No. 1, 1933.

This information should interest Mr. Arthur Vernay who, according to an October issue of the London Illustrated News, is going to make a hunting expedition to Siam in order to obtain a specimen of the Schomburgk deer for the British Museum.

ULRICH GUEHLER.

Bangkok, December, 1932.

No. VI. Reported Shooting of a Schomburgk Deer.

I have been most interested in the account of the presumed shooting of a Schomburgk deer in the Kanburi district in 1932. The photographs are undoubted by those of a Schomburgk deer head, but I am unable to accept the evidence as absolutely conclusive.

Such large sums have been offered of late years for a fresh specimen of this animal, and so many enquiries have been set on foot, that the temptation to "fake", from a desire for notoriety or pecuniary gain, must be taken into consideration. A head which has been hung on a wall will retain skin and dried flesh for many years, and it is easy to give these the appearance of freshness by soaking in a bucket of salt and water. There are several other ways of faking an old head which would pass muster, except to a man on the lookout for them. Until we get an absolutely fresh head, or a fresh skull with a complete skin, or the photograph (guaranteed untouched) of an entire Schomburgk deer, the record cannot be conclusive.

That the specimen in question is said to have been shot on the edge of an area which is practically our last hope of the continued existence of the Schomburgk deer, is, of course, very much in its favour and will, I hope, stimulate further enquiry in that direction.

C. H. STOCKLEY.

No. VII. Migration of Rats.

In Volume I of the Journal of the Natural History Society of Siam, T. S. Butler records a migration of rats which he observed while stationed at Koh Lak in September, 1913. For nearly a week his bungalow close to the beach was over-run with rats, and swarms of them passed through the building on their way to the beach and sea. "Their one idea appeared to be to leave the land. None turned back except when attacked by hawks or crows, of which they had attracted a good number. The following day, when going out to meet the steamer in Koh Lak bay, I noticed several rats well away from the shore, still swimming straight out to sea, and for days afterwards I found their dead bodies on the beach, washed up by the tides. This I observed throughout the whole length of my section, a distance of 30 kilometres," Late in August, 1931, a similar phenemenon was reported from the same district. Large armies of rats invaded Changwad Prachuab doing great damage to all crops and goods in stores, and it was reported that the influx of these creatures was from the sea.

I was instructed to investigate this matter and left Bangkok for Prachuab on the 6th of September, 1931. The first appearance of rats was noticed on the 27th of August. On the 28th they all landed on the shore extending from Thap Shake to Ban Saphan Yai, a distance of about 35 kilometres. These rats did considerable damage on the 28th, feeding on any edible thing that came in their way. Crops such as cocoanuts, sugar-cane, water-melons and other field and garden crops were destroyed, and stored products including leather and dry fish were equally damaged. Even the cats were afraid to attack them on account of their large number.

The rats did not seem to be afraid of men and would not hesitate to come and take away food from the plates while the latter were having their meals. They could be killed by the hundred without having to run about. A man with a small mallet, sitting quietly, could kill a great number of them.

On the 29th of August they started leaving the coastal areas, presumably for the hills and forests. By the 1st of September hardly any rat could be seen in that vicinity. We could not get any information as to whence they migrated, and since they did not go back into the sea it is safe to suppose that they went inland.

There is sufficient reason to believe that these rats came from across the sea. All the fishermen whom we met saw these rats in the sea in large swarms and also holding on the fishing "poh" to rest. At times they were mistaken for shoals of cuttle fish (pla muk), and people who went to catch these supposed pla muk were disappointed as well as surprised to find that they were rats. Many rats came along with fishing boats.

Rats can keep afloat even in fresh water without food for a few days and hence it is quite easy to believe that they might have swam across the gulf from Koh Chang which is notorious for its rats. Their large size may have inspired their aquatic enemies with fear and thus left them unharmed in their journey across the gulf. It is also probable that the number landed only indicated the number that survived the dangers and trials of crossing. Very small fishes may have served them as food.

A specimen of the rat was sent to Raffles Museum and was identified by Mr. F. N. Chasen as *Rattus rattus jalorensis* (Bonh.), the common field rat of Siam.

> ARIANT MANJIKUL, B. AGRIC., Assistant Entomologist, Dept. of Agricultural Research.

Bangkok, April, 1933.