

## Rubber, Tin-and Rhinos

By OLIVER MILTON

Southeast Asia Conservation Expedition

The author of this brief article will be remembered as the person through whom the Zoological Society received a young Takin from northern Burma in 1959. At that time Mr. Milton was engaged in the Burma Wildlife Survey. He has now moved into Malaysia on his Southeast Asia Conservation Expedition, sponsored by the Zoological Society.

UALA LUMPUR, the capital of the Federation of Malaya, is a modern bustling city surrounded by rubber plantations and tin mines. It is the hub of a network of some of the finest roads in Southeast Asia and if one travels along the highway leading north it would seem unlikely that the surrounding country harbors much wildlife. This is a legitimate conclusion because the traveller sees only miles and

miles of rubber trees (sprayed with deadly sodium arsenite which frequently causes the death of domestic and wild animals) and vast expanses that have been denuded of all vegetation by the great dredges searching for tin, the "black gold" of the region. However, at the 72nd mile there is a road leading to the west and if you follow it for a few miles you come to a canal. Two miles down the canal by boat brings one to a spot that

seems to be in the middle of nowhere because in all directions the dense dark green jungle wall hides a gigantic swamp forest. This vicinity, less than three hours from Kuala Lumpur, is the habitat of the Sumatran Rhinoceros, one of the world's endangered species of animals.

There are two species of rhino in Southeast Asia — Rhinoceros sumatrensis and R. sondaicus. The former is commoner and smaller than the latter which, except for a small concentration of about 50 animals in the Udjung Kulon Reserve at the western tip of Java, is not known to exist for certainty elsewhere in Southeast Asia. Still, during my work in Tenasserim, Southern Burma,

The Sumatran Rhinoceros is one of the rare and threatened animals in the world today. This one is in the Copenhagen Zoo.

Photo by Erik Parbst

Within three hours' travel from Kuala Lumpur is a great swamp, surrounded by thick forest. Here lives the Sumatran Rhinoceros.

Photo by Oliver Milton

in 1960, I heard reports that there *might* be some in the remote jungle on the Burma-Thailand border east of Tavoy. In Malaya the last definite record of *sondaicus* was in 1937 when a specimen was shot in the Ulu Bernam area, slightly north of the area I now write about.

In 1953 the Drainage and Irrigation Department (D.I.D.) of Selangor State commenced work on the canal to supply water for a coastal agricultural project. During the following years the laborers saw rhinoceroses on numerous occasions. I have spoken with some of these persons and they say that there are four animals: one large, two medium-sized and one young. Each is said to have but a single horn. (The Sumatran Rhinoceros has two horns and usually the posterior one is very small and often hard to see. The sondaicus has only one horn). One night a rhino came into a camp and licked the salt from an old shirt that had been thrown away. In March, 1957, and again in August, 1960, a solitary rhino was seen and photographed on the Lima Blas oil palm estate about five miles from



the canal. This animal was identified as sumatrensis.

I hoped to find out more about the rhinoceros population and suggest plans for their future preservation. The Director of the D.I.D. gave me full cooperation and lent his departmental bungalow at the north end of the canal to act as a base camp for a period of two months. The area in which I was interested lay about two miles south of this bungalow. To the west and south of it spreads a vast expanse of swamp forest. To the east is the Bukit Belata Forest Reserve and the northern part is bounded by blocks of forest in which commercial extraction of timber is taking place. Slightly further to the northeast is a new land settlement scheme where more than 600 Malay families will settle on about 9,000 acres. The rhinoceroses are therefore living on a kind of island bounded by swamp and human beings.

The land is about 50 feet above sea level, al-



though to the east there is a hill that rises to 829 feet. The lower land is almost entirely swamp forest characterized by such trees as Koompassia malaccensis, Shorea rugosa uliginosa and palms such as Licuala spp. and Cyrtostachys lakka. A river, the Sungei Dusun, had been dammed so that its water flows into the canal. This has resulted in many acres of forest being flooded and the trees have subsequently died. The higher portion of the ground is poorly covered with a non-dipterocarp type of forest which is typified by trees of the families Burseraceae, Sapotaceae and Dilleniaceae. The canopy is fairly open, there are few large trees and much of the undergrowth consists of the Bertam palm (Eugeissona triste Griff.) and rattan (Calamus spp.). The largest trees are probably the "Jelutong" (Dyera costulata) and there is a network of paths connecting these which has been made by the Chinese and aborigine tappers who collect the latex for eventual use in chewing gum. These paths are also used by the rhinoceros and elephant.

I was very lucky in seeing one rhino but unlucky in missing the same or others on several later occasions. One morning I had stopped for a short rest when a noise attracted my attention to the left. In a matter of seconds a rhino ambled out of some thickets and walked towards me on the path. Unfortunately it was almost entirely hidden by Bertam palm. It stopped abruptly and stood for a few seconds facing me. After a snort it turned about and trotted off into a patch of dense undergrowth. Although it was only 16 paces from me I was unable to identify the species but I could see that it stood at least 4' 6" at the shoulders. After this brief encounter I continued to see fresh tracks in various parts of the jungle and, in particular, at a wallow. I had cleared an overgrown path to reach this mud puddle and having visited it in vain for eight consecutive days I approached from another direction, rather casually, on the ninth day. I had to do a little path clearing and when only 20 yards from the wallow there was a splashing and general commotion, followed by the sound of break-

A rude shelter of sticks and leaves, sufficient to keep off the rain, was built near a fallen tree 20 yards from a wallow. The animal continued to make visits, unafraid of the structure.

Photo by Oliver Milton



A relaxed moment in the life of the Sumatran Rhinoceros in the Copenhagen Zoo — and a good view of the big cushioned feet. Photo by Erik Parbst

ing branches. The time was 11 a.m. and the rhino had been disturbed. The animal had been lying at the side of the wallow and then crashed off into the dense swampy area a few yards away. It returned the next day and continued to do so for a week after which I did not see any signs of it again. Unfortunately there was no suitable tree in which to construct a platform. There was, however, a fallen tree about three feet in diameter and 20 yards from the wallow, in full view. As it was next to the path used by the rhino I hesitated to build a ground level platform for fear of scaring the animal but I finally decided to put up a rude shelter. The animal paid little attention to it. I rigged up a trip line for flashlight photography but met with no success.

I made plaster of Paris casts of four clear tracks. Taking into account the nature of the ground, there is reason to believe that they were made by at least two and possibly by three animals. The measurements of the tracks are as follows:

	Length (from tip of central nail to rear of pad)	Breadth (between tips of lateral nails)	Central nail
Cast 1	21 cm.	22 cm.	8 cm.
2	20 cm.	19 cm.	6 cm.
(possibly same animal)			
3	19 cm.	18.5 cm.	6 cm.
(possibly hind foot)			
4	15 cm.	14 cm.	5 cm.

Summarizing the information available, we

know that in 1937 a sondaicus was shot in this vicinity, which is a typical habitat, i.e., low swampy ground. This species is also known to travel to higher levels periodically. The sumatrensis is more apt to be found in the hills near the sources of streams and yet it has been seen on several occasions in this low-lying area (e.g., Lima Blas estate). Among the many small trees about three inches in diameter that grow along the paths followed by the rhino and are used as rubbing posts, is one that I measured. Dried mud and absence of bark reached to a height of 4' 2" above the rhino's tracks. If this were caused by rubbing with the shoulder, then the height of the animal at the shoulder would be about 4' 10". This would be too big for a sumatrensis, but the marks could have been made with the head.

I have submitted recommendations that this small area (about 19 square miles) be made a game reserve especially for the rhinoceros. At the time of writing this article there has not yet been any official declaration, although it is fairly certain to be approved.

(By later mail.) The first week in February I paid another visit to the area and found distinct tracks of three separate animals, including one youngster. One of the laborers also told me that three had been seen together and so we now know for certain that at least three rhinoceroses are living within a comparatively short distance of Kuala Lumpur.