

The Nilgiri Tahr

E. R. C. Davidar



The Nilgiri tahr *Hemitragus hylocrius*, a wild goat confined to mountain tops along the Western Ghats in southern India, is listed in the IUCN *Red Data Book* of endangered species on the basis of surveys made by the author. In 1963 he organised the first tahr census for the Nilgiri Wild Life Association, of which he was Hon. Superintendent, and since then has made surveys in the Grass Hills (in the Anamallais) and the High Range (Eravikulam) in Kerala and Kodayar (Tamil Nadu). In 1972/73, sponsored by the Fauna Preservation Society, he made the population studies in the upper Palani Plateau, and the Highway Mountains, both in Madurai District in Tamil Nadu, described in this article. In both areas he found tahr numbers seriously reduced, and the main causes to be poaching and habitat destruction. In March this year the Kerala State Government declared the Eravikulam/Rajmally/Animudi area a sanctuary, which brings most of the range of the tahr under protection. But enforcing the protection may be more difficult, and it remains to be seen whether the tahr were better protected by the High Range Game Association, who protected the largest tahr population from poaching in the interests of their members' strictly limited hunting. Photographs in this article are by the author.

Upper Palani Plateau

The Palani Hills, called after the famous Palaniandavar Hill temple at Palani on one of the foothills, are an offshoot of the Western Ghats. Jutting out into the plains of Madurai, they rise gradually to a 6000-foot-high plateau, 200 square miles in extent, called the upper Palanis, which terminates abruptly in sheer precipices on the south and south-west sides. The famous South Indian hill resort of Kodaikanal or Kodai is on this plateau.

The upper Palani plateau is extremely scenic. The southern face, from Kodai to Vandarav, a distance of 40 km., is one unbroken chain of precipices, like the ramparts of an immense fortress. Extensive grass-topped undulating hills, or downs, interspersed with evergreen sholas, roll back northwards from the cliff edge. From Marian shola to Vandarav, these stretch right across the plateau covering about 100 sq. km., one of the finest downland expanses anywhere, despite the wattle plantations dotted here and there. The Kodai-Munnar road runs parallel to the cliff line, in some places within a few metres, and nowhere more than a couple of hours' walk from it. Moreover, the entire plateau is dotted with cliffs, as in Adukkam, Perumal Malai, and Poomparai. It is an ideal habitat for the Nilgiri tahr *Hemitragus hylocrius*.

Prior to my survey in 1973, no serious attempt seems to have been made to ascertain the tahr's status which would have facilitated a comparative study. However, I was fortunate in having been the guest of HH the Raja of Pudukottai who has spent every summer for the last 25 years or more in Kodai, knows every inch of the tahr country, and has shot many saddlebacks there. He estimates that 25 to 30 years ago there were well over 1000 and nearer 2000 tahr on the plateau. He showed me a dozen cliffs within a radius of 20 km of Kodai which 10 to 20 years ago held thriving tahr populations, some as recently as five years ago. His men told me that tahr used to move in droves like domestic sheep and goats.

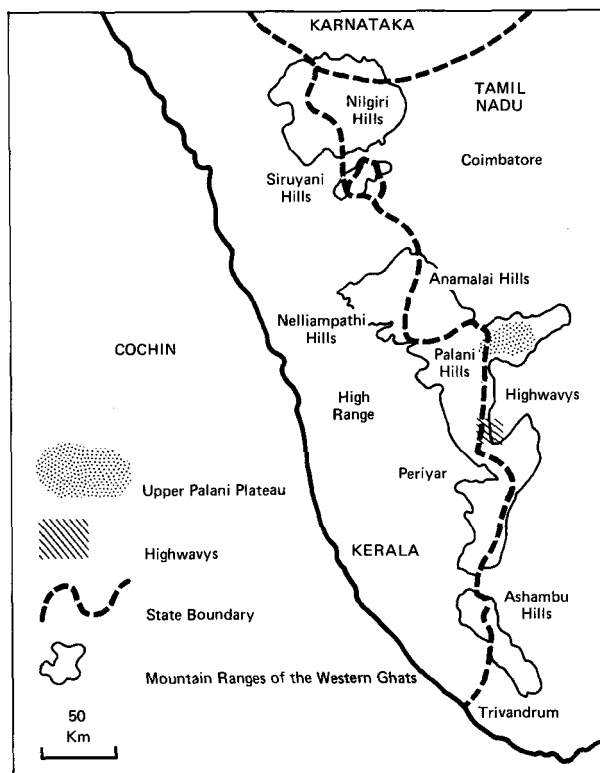
My survey was conducted between April 12 and 20, 1973. Conditions were ideal, except for the usual ground mist which rolls up from the plains obscuring the cliffs for a few hours every day. Grass had burned extensively and fresh young grass was sprouting in large patches, an open invitation for a tahr gathering. The burning also helped to set the tahr in bold relief against the mountain side which made spotting easier.

The Raja arranged for two experienced shikaris to assist me, and he himself accompanied us on many of the trips. With a long-range telescope and powerful binoculars we covered systematically, section by section, the entire southern cliff line from the Pali varai (cliff) below the golf links to Vandarav, double checking the more promising sections. Our total was 23.

Marian Shola varai	Karian varai
2 Adult females	1 Light brown male
2 Young	1 Adult female
—	1 Young
4	—
	3
Koravan Thotti	
1 Saddleback	
1 Brown buck	
7 Adult females and light brown males	
4 Yearling	
3 Young	
—	
16	Total 23
—	

We were unable to visit Kaluguthorai and Vannathi odai cliffs, because, due to road works, they could not be approached by road, but a herd of 12, including a saddleback, is reported there. On May 25, 1973, the Raja saw ten tahr in Sooriankanal in two herds (one saddleback, four adult females and two young – one brown-back and two adult females). This brings the total to 45. Even allowing a liberal 35 per cent error margin for animals that we might have missed in the count the total tahr population in upper Palanis is unlikely to exceed 60. A shocking case of wildlife decimation.

Not one of the persons I came in contact with attributed the decline to natural causes. Poaching and habitat destruction are said to be the main causes. In spite of the vast downland area on the plateau, with ideal grazing, I found no evidence of tahr having been there; the animals were all halfway down the cliffs. This was because the wattle plantations on top have been extended right up to the cliffs' edge, and wattle strippers and wood cutters



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were moving about at all times of the day. Where there were no such plantations there were massive movements of cattle. Between Karian varai and Vandarav, the most promising country, cattle were grazing perilously close to the cliffs even at 8 a.m. and did not come down until dusk. Though these movements were seasonal their unsettling effect on the region's ecology can be imagined. Moreover, Kumari cultivators were everywhere. Kumari is a cultivation system, under which the Forest Department grants short-term leases of land for potato cultivation on condition that young wattle are intercultivated and tended by the lessees. At the foot of the cliffs cardamom plantations and plantain gardens have crept right up to the cliff wall.

Predation on the tahr is virtually non-existent. There are no tigers, and, it is believed, only one pair of leopards on this vast plateau. None of the four leopard droppings examined contained any trace of tahr remains. A pack of half a dozen dhole (wild dogs) are reported to be operating on the plateau, but examination of a dozen of their droppings showed that they preyed on sambhar and occasionally on barking deer.

The tahr seem to be adapting themselves to the changed environment by living among the cliffs, daring neither to come to the top nor risk a trip to the bottom. Their behavioural pattern also seems to have changed. Normally tahr when disturbed dash off until they disappear from view over the skyline or around a cliff. But the Palani Hills tahr have learned to take advantage of the cover the country affords. On two different occasions, the Marian Shola herd, suspecting our presence, merely ran under an overhang, where they could not be seen from above, and stayed there.

The decline of the Palani Hills Game Association is said to be another reason for the general decline in the status of wildlife generally and tahr particularly. The association, which played an important part in wildlife management and promoting wildlife consciousness, has now virtually ceased to exist. If it could be revived it would improve the wildlife situation; leaving everything in the hands of the forest department has not been a happy experiment, as certain incidents during my visit convinced me. But this could only be done if dedicated and responsible people came forward to take responsibility. One of the factors working against the tahr, namely the easy accessibility of their ground thanks to the Kodai-Munnar road, constructed around 1942, could then be used to advantage in protecting them.

Of the 23 animals seen, six were young (eight out of 33) a healthy 25 per cent growth rate. Given adequate protection and a proper environment – which means restoring the original habitat along the cliff line by keeping it free of cattle and wattle – I have no doubt that the Palani Hills tahr will rehabilitate itself.

I am deeply grateful to HH the Raja of Pudukottai for his unstinting and generous help and for sharing his deep and unrivalled knowledge of the hills with me.

Postscript

Of the latest position (May 1975) HH Raja of Pudukottai writes: “Kumari cultivators have planted potato right up to the cliffs as far as Pasa Odai (very near Vandaravu). I have been to Vannathiparai and could not sight any tahr. Much poaching seems to be going on there. The Sooriankanal herd seems to be holding out. The tahr on the hills are diminishing in numbers and I am afraid that unless some drastic steps are taken to preserve the species they could never increase”.

Kookal (Papalai Varai): It is heartening to hear that the cliffs on the eastern edge of the plateau, which was not covered in the survey, holds a herd of four tahr, a saddleback and three females.

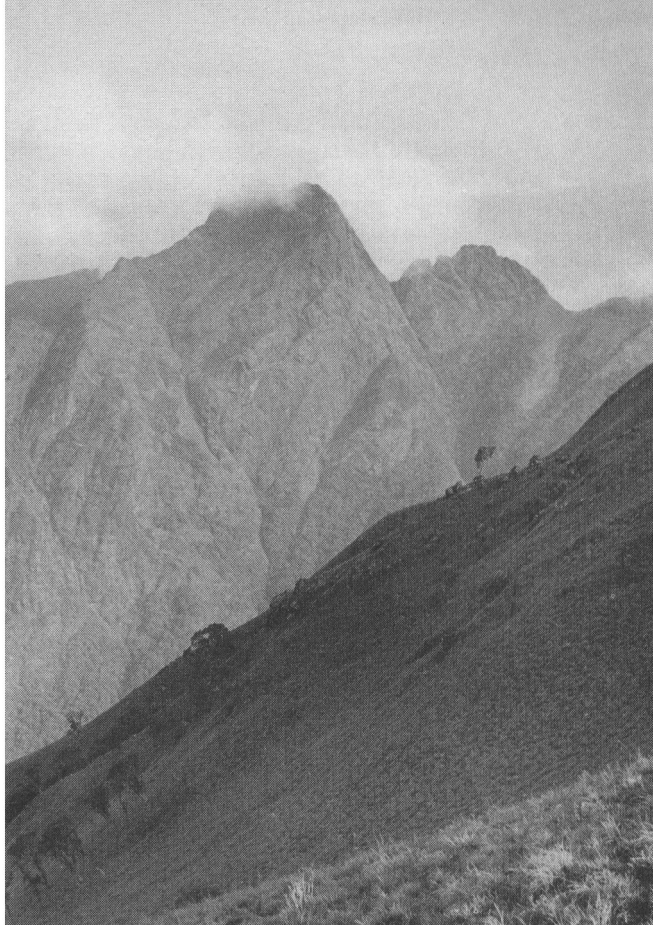
Highway Mountains

The Highway Mountains are part of the Western Ghats in the Madurai District of Tamil Nadu. The range has no true plateau, the top being cut into steep-sided valleys. The narrow strip of fairly level ground on which the road is laid, which for convenience can be called the “plateau”, averages 5000 feet but some of the summits go over 6000. Until 1931, when a tea company obtained a concession over a large extent of the range, these mountains were covered with thick evergreen sholas, some of which survive where they have not been replaced with tea.

The tahr inhabit five grass-covered rock outcrops jutting out from the mountain range: Metla Malai, Kudamparai, Plot No. 28, Varayatu Mottai and Attu Mottai (Pathukudisal). Except on Attu Mottai there are no steep precipices, as in the Nilgiris or the Palanis; the cliffs are no more than a few hundred feet high, and are easily accessible from both above and below, and none of the grass areas covers more than a few square kilometres.

The approach from the plateau to all five tahr grounds is through the tea gardens. There is a motorable road to within 200 yards of Varayatu Mottai,

**TYPICAL NILGIRI
TAHR HABITAT –**
grass hills with
steep cliffs.
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but the others involve treks through the jungle, varying from half-an-hour to four hours for Kudamparai, the most distant.

When I was on the Highways in early December 1972, I had the assistance of an experienced shikar guide from the Nilgiris and local guides. Continual drizzle made conditions unpleasant, but ideal for leeches, which literally swarmed in the sholas. In spite of all precautions dozens worked their way through our clothes and batted on us.

Up to that time no attempt seems to have been made to census the tahr population on the Highways or for that matter the other wildlife there. Even the report of the Bombay Natural History Society's 1917 expedition to the hills, of which Prater was a member, makes no mention of the larger forms of wildlife found on the mountains (JBNHS, Vol. XXXI, p. 545). However, Mr E.W.G. Hagger, a director of the plantation company, who has been familiar with the area since 1955, writes about the tahr (which he calls "ibex" after the local practice): "In 1956 I saw herds of over 100 on the Metla and Varayatu Mottai. I would guess conservatively that altogether in the early fifties there would have been at least 500 ibex on these hills. The opening up of the Varushanad Valley and the road to Vellamalai had a profound effect on the ibex population". To compare with this my count yielded the following figures:

Metla 5.12.72

Padicattu Metla – southern slope

First Herd		Second Herd	
Young	1	Young	1
Adult females	3	Yearling	1
Light brown male	1	Adult females	3
Brown buck	1	Light brown male	2
	6		7

Mudal Metla

1	Young
3	Adults
(Could not be sexed) Total 4	

Varayatu Mottai (Venniar) 6.12.72

First Herd		Second Herd	
Young	2	Young	1
Adult Female	2	Yearling	3
	—	Adult female	5
Total	4	Light brown male	2
		Brown buck	1
			12

Attu Mottai
(pathukudisal)

		Plot No. 28 7.12.73	
		Young	3
Yearling	2	Yearling	2
Adult Female	2	Adult female	3
	—	Light brown male	1
Total	4		9

Young = birth to 1 year old; yearling = 1 to 2 years; adult female and light brown male = 2 years upward; brown buck = dark brown male; saddleback = old male.

Kudamparai could not be visited, but Mr Palaniappan's shikari reports having seen there five tahr (two adult males, three adult females). A saddleback and four others were seen a week previously at Plot No. 28. Mr Palaniappan's subsequent counts and recounts yielded the following figures:

Attu Mottai – 2 brown buck, 5 adult females and 2 young:
total, 9.

Padicattu Metla – 2 brown buck, 7 adult females, 5 young, not classified 6: total 20.

Mudal Metla – 1 saddleback, 8 young, 18 not classified: total 27.

Thus the total tahr population can be taken to be $20 + 27 + 9 + 14 + 16 + 5 = 91$ or, say, 100. The animals were healthy and did not seem unduly disturbed, the ratio of young reveals a healthy growth rate. The rechecks have revealed the remarkable fact that the Highway's tahr have learned to adapt themselves to their environment by extending their limited preferred habitat of grassy hills among rocky terrain to include surrounding shola forests which tahr normally avoid.

Such predation as there is cannot be more than casual. Tigers are uncommon – an odd animal was occasionally seen – and there were a few leopards about. Dhole packs are reported to operate on the mountains at regular intervals, but there was no evidence that they preyed on the tahr. The planters have been cropping an occasional saddleback, probably not more than two a year on average, and none has been shot in recent years. Cattle come as far as the Metla and Plot No. 28 from below and are grazed regularly at Varayatu Mottai. Poaching, which seems to take place from below, is worse on Attu Mottai, in spite of it being the most precipitous as it lies close to a short cut to the plains and is frequently visited from below. From the top there is very little poaching as the group manager and managers of estates keep a close watch and restrict entry. The one class of poacher against whom they seem to be helpless is the ‘gun men’ employed by the Electricity Board, who are armed with shotguns supplied by the Board and given free access to the forests and the cliffs. The ostensible purpose for arming them is to protect the Board’s survey staff from wild animals especially elephants – shotguns against elephants! – but gun men seldom, if ever, use their weapons for this purpose and consequently the tahr suffer.

A hydroelectric project to harness the waters of the Surliar River, which rises in these mountains, has brought a large influx of people from the plains; hundreds of workers are housed and a large store is within a stone’s throw of Varai Attu Mottai. The forests are being cleared on every side. These changes are bound to have an adverse effect on the wildlife, especially on the tahr, whose small isolated habitats are vulnerable on every side. Even a few poachers among the thousands of people who will be migrating to these hills in the next few years could jeopardise the tahr’s survival. The first step would be to increase the strength of the forest staff and arm the estate managers with game wardens’ powers.

Acknowledgments

I am greatly indebted to Mr B. Palaniappan, Manager, Highwavys Estate for actively assisting me in various ways and for the recounts that he did, but for which the account would have been incomplete. His knowledge and experience of the mountains were invaluable for this work. I am also grateful to Mr J. C. Daniel of the Bombay NH Society for encouraging me to undertake the survey and to the Fauna Preservation Society for its assistance.

Note: The only other principal tahr area still to be surveyed is the Nelliampathi Hills in Kerala; a few other suitable habitats are worth investigating.

On the High Range in Kerala the tahr country extends beyond Rajamullay and Eravikulam to the South and across the Munnar-Udumalpet road. Here there are three or four suitable tahr grounds including Tertian Plateau which have not been visited. In the Top Slip sanctuary of Tamil Nadu are three typical habitats, which held tahr herds not long ago, and are worth investigating, as are also the Siruvani Hills near Coimbatore.

Further South there are three tahr areas which may hold viable herds: Kodayar in Kanyakumari District and other localities in the Ashamba Hills; Rajapalayam Hills, and Srivilliputtur Hills (Mudaliar Oothu). It is hoped that these will be surveyed this year by Mr A. J. T. John Singh, a zoologist familiar with these areas, under the guidance of the author.