

MISCELLANEOUS NOTES.

No. I.—MIGRATION OF RATS.

The migration of rats from one part of the country to another is not unknown, and I was fortunate enough, quite recently, to witness another instance of this interesting habit of theirs. It was all the more extraordinary as it led them to their own destruction. The occurrence took place in September last, when I was stationed at Koh Lak, and lasted for nearly a week. My section-house lies close to the beach, and the first intimation I received of anything unusual, was in discovering one evening that my abode seemed to be full of rats. They swarmed everywhere, running along the beams and rafters, and over and under the floors. I could see also, from my verandah, many more upon the beach, running across the sands and making straight for the 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 cut 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.

I am unable to give any explanation to account for this migration. The only thing which I noticed at the time was an unusually large number of jungle fowl about. This I look upon as a coincidence, as I can not see in any way what relation the one creature could bear to the other.

I did not, unfortunately, keep any specimen so that the animals could be positively identified, but they appeared to me to be the ordinary house rat which is common everywhere.

T. S. BUTLER.

December, 1913.

No. II.—SORE NECK IN SAMBAR.

From 1910 to 1913 I was engaged on Survey work in the district lying approximately between Lat. $14^{\circ}.00'$ and $16^{\circ}.00'$ N. and Long. $98^{\circ}.30'$ and $100^{\circ}.00'$ E. Most of this area is in the valleys of the Me Klawng river or its tributaries, the remainder being on the edge of the watershed of the Menam Chao Praya. During those years, between the months of December and June, I shot several Sambar in this district, all of which were affected by a peculiar sore upon the

neck situated in the mid-line in front and about half way down. The actual sore was round, about an inch and a half in diameter, and the skin around it devoid of hair, which had apparently been rubbed off over an area about 8 inches long and 6 inches wide in adult animals, the sore being in the middle of this bare patch. The sore seemed to be merely a superficial affection of the skin, and did not extend deeply, or indeed penetrate the skin or affect the flesh at all, but it seemed to be accompanied by considerable itching. The hair round the sore appeared to be worn off by rubbing to allay the irritation. Animals of all ages and both sexes suffered from this sore.

Mr. A. J. Irwin, of the Survey Department, has also observed the same affection in Sambar shot by him in the present year, and has given me the following information.

The disease is called "Khi ruen kwang" or "the leprosy of the Sambar" by the Siamese, and the "Ma-kawk season sore" by the Kariangs. A Siamese hunter who has lived for years on the edge of the jungle, and has killed many Sambar, considered it a disease to which Sambar were subject permanently, being born with it, and he was much surprised to hear that they did not suffer from it everywhere. An old Kariang informed him that the Sambar suffered from it only during the "Ma-kawk" season, when even the young in the womb bore the mark, and not during the rest of the year. The Ma-kawk tree is a kind of wild plum tree, bearing fruit having a sourish sweet taste. It is generally called in English the "Wild Olive," but the fruit is about three times the size of a large olive, and the taste is different. The fruit ripens, according to the class of jungle and country, at different times through the dry season. Deer are very fond of this fruit. The Kariang gave Mr. Irwin the following legendary account of the origin of the sore. Phra Sian (Buddha) gave the Sambar the fruit of the Ma-kawk tree to eat. The Sambar tasted it, and then refused it, saying it was sour. Phra Sian said, "Very well, then the Ma-kawk fruit shall not be considered food for the Sambar." Afterwards the Sambar again tasted the fruit, and finding it sweet on this occasion, came to Phra Sian and begged permission to eat it in future. Phra Sian granted permission, but as a punishment for fickleness condemned all Sambar to suffer from the sore on the neck during the Ma-kawk season.

I have shot Sambar further south than the district referred to, in the Ma-kawk season, and so has Mr. Irwin, and neither of us has noticed any sore on the animals there. It does not seem to affect the Sambar in the Pitsanulok jungles, or in the Siamese portion of the Malay Peninsula, where I have also shot Sambar, and where the Ma-kawk fruit is eaten by them. Where they suffer from the disease, the animals may be only affected during the Ma-kawk season, but I do not think that eating that fruit causes the sore. The district in which I have noticed them suffering from it, is one abounding in mineral springs, called "Pong Nam" in Siamese. Animals frequent these to drink the water. This water may possibly cause the sore in Sambar, but not in other animals. It will be inter-

esting to learn if any readers of this Journal have noticed the occurrence of the sore, in any other locality and can give information as to its cause.

P. R. KEMP.

January, 1914.

[This curious sore upon the necks of Sambar is not unknown. Major Evans in his book, *Big Game Shooting in Upper Burma* (1910) speaks of it, and states positively that it occurs in all Sambar and at all times (presumably in Burma and India). He considers it to be of parasitic origin. It does not appear to be found upon animals in captivity.—Eds.]

No. III.—A CASE OF TRIPLETS IN AN ELEPHANT.

The case of an elephant giving birth to triplets, has, I believe, never yet been known, so I think the following instance should be recorded.

There is no note of the date of impregnation. The elephant was first reported in calf in October 1912, when she would be evidently well on in pregnancy, and on October 27th of the following year gave birth to three male calves, of which one was still-born and the other two only survived until November 8th and 9th, respectively. Everything was done to bring them up, but the mother would not look after them and kicked them off whenever they came to suckle. If let loose she would run away from them.

Of the calves born alive, one was normal and one very small. Me Hean, the mother, is 7ft 4 ins. in height and is a young elephant probably about 25 years old. She has never to my knowledge calved before.

Triplets are entirely unknown in the writer's experience and Lt. Col. Evans, the Indian Government expert, quotes no instance of even twins in his standard work *Elephants and their Diseases*. I believe, however, the Bombay Burma Trading Corporation had a case of twins in Muang Prae district a year or two ago.

D. F. MACFIE.

CHIENGMAI, December 18th, 1913.

No. IV. DISTRIBUTION OF CERTAIN ANIMALS IN SIAM.

I should like to ask through your columns for information on the following points, some of which I feel sure must be known to members of the Society up-country.

1. What is the eastern range of the Gaur or Sladang. (*Bos gaurus*) the Gayal (*B. frontalis*) and the Banting (*B. sondaicus*)?

To which of the two last does the Siamese name $\overset{\sim}{\text{ก}}\overset{\text{๑}}{\text{ก}}\overset{\text{๑}}{\text{ก}}$ refer, as there seems to be some doubt on the matter.

2. Blanford, in the *Fauna of British India*, states that the young of Sambar are never spotted at any time of their existence.