

## Observations on the Himalayan Tahr (*Hemitragus jemlahicus*) and other ungulates of the Sagarmatha National Park, Khumbu Himal, Nepal.

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Over 200 km were covered on foot in 22 days to search for wild ungulates in the Sagarmatha National Park (Mt. Everest), in September 15-October 7, 1989, from about 2,000 m up to almost 6,000 m a.s.l. The survey started from Lukla, continuing through Namche Bazar, Thangboche, Pangboche, Pheriche, Lobuche, Gorak Shep, Kala Pattar, back to Pangboche, Phorse, Nhahla, and then back to Phortse, Khumjung, Namche Bazar, Benkar and Likla (Fig. 1).

The tahr, *Hemitragus jemlahicus*, was the most common caprin (Fig. 1). Its altitudinal distribution, assessed from sightings and pellet presence, ranged from 2,700 m to about 4,500 m a.s.l. The most densely populated area (27 ind./km<sup>2</sup>) was located between Pangboche and Phortse, at almost 4,000 m, in the SE aspect. Group size (median: 5; range: 1-53; n=9) was larger there than in the neighbouring territories, between Phortse and Khumjung, where the tahr was also fairly common (median group size: 4; range: 1-7; n=7). The tahr population, the size of which has been conservatively estimated at no less than 300 individuals, showed a very poor reproductive rate: 0.18(n. kids/n. mature females) in the former area; no kid was seen in the latter or in other areas of the park. Such a finding is all more surprising as survey was carried out at the end of the monsoon, i.e. when all kids are supposed to be born (cf. Schaller 1973). Some females looked in poor shape, in spite of the lush vegetation. The heavier snow falls of the previous winter (about 150 cm of snow depth; normal depth: 90-100 cm; S.N.P. Authorities (*ex verbis*) may have negatively influenced the condition and reproductive success of females.

Although no attempt was made to estimate the numbers of Musk Deer, *Moschus chrysogaster*, dung piles and footprints of this elusive ungulate were met very frequently, from Benkar to Pangboche and to Khumjung, over an area of at least 8-10 km<sup>2</sup>, from 2,700 m to about 4,000 m a.s.l. Three individuals were sighted, near Yaral, Phortse and Khumjung.

A sighting, north-east of Thangboche (3,867 m a.s.l.), was the only record of the Serow, *Capricornis sumatrensis*, during the whole survey. No dung piles nor marking signs on trees were met. Probably this goat-antelope is uncommon and localised in the scarce broad-leaf forest of the park. On the other hand, no Goral, *Nemorhaedus goral*, nor signs seen.

A group of two Sambar hinds, *Cervus unicolor*, with two fawns were sighted at 3,740 m a.s.l., north of Thangboche, SE aspect. This sighting is apparently the first of Sambar in the park (Fanindra Raj Kharel, *ex verbis*).

No sighting, footprint or scat of any larger mammalian predator was recorded. The Snow Leopard, *Panthera uncia*, occurred in the park till the 1960's and wolves, *Canis lupus*, are said still to visit the park territories (Fleming, undated), but I cannot confirm the presence of either species.

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### References

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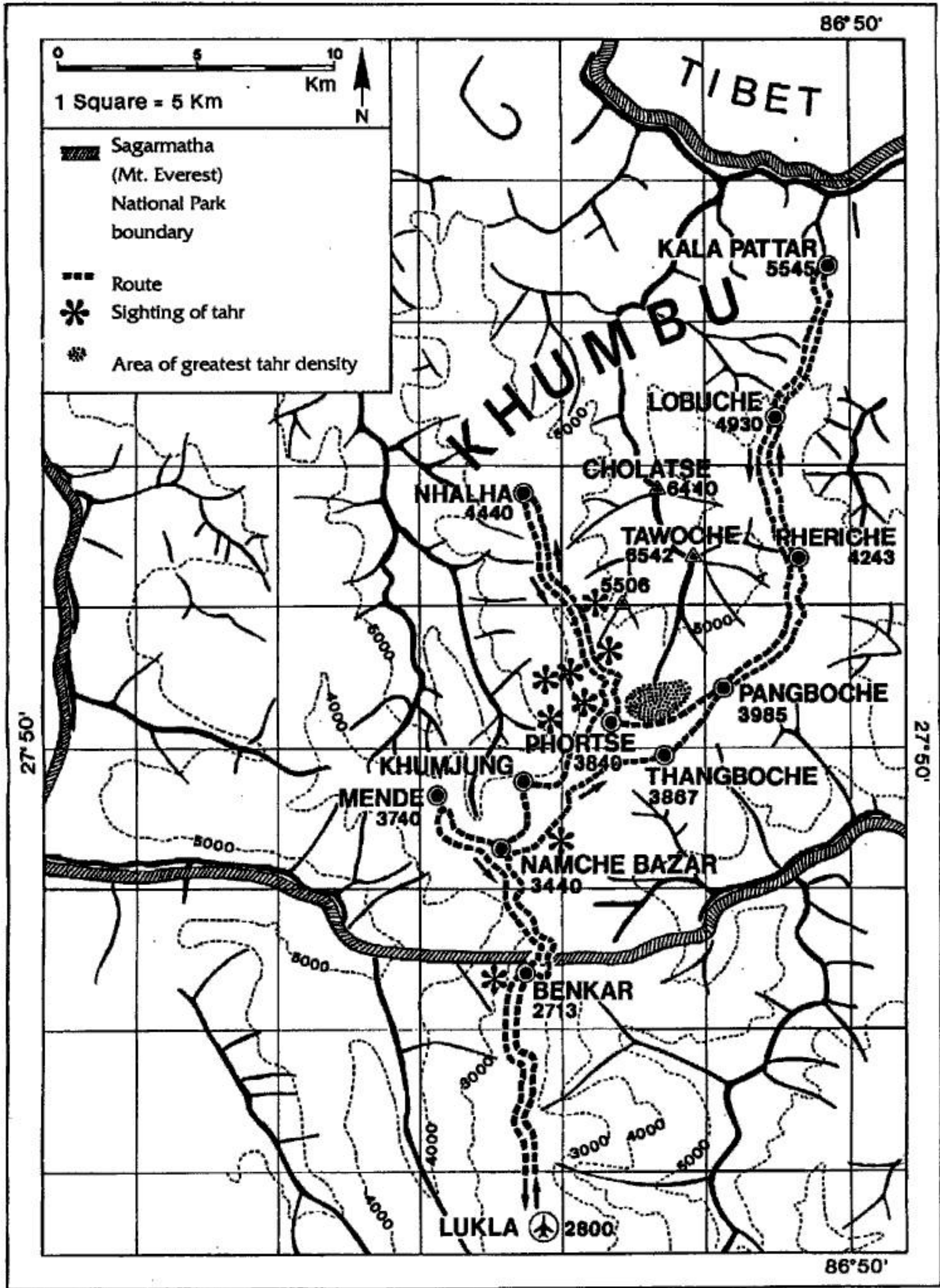


Fig. 1. Altitudinal distribution of the Himalayan Tahr.