*. Kuala Lumpur.
2. GODDARD, JOHN. (1967). Home range, behaviour and recruitment rates of two black rhino populations. *E. African Wild. J.* 5: 133-150.
3. GROVES, C.P. (1967). On the rhinoceros of South East Asia. *Saugetierk. Mitt.* 15: 221-237.
4. GROVES, C.P. and FRED KURT. (1972). *Dicerorhinus sumatrensis*. Mammalian species No. 21. *American Society of Mammalogists*.
5. GYEKIS, KERRY. (1966). Forest Reconnaissance Survey Report No. 7 Segamat District. Forest Department, Kuala Lumpur.
6. HISLOP, J.R. (1965). Rhinoceros and Seladang, Malaysia's vanishing species. *IUCN Pub. New series 1(10)*: 278-283.
7. LEE, P.C. (1966). Forest Reconnaissance Survey Report No. 3, Rompin District, Pahang. Forestry Department, Kuala Lumpur.
8. McNEELY, JEFFREY and EDWARD W. CRONIN. (1972). Rhinos in Thailand. *Oryx 11(76)*: 455-460.
9. METCALFE, G.T. (1961). Rhinoceros in Malaya and their future. *Malayan Nat. J. Special Issue* 183-191.
10. MILTON, OLIVER. (1963). Field notes on wildlife conservation in Malaya. *Spec. pub. No. 15. American Committee for International Wildlife Protection*.
11. OWEN — SMITH, N. (1975). *The social ethology of the white rhinoceros Ceratotherium simum* (Burchell 1817).
12. SCHENKEL, R. and SCHENKEL — HULLIGER. (1969a). *Ecology and behaviour of the black rhinoceros (Diceros bicornis L.). A field study*. Paul Parey, Hamburg and Berlin — 101 pp.
13. SCHENKEL R. and SCHENKEL — HULLIGER (1969b). The Javan rhinoceros in Ujung Kulon Nature Reserve. Its Ecology and behaviour. *Acta Trop. (basel)* 26(2): 97-135.
14. STEVENS, W.E. (1968). The conservation of wildlife in West Malaysia. *Office of the Chief Game Warden. Kuala Lumpur*.
15. STRICKLAND, DAVID (1967). Ecology of the rhinoceros in Malaya. *Malayan Nat. J.* 20: 1-17.
16. VAN STRIEN, N.J. (1974). The Sumatran or two-horned Asiatic rhinoceros. A study of the literature — Meded. *Landbouwhogeschool Wageningen* 74-16 82 pp.



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MALAYAN NATURALIST

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1. Editorial
2. Endau Rompin Story (Reported in the Press)
Marcus Chambers
5. The Sumatran Rhinoceros in the Endau Rompin National Park of Peninsular Malaysia
Rodney Flynn
13. The Value of a Forest
Richard Lulofs
13. Endau Rompin: Its Potential As A National Park
Ken Rubeli
16. Human Interference with the Malaysian Tropical Rainforest
Goh Kim Chuan
22. Photofeature
Christine Betterton
26. Endau Rompin: An Eye-Witness Account
Leow Kee Peng

Cover Pictures by Marcus Chambers: Scenes of the controversial logging area in the core of the proposed Endau-Rompin National Park. These photographs were taken during the Malayan Nature Society trip to the area in July 1977.

EDITORIAL POLICY: The Malayan Naturalist is a quarterly newsletter devoted to furthering the objectives of the Malayan Nature Society. These are to promote an interest in the natural

Editorial

Endau-Rompin is the most important conservation issue to have arisen in Malaysia. For the first time the general public has become actively involved in a matter concerning the continued existence of this country's rich and invaluable natural history. Concern extends beyond the simple conservation of wildlife. The maintenance of blocks of virgin forest has deep implications with regard to climatic stability, water supplies and erosion. Through a long, complex chain of cause and effect, uncontrolled land clearance can lead eventually to a decrease in the standard of living of rural and urban peoples, both rich and poor.

Such effects are acknowledged. However the temptations of quick profit are always present and the conflict of short and long-term interests came to a head in the Endau-Rompin issue.

It is not easy to make an attractive case for the less tangible benefits of conservation when dollars and cents can be laid on the opposition's table, and an impassioned call of rapid development 'for the good of the People' has been made. But one need only to look to other countries to see the disastrous results of overfast and ill-considered projects. The Aswan Dam on the Nile, which was designed to improve crop production, has cost the Egyptian Government millions of dollars through an increase in the disease, schistosomiasis. In the Philippines, extensive logging has turned once richly forested highlands into tracts of pine tree and lalang. In Japan, irresponsible release of mercury-containing effluent gave rise to crippling Minamata disease. Here in Malaysia, 42 rivers are grossly polluted with effluent from agro-based industries, seriously depleting freshwater fish stocks.

The cases are innumerable. It is not simply a question of esthetics, or academics wishing to conserve for the sake of some obscure ideal (an impression which is frequently transmitted by non-conservationists). It is a question of the quality of life and the livelihood both of ourselves and of future generations.

This is the message that must be widely spread in order to develop an informed and socially responsible attitude among the general public and developers alike.

The dispute over Endau-Rompin is a milestone in the history of conservation and the environment in Malaysia since it stimulated the first national publicity campaign on such an issue. Following the appearance of a half-page 'Save Endau-Rompin' advertisement in the New Straits Times, which had been placed there through the efforts of the Council of the Malayan Nature Society, the Penang Branch Launched a 'Save Endau-Rompin' campaign. This included the production of car stickers and posters which were distributed throughout the country by well wishers and branches of the Society. A signature campaign was organised and some 4000 signatures protesting the logging were sent to the Pahang State Government c/c the Prime Minister. Letters were written to international conservation bodies explaining the situation and appealing for their support. A favourable response was received ant the International Union for Conservation of Nature publicly expressed its concern over the logging in the proposed Endau-Rompin National park. Photographs and Articles based on the Nature Society's trip to the logging area in July 1977 appeared in the national press. The Selangor branch set up displays in supermarkets in Kuala Lumpur and Petaling Jaya.

Endau-Rompin caught the public attention and became a newsworthy item. Banner headlines on the story appeared on the