# NILGIRI WILD LIFE ASSOCIATION

## CENTENARY

## 1877 - 1977

524



Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

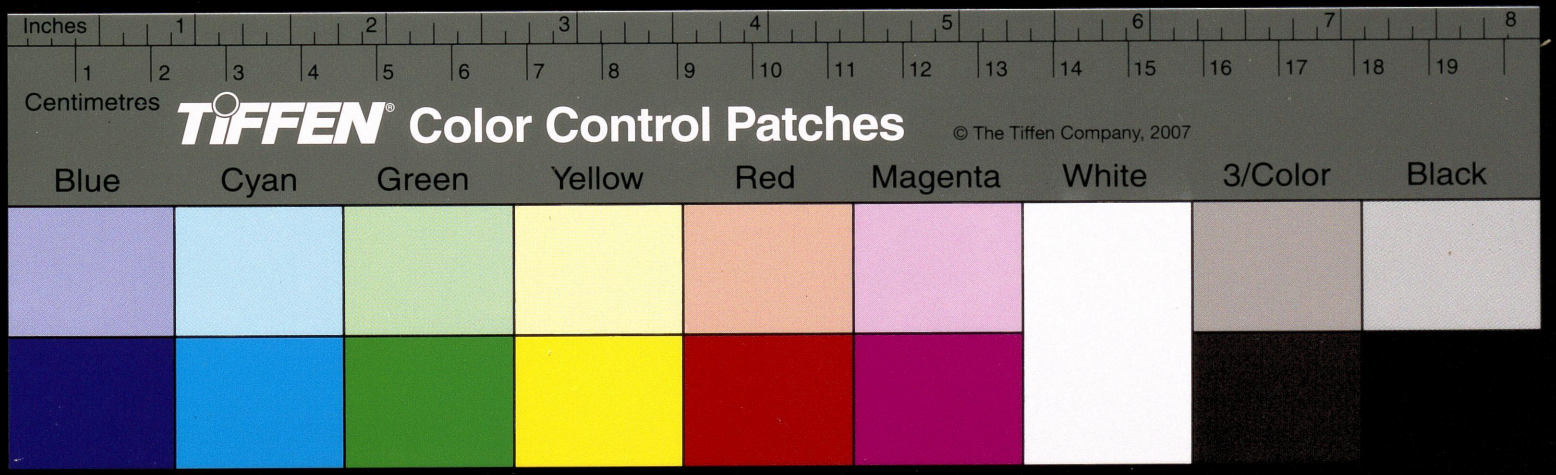
# CONTENTS


| | Page |
|---|---|
| Introduction | |
| Messages | |
| The Nilgiri complex as a refugium for Himalayan fauna and flora — Dr. Salim Ali ... ... | 1—4 |
| Violation of the Virgin hills — H. L. Townsend ... ... | 5—22 |
| Management of game by the Association — E.R.C. Davidar ... | 23—28 |
| Introduction of exotic fauna — ... ... ... | 29 |
| A short history of man made forests in the Nilgiris — J. C. Kala, IFS ... ... | 30—33 |
| The Romance of the Nilgiri Rainbow Trout — E. R. C. Davidar | 34—39 |
| Hunting with the camera — B. N. S. Deo FRPS ... ... | 40—41 |
| Mudumalai Wildlife Sanctuary — P. Padmanabhan, IFS ... | 42—45 |
| Recollections — R. Radcliffe ... ... ... ... ... | 46—50 |
| Orchids; and orchids of Nilgiris — Dr. J. Joseph ... ... | 51—55 |
| Two days in the Jungle — Lt Col E. G. Phythian-Adams ... | 56—61 |
| Status of Wild life in the Nilgiris — E.R.C. Davidar ... ... | 62—76 |
| Future of shooting in the Nilgiris — R. Radcliffe ... ... | 77—79 |
| Shikari Joe — H. L. Townsend ... ... ... ... ... | 80—81 |
| Bird life in a eucalyptus plantation — Priya Davidar ... ... | 82—83 |
| Astagraha and I (a fishing tale) — E.R.C. Davidar ... ... | 84—87 |
| Challenge of 1977 — Contributed ... ... ... ... ... | 88—90 |


Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

An ambitious publication project of this nature requires much planning and preparation and adequate time for execution. The Souvenir although conceived late, was planned carefully. However, its execution had to be rushed to catch a deadline, namely, the Centenary Celebrations inaugural function on 2nd October 1977 at which it was to be released. The demands on the printer's time and the fact that the editors and the press were located at three different places, miles apart from each other, made matters worse. In this situation it is inevitable that printing errors should occur. We would request the readers to overlook them.

EDITORS



## INTRODUCTION

The Centenary of the Nilgiri Wildlife Association is not only a milestone in the annals of the Nilgiris District, but also in the history of game management in India.

In presenting this Souvenir to the public, we have endeavoured to place on permanent record the many and varied aspects relating to game which led to the birth of the Association, its healthy growth and its achievements over the past one hundred years. With the implementation of the Wildlife (Protection) Act of 1972, the Association is no longer directly involved in game management: but having led a useful and active life, the Association is determined not to go into retirement and is seeking new fields of endeavour. Although wildlife conservation continues to be the main objective of the Association, it is enlarging its scope and functions and to include allied outdoor activities. The rugged and charming Nilgiris offer much in this direction — watching wild animals and birds for fun and for serious study, wildlife photography, camping, trekking, rock climbing and angling. All are equally rewarding pastimes. It is hoped that youth will play a more important role in the activities envisaged.

In these days of tensions to which we are subject, great mental peace and relaxation may be achieved if only an awareness can be created as to the beauty of nature, which we are doubly blessed with, in our own Nilgiri hills. To create and foster such an awareness is the duty of this Association. Our Field Staff, members and our growing library of works relating to natural history are at your service.

May we now look forward to your goodwill and support to ensure for continuing generations, the preservation of the environment and the enjoyment of the flora and fauna of our beloved hills.

We are greatly indebted to the contributors of articles and photographs for their valuable contributions, which we hope will provide a measure of interest for most tasters. Our special thanks are due to Dr. Salim Ali, the eminent ornithologist, for his valuable paper explaining the link between the Nilgiri fauna and their Himalayan counterparts. We are no less grateful to the advertisers for the generous contributions made by them, as without their help, this project would not have been possible.

E. R. C. Davidar,
H. L. Townsend,
*Editors.*

K. INBASAGARAN
*President*

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

VICE-PRESIDENT
INDIA
NEW DELHI
19th September 1977

I am happy to learn that the Nilgiris Wild Life Association, Ootacamund, is celebrating its Centenary in the first week of October next, and that the occasion will be marked by the release of a souvenir. I congratulate the Association on completing one hundred years of useful existence in the service of wildlife, and wish the ensuing Centenary Celebrations all success.

(B. D. JATTI)

TIFFEN® Color Control Patches © The Tiffen Company, 2007

RAJ BHAVAN
MADRAS-600 022
Dt : 20th Sept. '77.

## MESSAGE

I am glad to know that the Nilgiris Wildlife Association, Ootacamund proposes to celebrate its centenary in the first week of October, 1977.

This is the oldest association of its kind in India and it can look back with pride on its signal contribution to wild life preservation. Today many species have become extinct and steps are being taken to preserve the existing species. In preserving wildlife, public consciousness should be roused and organised bodies like this Association have a vital role to play. I wish the Centenary celebration every success.

(PRABHUDAS B. PATWARI)
Governor of Tamilnadu

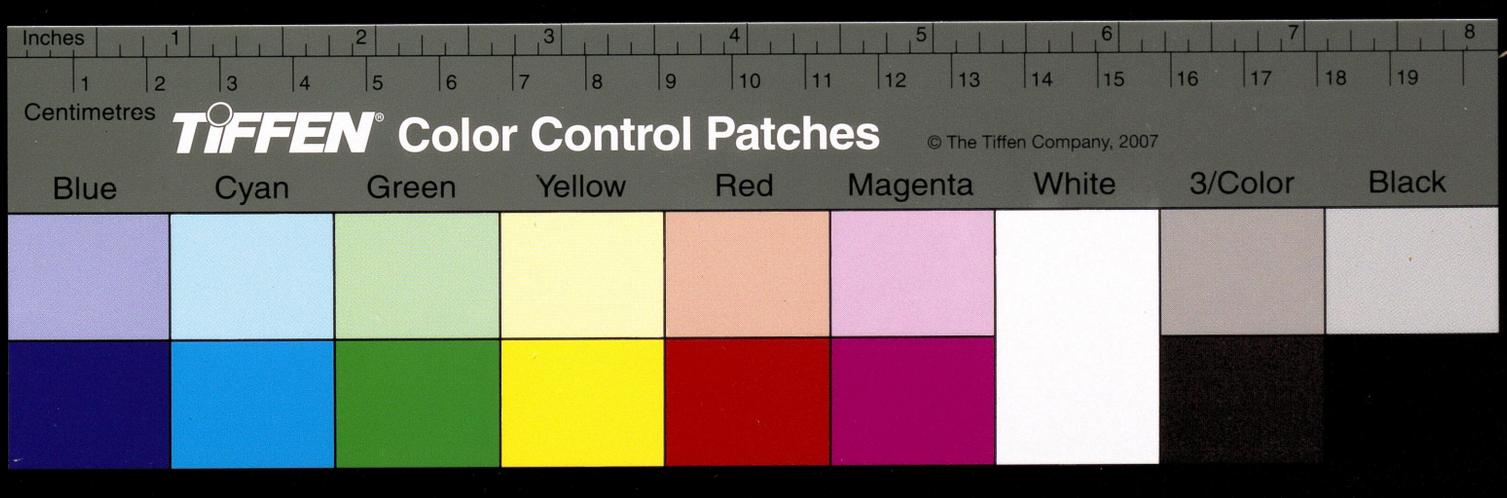
Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

On behalf of the Defence Services Staff College, Wellington, I have very great pleasure in sending our greetings and good wishes to the Nilgiris Wild Life Association on the occasion of its centenary.

Centenary celebrations are rare but proud occasions for any organisation or association to remember. In the case of the Nilgiri Wild Life Association, it has reasons to be justifiably more proud as it is the oldest association of its kind in India. Not only that but it has done untiring pioneering work in the many fields and activities in the preservation of wild life, so very essential for the ecological well-being of this country.

The Association can be justifiably proud of its many fold activities. I have no doubts that it will continue to do even better in the years to come.

AM SETHNA A.V.S.M.
Major General
Commandant, D.S.S.C.



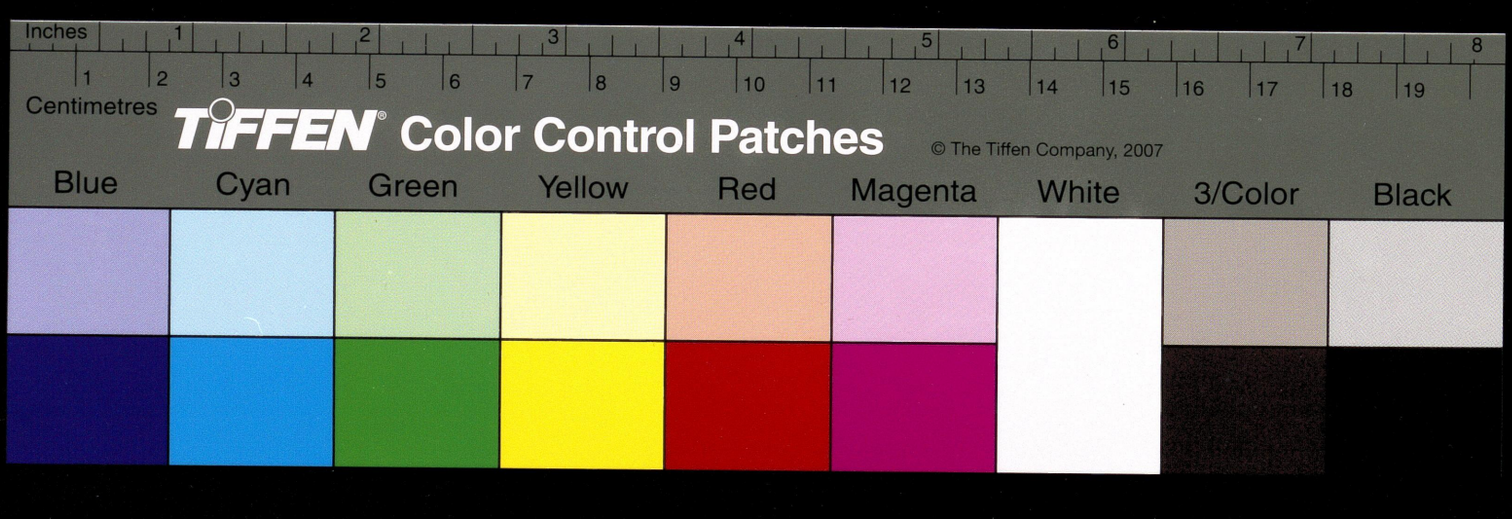
There are few institutions which have the honour of completing a century of useful existence. I am glad that the Nilgiri Wildlife Association which is widely known among nature lovers and sportsmen is celebrating its centenary in 1977. The development of the Nilgiri rainbow trout fishery and the special protection afforded to the Nilgiri Tahr by the enthusiastic members of the association had been appreciated by all who are interested in the wildlife management of the precious natural resources of the Nilgiris. I am sure that the useful work done by the association will go a long way to preserve the wildlife of the Nilgiris.

T. JEYADEV I.F.S.,
Chief Conservator of Forests (Dev.)
Tamil Nadu

It is a matter of pride that the Nilgiri Wildlife Association has completed 100 years since its inception. This Association has been a pioneer in introducing the concept of wildlife preservation and game management in South India and has been responsible to a large extent to make Nilgiris as one of the foremost wildlife regions in the country.

There is a great deal of awareness in the country to-day about the need to preserve the precious heritage of wildlife. However, this is not a task which can be achieved by Government agencies only. There should be active involvement by the public also if our wildlife has to be saved. Therefore organizations like Nilgiri Wildlife Association can render useful service in this task and serve as a model to other regions in the State and in the country.

K. A. BHOJA SHETTY, I.F.S.
Chief Conservator of Forests (General)
Tamil Nadu



## NILGIRI WILDLIFE ASSOCIATION
## EXECUTIVE COMMITTEE
## 1977-78

| | | |
|---|---|---|
| 1. | Mr. K. Inbasagaran, IAS | *President* |
| 2. | Mr. J. C. Kala, IFS | *Vice-President* |
| 3. | Mr. R. Radcliffe, MC | *Vice-President* |
| 4. | Mr. E. R. C. Davidar | *Hon. Secretary* |
| 5. | Mr. E. Luke | *Hon. Treasurer* |
| 6. | Col. R. A. Willis, OBE | *Member* |
| 7. | Mr. G. R. Karthikeyan | ,, |
| 8. | Mr. B. Palaniappan | ,, |
| 9. | Mr. H. L. Townsend | ,, |
| 10. | Mr. C. Rajubettan | ,, |
| 11. | Mr. A. J. Packianathan | ,, |

## HONORARY MEMBERS

1. Mr. B. Vijayaraghavan, IAS
2. Maj Gen A. M. Sethna, AVSM, Commandant, DSSC
3. Col. J. D. Katkar, Commandant, MRC
4. Mr. K. Kasim, Supdt of Police, Nilgiris.
5. Mr. S. A. Rahmatullah, IFS, Chief Wildlife Warden, Madras
6. Mr. J. John Joseph, IFS, Wildlife Warden, Mudumalai
7. Mr. S. V. Natchimuthu, IFS, District Forest Officer (North)
8. Mr. L. X. Jesudas, Tourist Officer
9. Dr. N. C. Nair, Deputy Director, Botanical Survey of India
10. Mr. M. A. Parthasarathy, Regional Representative, WWF,
11. Mr. J. C. Daniel, Curator, Bombay Natural History Society
12. Mr. Subha Rao, the Asst. Director of Fisheries,
13. The Asst. Director of Animal Husbandry, Ootacamund,
14. Mr. J. A. Master, IFS (Retd)

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

**CENTENARY SUB-COMMITTEE**

1. Mr. J. C. Kala
2. Mr. S. Nachimuthu
3. Mr. R. Radcliffe
4. Mr. F. X. Jesudas
5. Mr. G. R. Karthikeyan
6. Mr. E. R. C: Davidar
7. Mr. E. Luke

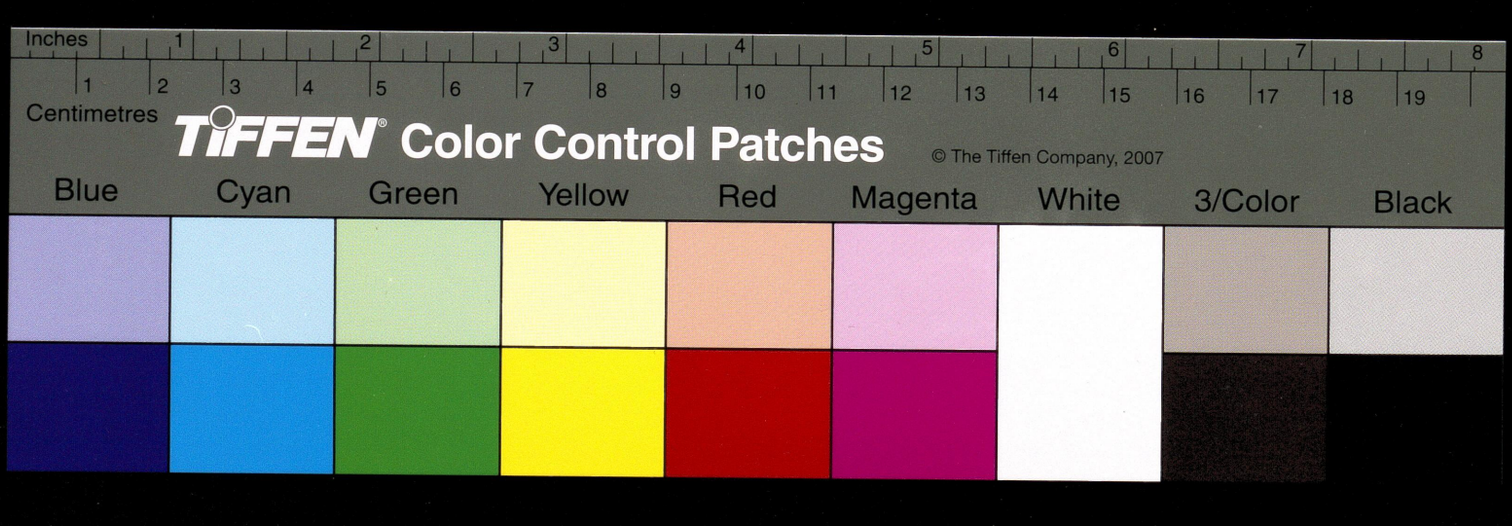
**SOUVENIR SUB-COMMITTEE**

1. M. H. L. Townsend
2. Mr. J. C. Kala
3. Mr. P. Padmanabhan
4. Mr. F. X. Jesudas
5. Mr. C. Rajubettan
6. Mr. E. R. C. Davidar

---

COVER PHOTOGRAPH: Dr. George B. Schaller

---



'Family of Tigers' — Nilgiri Plateau drawn by
Gen. Douglas Hamilton — 'Record of Sport in Southern India.'

TIFFEN® Color Control Patches
© The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

# THE NILGIRI COMPLEX AS A REFUGIUM FOR HIMALAYAN FAUNA AND FLORA

**Dr. S'alim Ali**

From the biogeographical point of view the Nilgiri Hills, forming an important component of the southern Sahyadri (Western Ghats) complex, are one of the most fascinating features of the Indian subcontinent. Altitude, climate and rainfall combine to make this a particularly rich habitat for plants and animals. But the chief interest of the biota lies in the curious fact, already remarked by earlier naturalists, of the occurrence in these hills — and some adjoining ones such as the Anaimalais, Palnis and others — of a sizeable number of endemic plant and animal forms whose nearest congeners in the Indian subcontinent are found only in the Himalayas — especially the eastern section — and in the hills of western China, Burma, and Malaysia. The two populations are often separated from each other by 1500 miles or more. Among mammals the most outstanding and familiar example of this phenomenon is the mountain goat called Tahr. The Nilgiri Tahr *(Hemitragus hylocrius),* popularly miscalled 'ibex', belongs to a genus which has a curious broken and far-flung geographical distribution on the Asian continent. Besides the Nilgiri species, this genus has one species *(H. jemlahicus)* in the Himalayas ranging from the Pir Panjal Range to Bhutan, and a third one *H. jayakari,* found only in the mountains of the Oman hinterland in SW. Arabia. Another mammal genus with the same discontinous Himalayan-Nilgiri distribution is the Marten, belonging to the carnivorous Weasel family (Mustelidae). The genus *Martes* is represented in the Himalayas by two species, one of which, the Yellow throated Marten *(Martes flavigula),* has a closely related and superficially similar species *(M. gwatkinsi)* in the Nilgiri hills complex. The former occurs in the Himalayas and extends into the hill ranges of Assam, Burma, W. China and Malaysia. *M. gwatkinsi* is confined to the Nilgiri and associated hills of the Southern Western Ghats. Examples of such far flung disjunct distribution are to be found in a great many Himalayan plants and animals which have evolved endemic species in the south. Among reptiles a typical example is the Flying Lizard, genus *Draco.* It is represented by three species in the eastern Himalayas and the tropical moist-deciduous forests of the Nilgiri and Kerala foothills country. Among amphibians a notable example is the beautiful tree frog genus *Ixalus* (now *Philautus)* which has a more or less identical disjunct distribution.

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

To the ornithologist the most abundant and striking examples will naturally be provided by the birds. As I have pointed out elsewhere * the more prominent among the sedentary endemic birds of the Nilgiris and associated south Indian hills which are obviously relic populations of Himalayan forms, or clearly derived from them, are the following:

Laughing Thrushes (genus *Garrulax)*
Fairy Bluebird *(Irena quella)*
Great Pied Hornbill *(Buceros bicornis)*
Several raptors, e.g. the two Bazas or Lizard Hawks *(Aviceda jerdoni* and *A. leuphotes)* and the Rufous-bellied Hawk-Eagle *(Lophotriorchis kienerii)*

Many other avian genera and species show the same peculiarity of interrupted (discontinuous) distribution in greater or lesser degree. However, in my opinion, the most striking example among them is provided by the laughing thrushes of the genus *(Garrulax* (Fam, Muscicapidae, Subfam. Timaliidae). These birds are pre-eminently Himalayan and found throughout that range in something like 27 species. After a complete absence of over 2000 km in continental and peninsular India, the genus reappears in the extreme south-western hills in two endemic species: *G. cochinnans* restricted to the Nilgiris, and *G. jerdoni* in three well-differentiated subspecies to the Palnis and Kerala hills. There is, additionally, a third species found in Kerala, namely the Wynaad Laughing Thrush, which is an obvious subspecies of the east Himalayan *G. delesserti* and a fourth in Sri Lanka, closely related to the latter. A point of added interest in the case of these laughing thrushes is that their presence in the southern hills also is symbiotically associated with the plant genus *Rubus* (Family Rosaceae) — blackberry, raspberry, etc. — itself a common Himalayan relict whose berries provide the birds with food and who in turn help to disperse its seeds. Thickets of Rubus first appear in the S. Indian hills from an altitude of about 1000 m upward. Significantly, it is at this same elevation that laughing thrushes also appear on the scene!

A considerable number of endemic Himalayan birds winter in ecologically equivalent temperate habitats in these southern hills, some apparently performing the annual migratory journey of 1500 to 2000 km each way in a single stop. A typical example of such a migrant is the Woodcock *(Scolopax rusticola)* — a dumpy outsized snipe — much sought after by sportsmen in its Himalayan homeland as well as in its southern winter quarters, traditionally the Nilgiri Hills. Its extreme rarity in the intervening country during the migration season leaves little doubt that the bird must fly non-stop.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

All the relics of the Himalayan biota found in the Nilgiris and associated hills today — as well as the Himalayan bird migrants that regularly spend the winter there — are evidently organisms of narrow ecological tolerance, adapted for life in temperate, humid, well-wooded biotopes and climatic conditions equivalent to those obtaining in their Himalayan homeland in summer. The origin of these relics can best be explained on the assumption that in the geological past there was a direct elevated land connection between the Himalayas and the southern hills providing the requisite physiographical conditions for a continuity in their distribution. Through the action of geotectonic forces — subsidence or erosion — the connecting land 'bridge' disappeared cutting off the more stable sections from the Himalayas as 'islands', thus marooning the local populations of plants and animals on them, including weak-flying sedentary birds like the laughing thrushes, in a sort of natural refugium.

Perhaps the most intriguing facet of this problem of disjunct distribution concerns the specially adapted fishes of torrential hill streams of the eastern Himalayas and Malaysia on the one hand and the south Indian hills on the other, several genera — and even species — being common to both. Of all animals the group of fishes is so inescapably dependent on the watery medium in which they live that Himalayan forms could not possibly have reached S. India in any way other than through some sort of direct water connection between the two regions. How was this achieved? It was while investigating this intriguing problem that the late Dr. Sunder Lal Hora, a distinguished Indian Ichthyologist, hit upon an explanation since known as the 'Satpura Hypothesis for the Distribution of Malayan Flora and Fauna to Peninsular India'. Details of the hypothesis may be obtained by those interested from the references given at the end of this article. Meanwhile it may be relevant to highlight some of its salient points. The Satpura Hypothesis postulates that Satpura-Vindhya trend of mountains, stretching across India, was once more elevated and moister than now, and with a more temperate climate. It was continuous with the Assam hills in the east and with the northern end of the Western Ghats in the west, and thus served as a causeway for the spread of specialized Himalayan flora and fauna to the S. Indian hills and Sri Lanka. The direct water connection, indispensable for the spread of Himalayan-Indomalayan fish fauna to the hill streams of S. India is postulated by Dr. Hora to have occurred through a series of 'river captures', i.e. by the repeated creation of new watersheds and the diversion and reuniting of the flow through geotectonic action such as the uplifting and subsidence of the intervening land during the last 15 million years. Although the hypo-

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

thesis was primarily concerned with fish distribution, it seemed to answer equally for the other organisms as well. A number of lacunae in the argument still remain to be plugged, but by and large the theory offers a plausible and satisfying interpretation for the enigma and merits more intensive study.

## REFERENCES

Ali S'alim (1949): 'The Satpura Trend as an ornitho-geographical highway'. *Proc. Nat. Inst. Sci. India* 15(8): 379-86.

Hora, S. L. (1949): 'Symposium on the Satpura Hypothesis of the distribution of Malayan flora and fauna to peninsular India'. *Proc. Nat. Inst. Sci. India* 15(8): 307-422.

———(1950): 'Hora's Satpura Hypothesis. An aspect of Indian biogeography'. *Current Science* 19: 364-70.

* Ali, S'alim (1933): 'The Ornithology of Travancore and Cochin', Pt. 1. *J. Bombay nat. Hist. Soc.* 37(4): 814-43.



Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black



From a painting ascribed to F. C. Lewis, at one time owned by Lord Tweeddale, Hartnolls Eyre, London. Otacamund Ca. 1833-35

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

# THE VIOLATION OF THE VIRGIN HILLS

**H. L. Townsend**

*On the third of October 1877 the following note appeared in The South of India Observer*

**The Neilgherry Game Association:** This day being fixed for a public meeting of those Sporting gentlemen of the hills, interested in the question of Game to take into consideration the question of Game Law, Gun Tax and such like, to prevent the indiscriminate slaughter of Game. The Secretary's Room at the Library witnessed a goodly show of gentlemen as follows:—

Messrs: Webster, Windle, Col. Wilson, Fraser-Tytler, F. G. Shaw, A. Griffin, Capt. Rae, J. Phillips, Hill, G. Dawson, Schmidt, Ollef, H. Wapshare, Major West, Kelle McCullum, Gordon Forbes, Gisborne, L. F. Chapman, R. Russell, W. Teare, A. Russell Hodgson, Dr. Fox, Dr. Gorden, Capt. Godfrey and Capt. Begbie.

Mr. Webster proposed and Colonel Wilson was unanimously voted to the chair. Mr. Webster then proceeded to explain the object of the meeting, and read letters from Mr. W. Mullay, Mr. R. Phillips, Mr. H. G. Sinclair and the Rev. O. Dene, expressing regret at being unable to attend, but advocating the formation of a Game Association.

It was requested that a sub-committee be appointed and, accordingly, the following gentlemen were selected as members.

"Colonel Hadfield, Mr. Teare, Mr. Hodgson, Mr. Webster, Mr. Dawson, Mr. Windle, Capt. Rae, Dr. Shaw, Col. Wilson, Mr. Wapshare". Thus was the foundation laid.

Let us now examine the Nilgiris in some detail, geographically, politically and the events which led to the need for a Game Association.

The Nilgiri hills — more correctly, 'Nilagiris' Blue Mountains consist of a Plateau roughly 35 miles long, 20 miles in width and some 6,500 ft. on average, above sea level, and lie between 11°-12° North and 77°-79° East. The hills were formed, long before the Himalayas, by a gigantic upheaval, at the junction of the Eastern & Western Ghats, whose ranges run southwards at a converging angle through the old Madras Presidency, forming as it were an island or rock pillar in the

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

earth's crust, the highest point being Dodabetta, 8,640 ft. above sea level and 1,412 ft. above the Ooty Lake. Three other hills worthy of note in this great mass are Snowden, an almost perfect cone 8,299 ft. above the sea; Club Hill 8,030 ft. and Elk Hill 8,090 ft. which three, with Dodabetta, surround the sheltered valley wherein lies Ootacamund.

In the South Western corner of the District rise the Kundahs, the chief heights of this regular range of hills being the precipitous Avalanche Hill, two peaks on which, called Kudikadu and Kolari are 8,497 ft. and 8,613 ft. above the sea and so rank next to Dodabetta; the conical grass covered Derbetta 8,304 ft.; and South of it Kolibetta, 8,182 ft. The Kundah Range continues on to the North—the great line of peaks just south of the Ouchterlony Valley, the most notable being Pichalbetta 8,348 ft., Nilgiri Peak 8,348 ft., which was for many years thought to be unclimbable and the sheer Mukerti Peak 8,380 ft. down the precipitous side of which the souls of Men and Buffaloes are believed, by the Todas, to leap together into the nether world.

The so called plateau is, in reality, an area which presents a most varied and diversified aspect. The terrain extends over its limits in ceaseless undulations and valleys, frequently breaking into lofty ridges and rocky eminences, terminating in sudden and abrupt descents to the plains below with the exception of the North where the base of the mountains rest upon the elevated land of the Wynaad and Mysore which standing between 2,000 ft. and 3,000 ft. above sea level, form as it were steps by which the main fall to the coast is broken.

The name Nila, as applied to these hills, we know to have been used over 800 years ago since, about this time, the King of the Hoysalas, Vishnuvardhana, who ruled from 1104 to 1141 A.D. seized the Nilgiri Plateau. His general one Ponisia, is said in a record of 1117 A.D. to have " Frightened the Toda, Driven the Kangas underground, slaughtered the Poluvas, put to death the Maleyalas terrified King Kala " and entering into " Nila Mountain offered up its peak to the Lakshmi of Victory ". This is the earliest mention of the names Toda and Nila Mountain so far recorded.

The name Nilagiri was doubtless, suggested to those living on the plains below the plateau by the blue haze which envelops the range as is common with most distant hills of considerable size. The idea that it is due to the violet blossoms of the Strobilanthes which, from time to time, carpet wide stretches of the grass downs, may be discounted.

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

Imagine then, this plateau, a spider's web of countless streams, converging ultimately to become dignified as rivers and falls of great beauty. A patchwork of swamps and marshes, rolling grasslands, with every fold and ravine clothed in evergreen woods or sholas, the whole abounding in a wide variety of wild life both fur and feather. Such was this rare jewel of nature, guarded for so long from the Foreign invader by the Malarial Forests of the foothills, at the beginning of what is known officially as the 'English Period', why 'English' when Scots and Irish, in the main, developed the hills, we are unable to understand.

## II

This territory came into the possession of the Honourable East India Company as part of the ceded lands, held by Tipu Sultan, by the Treaty of Seringapatam in 1799. Nearly two centuries before the East India Company obtained it, two Portuguese priests had made flying visits from Malabar in search of certain Christians who were stated to be living on the hills and to have "Anciently belonged to the Syrian Church of Malabar, but then had nothing of Christianity except the bare name". Their account on return was "not so sure and complete as was desirable". So, soon afterwards, a further expedition led by a Jesuit Priest Jacome Ferreira was, at the Bishops request, dispatched from Calicut. Ferreira's report on his return on 1st April 1603 stated that he had "no tidings of any Christian colony", but contained some account of the Todas and Badagas.

Strange it may seem that the hills remained in view of all British Civil and Military Officers in Coimbatore for years before anyone ventured to explore them. But in those days, the only well known hills were low Ranges, full of Malaria, and it was not realised that above a certain height there was no risk of this disease. As Lt. Burton (Later Sir Richard) writing as lately as 1847 put it 'We demi-Orientals, who know by experience the dangers of Mountain air in India, only wonder at the daring of the man who first planted a roof tree upon the Neilgherries'. It was apparently not until 1812 that the first Britishers, an Assistant Revenue Surveyor William Keys and an apprentice named Mac Mahon, reached the top of the plateau. No record survives of any further expedition until that of Messrs. Wish and Kindersley, Assistant and Second Assistant to the Collector in Coimbatore in 1818.

On their return to Coimbatore their account of the delights of the scenery and climate led to another venture, one member of which was John Sullivan, Collector of Coimbatore, later to become popularly known

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

as the " Father of Ootacamund ". This party in January 1819 made camp at Dimhatti just north of Kotagiri. An account to the newspapers laid much emphasis on the fact that " water froze in their "chatties" at night; that they walked about up and down hill nearly all day without experiencing the least inconvenience from heat; often indeed seeking the sunshine as a relief from the cold "....." It was impossible to move a quarter of a mile in any direction without crossing streams "; and that the scenery was of "extra-ordinary grandeur and magnificence ". It wound up by saying " your readers will, perhaps, be surprised to learn that frosty regions are to be found at no very great distance from the Presidency (Meaning Fort St. George) and within eleven degrees of the Equator ".

So far none of these expeditions had reached the beautiful valley which was to become the district head quarters — Ootacamund. Once again, in may 1819, Sullivan went upto the hills accompanied by the naturalist M. Leschenault de la Tour, and Assistant Surgeon Jones. During this stay of twenty days, Sullivan began the construction of his bungalow at Dimhatti in which he later resided — the first European dwelling on the hills. The naturalist, who by illness had been brought " To Deaths' Door " rapidly recovered his health in the cool climate.

In March 1819, Sullivan had asked the board of Revenue for money to prepare a rough survey of the cultivation which produced crops of wheat, barely, peas, opium, millet, garlic and mustard, since the existing survey was only based on estimates; and a better means of access. He justified the proposed expenditure by say that the revenue was diminishing since the ryots (Badagas) only paid what they pleased. Their inaccessible position rendering them " Quite secure from any coercive measures ".

Sanction was given for Rs. 800/- for the survey and Rs. 300/- for the path up. This path started at Sirumugai near Mettupalayam, to Kotagiri, thence to its neighbour Dimhatti. The trace of the path was started in 1821 and completed in May 1823. This remained the best route to the hills until the first Coonoor Ghat was made in 1830-32.

In the meantime, glowing reports had been forwarded to the Madras Government concerning the hills and their climate. In these days hill stations did not exist and officials whose health had suffered in the plains used to travel all the way to the Cape or Mauritius, both inferior climatically to the Nilgiris, to renew their health.

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

The possibility of there existing in South India close to the equator a region where the climate was cool and invigorating was at that time to most people incredible. Lt. Burton says that when the first visitors to the hills stated that the thermometer there was 25° lower than on the plains, " such a climate within the tropics was considered so great an anomaly that few would believe in its existence ".

Meanwhile, however, more people were satisfying themselves, by actual trial, the truth of the matter. By June 1820 we find that more than twenty gentlemen had visited the plateau and one lady, apparently Mrs. Sullivan " Without any inconvenience to herself and without giving any particular trouble to the bearers ". In 1821 it is recorded that " some families took up their temporary abode there ". " There " being in all probability Dimhatti where Sullivan had by now a reasonably substantial bungalow, or at Kotagiri; Ootacamund remained still undiscovered.

The first mention of the place occurs in a letter of March 1821 to the Madras Gazette by an unknown correspondent who had penetrated from Dimhatti as far west as Mukerti Peak by way of " Wotokymund " and Nanjanad. This letter shows that another party had made the same trip, by the same route in February of the year before. Who they were is unknown, but apparently they were the first Europeans to set eyes on the Valley of Ootacamund.

Many theories and arguments have been recorded and much verbosity expended as to the origin of the name Ootacamund. At the final count, it is felt that the explanation put forward by Sir Frederick Price is as near to the truth as we may hope to get. Briefly, this is as follows. Todas were on the hills long before the immigrant Badagas. These newcomers must have found the place already named. We accept the fact that the Toda name of Ootacamund is and always has been Patkh-Mud and there seems to be no reasonable doubt that the Badagas called it by a name as nearly approaching to the Toda pronounciation as their language would permit. Therefore that Ootacamund has arisen from the Badaga form of Patkh-Mud and further anglicised may be accepted. So much for the story of the Toda selling land to a Britisher " I taka da money — Youtakadamund ".

Just when Sullivan first visited the valley is still a matter of conjecture, but we do find two vernacular letters addressed from Ootacamund to Indian Subordinates dated 8th & 16th of April 1822, but having no mention, otherwise, of the Nilgiris.

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

The first house to be built in Ootacamund was undoubtedly "Stone House" which Sullivan commenced to build in April 1822 and by May 1823 was sufficiently habitable for his son to have been baptised there on that date, the first recorded in the Nilgiris. A substantial part of the old Stone House is embodied in the present Government Arts College on Stone House Hill.

At some time during 1821, the first medical reports on the hills written by three Officers deputed for the purpose by the Medical Board, at the request of Government appeared. One such report discussed the best site for an establishment for invalids should it be decided to locate one on the Nilgiris.

Too late!; John Sullivan had already made his mind up on the question of the best site for a settlement, and was busily engaged on the improvement of it. In September 1822 the building of Stone House was well advanced and he requested Government's permission to take over 500 ballas (1,910 acres) of land to make experiments in agriculture and horticulture. This appears to have been his chief interest for he had already started a flower and kitchen garden at his Dimhatti bungalow and had begun another just east of Stone House and had employed a Scottish Gardener named Johnstone to care for it.

In 1821-22 Capt. B. S. Ward surveyed and mapped the hills (excluding the Kundahs and the valley later known as Ouchterlony, which then belonged to Malabar). His memoir is of great interest as showing the progress which had been made upto then in opening up the Nilgiris. Capt. Ward says that apart from those at Dimhatti and Stone House, temporary bungalows for travellers had been put up at Kodavamund, between Kotagiri and Ootacamund, Nanjanad, Kilur (Manjakambai) and Yellanhalli. European vegetables had been tried and "thrived exceedingly well" as also Strawberries etc. There were no crows on the hills at that time. Apple trees had been tried and were doing well. The Sirumugai-Dimatti route was "The most frequented by travellers and admits of palanquins; horses and laden cattle go up with much ease".

The years between 1822 and 1825 witnessed considerable physical and paper activity. Funds were sanctioned for completing the track across the hills to Gudalur and the Wynaad, also for opening up the Kakur Ghat to the Wynaad from Malabar and improving the route from the top of it to Mysore. Sullivan was busily engaged in throwing up a bund to form the present lake. A committee consisting of Sullivan, Lt. Macpherson and staff surgeon Haines had been appointed by the

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

Governor, Sir Thomas Munro to frame detailed plans for providing accommodation for invalids. To meet the great difficulty of getting supplies at Ootacamund, the cost was sanctioned of establishing European Military pensioners to grow vegetables and raise poultry. Sadly, the records state, " But none came ".

In September 1826 Sir Thomas went up to the hills and was greatly impressed by all he saw and above all by the cold. " I am writing in a great coat and my fingers can hardly hold the pen. I am almost afraid to go to bed on account of the cold. The first night I came up the hills I did not sleep at all ".

Stone House was, at the suggestion of Sir Thomas, rented to Government for two and a half years as quarters for sick Officers and Surgeon Haines, then living in Ooty was appointed resident Medical Officer. Sullivan's dream of a Sanitarium was coming true. In July 1827 Munro died of cholera and was succeeded as Governor by the Right Honourable Stephen Rumbold Lushington who " did more than any other man to bring to notice and render available the many advantages of Ootacamund as a Sanitarium ".

In September 1827 Sullivan sums up the progress made so far. Seventeen European Houses had been built and five more at Kotagiri ; Roads have been made in all directions about the settlement so that invalids may take either Horse or Palanquin exercise with almost as much facility as in the low country. A fine piece of water has also been constructed on which boats are beginning to ply. A subscription has been set on foot for a Public Reading room. Ootacamund, in short, is gradually approximating to a state of comfort and civilisation ".

On assuming the responsibilities of Governor, Mr. Lushington directed that two companies of Pioneers be immediately sent up to improve the road from Mysore. That bungalows be built at Billicut at Sigur and Thepakadu. That a Hospital for forty invalid soldiers (afterwards turned into the District jail) and ten bungalows to hold four bachelors, or two families each, should be built. The timber for them and their furniture to be supplied by the Gun carriage Factory at Seringapatam.

Mr. Lushington held the opinion that with the expansion which would doubtless follow, the care of the Nilgiris would be " Sufficiently burdensome to constitute a separate charge " and that Major William Kelso, 86th Native Infantry. (Whose memory is today perpetuated in Kelso House & Kelso Cottage) should be appointed " Commanding

Officer on the Neilgherries"; that Collectors of neighbouring Districts and even the Resident in Mysore should lend him every assistance in their power "that work might be pushed on at once and thoroughly".

Mr. Sullivan's dream had now come true; Ootacamund had become the Sanitarium of Madras. It must have been a sad, sad, Sullivan to find this child of his endeavours handed over to the upbringing of another. Differences of opinion between him and Major Kelso arose in regard to the allocation of land for a Military Bazaar or Cantonment. Major Kelso evisaged an area of ten or twelve square miles with the main Bazaar at what we know as Charing Cross. Sullivan wished to restrict it to a much smaller site near the west end of the lake. Eventually a compromise was reached by which the Cantonment Bazaar, Public Offices, Hospital etc. were located on the spot now called Jail Hill, above the Lake, which then extended almost upto Charing Cross. Early in 1829 Mr. Lushington went to Ootacamund to see for himself how his instructions were being implemented, and on this occasion laid the foundation stone of Saint Stephen's Church which was apparently named after him. It was at this time that he purchased, for Government, Mr. Sullivan's other property Southdowns later to be called Bishops' down and presently St. Patricks and started an ambitious experimental Farm at Ketti.

In January 1830 the greater portion of the hills including the low country to the North was transferred to Malabar on the grounds that this was the best way of checking the tobacco smuggling which went on between Coimbatore and Malabar. Sullivan composed a "Long and powerful" minute on the subject in protest, prior to proceeding on furlough. It was not until many years later when, as a Member of Council, his views were allowed to prevail.

A more direct route than that via the Kakur and Gudalur Ghats between Ootacamund and Calicut was desirable and in 1831, the old tobacco smugglers path later known as the Sispara Ghat was selected. Pioneer camps were established at Sispara and Avalanche and, in 1832, the Kundah pass, as it was then called, was opened.

It was, at this time, thought that the Coonoor and Sispara Ghats would become the two main routes to the hills. The objection to the then rudimentary and difficult Sigur path via Billicul; and the Gudalur route was the imminent risk of malaria which everyone ran who travelled through the dense jungles at the bottom of them. So great was the fear of this fever, that troops from Bangalore marched via the Coonoor Ghat, increasing the journey by some sixty miles.

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

Further improvements were in progress. The Church Missionary Society started a School for Europeans, having built for it the house which is now the Savoy Hotel. Sir William Rumbold had begun to build a Hotel which is now the Ootacamund Club. The Bombay Government had already purchased, as quarters for its invalid officers the building which in consequence was known as Bombay House, whilst three Parsis from Bombay had opened well stocked shops.

The opening of the Coonoor Ghat laid the foundations for the settlement of Coonoor but had given a blow to Kotagiri and Dimhatti from which neither fully recovered.

Meanwhile, the Directors were a trifle uneasy at the expenditure being incurred on the new "Health Resort" and asked for details of what had been done and the advantages expected from the outlay.

A local committee reported back in 1832. It recommended the scheme of Major Crew, Assistant Commissionary General of Ootacamund, for the colonisation of the hills by Europeans and Eurasians; the formation of a cattle breeding establishment to supply animals for public service and salt beef for the Navy. It remarked upon the various public buildings including St. Stephen's Church. The Convalscent Depot or Hospital, Southdowns which the Governor used as a residence, the different public quarters now known as Westlake and Caelaverock. The Native Barracks, The Choultry, The Lock Hospital below Jail Hill and the Public Bazaar. It also suggested a bridge of boats across the Bhavani at Mettupalayam and remarked on the suitability of the Coonoor and Gudalur Ghats, on completion, as being "Easy for travellers and wheeled carriages of every description almost throughout the year". This appears to have satisfied the Hon. East India Companies' Directors.

On the retirement of Mr. Lushington in 1832, Sir Frederick Adam took over the reins. It was by his decision in 1834, that the Convalescent Depot, which had been moved to Southdowns in 1832, was abolished, and the Lock Hospital (a polite name for a Hospital for venereal diseases in those days) turned into an ordinary Hospital, the Medical establishment accordingly reduced. All this, on the grounds that the Depot had proved of smaller value than had been anticipated, and was expensive to maintain. Stonehouse, rented by Government as quarters for sick Officers was given up and, of the houses belonging to Government, Bombay House was burnt down, West Lake and Caelaverock sold in 1836 and Southdowns in 1839. Ootacamund was no longer an Official Sanitarium. A new broom having swept very clean.. Changes in administration had

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

now become desirable, the plateau being divided between Coimbatore and Malabar a divided responsibility being no responsibility, the authority of the Military Commandant being confined to Ootacamund. Attention was forcibly drawn to this matter by the failure to bring to justice a group of hill people who massacred in 1835, fifty eight Kurumbas suspected of witchcraft. As a result, the Madras Government considered it advisable to vest in one Officer the powers of Collector, Magistrate and Justice of the Peace, throughout the hills. This could not be done without special legislation which the Government of India refused to sanction "The necessity for it not having been sufficiently proved". The idea was dropped in 1837 and Ootacamund remained a plain Military Bazaar or Cantonment. In this same year Lord Elphinstone became the Governor and it was during his rule that the hills first began to be cleared for Coffee Estates. In 1839, Sullivan, now a member of Council, again raised the question of restoring to Coimbatore, the Nilgiri Territory transferred to Malabar in 1830. It was not, however, until 1843 when the Marquis of Tweeddale, successor to Lord. Elphinstone, decided to retransfer the tract, leaving to Malabar the territory West of the Pykara River and the Kundahs. The Marquis's rule is also memorable for the decision to establish the Barracks at Jackatalla later to be known as Wellington, a decision which was to greatly benefit the social and economic status of the hills. The first geographical and statistical survey of any value was completed in 1847 by Captain J. Ouchterlony and from this we learn that there are now 76 European Houses on the hills and 342 settled Europeans, whilst the revenue to Government from that part of the hills under the Coimbatore Collectorate, was Rs. 38,562/- of which Rs. 16,300/- was derived from the sale of the arrack contract. In 1855 a Principal Sudder Amins Court was established, and the Commandant ceased to be the District Munsif. This same year an Act was passed empowering the Judge of Coimbatore to hold criminal sessions in the hills. In 1858 the Principal Sudder Amin was replaced by a Sub-Judge and the plateau west of Paikara, the Kundahs and the Low Country to the North were under his jurisdiction, these areas being annexed to the Coimbatore District for revenue purposes in 1860. In 1859 the post of Commandant was abolished, whilst that of Joint Magistrate continued, the Military Police being placed under the Civil authorities.

The Coimbatore Judge enjoyed his criminal sessions on the salubrious hills, such sessions being "frequent and protracted" to the detriment of his work at Head Quarters, and in 1863 a Special Civil and Session Judge was appointed. The new Judge had little to occupy him and the post was abolished by an Act of 1865 which separated the Nilgiris from Coimbatore, and placed them under a Commissioner and

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

Assistant, who enjoyed Revenue, Criminal and Civil jurisdiction, with Small Cause powers.

The first Commissioner was James Wilkinson Breeks who died in June 1872. The Breeks Memorial School was founded in his memory. In 1873 the Ouchterlony Valley and in 1877 the South East Wynaad were added to the District. In other ways also, its importance had increased rapidly. Coffee, tea and cinchona had been planted in large areas; Ootacamund and Coonoor had been growing daily. The Indian population of the hills had advanced in numbers and wealth and the District had become the recognised hot weather seat of Government. It was not however until 1882 that it became a Collectorate.

This then, is the Political history of the Nilgiris upto the time when it became desirable to form a Game Association.

III

When the first Europeans came up to the Hills, The Plateau was a natural Game Sanctuary, where the balance of nature had remained virtually undisturbed from time immemorial.

The Todas, traditional Lords of the Hills, although we are told that sambur meat was not repugnant to them when obtainable, were in no way a threat to the edible game ; Tiger and Panther must have, to some small degree, been responsible for the loss of Buffalo calves, and doubtless this was accepted philosophically or the marauders dealt with by the local Kurumbas or Kotas.

Of the Badagas, whose immigration to the Nilgiris started some 400 years ago, supposedly as refugees from the falling Vijayanagar Empire, little is recorded as to their hunting propensites, and we may count their influence on the game population as being negligible. However, as the principal cultivators it is more than likely that crop protection became a dire necessity at certain times of the year, but it is felt that the local tribals would be engaged for this purpose having the requisite hunting and trapping skills.

At the time of which we are writing, the so called early " English " period, we are told that, where Raj Bhavan now stands, there existed a vast Shola where might be found " Numerous Elk, Jungle sheep, and Bear were not infrequently seen; the cheery call of the jungle fowl could be heard at all times.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

" Elk Hill was famous, as its name betokens, and many a deer was killed within sight of St. Stephen's Church then being built " (1829-30) ".

Let us now examine such records as exist of shooting on the Nilgiris. Here is the tale of big and small game falling to a single gun, which may be found in the Oriental Sporting Magazine for October 1829.

**" Neilgherry Sport "**

List of game killed by a gentleman in the Neilgherries within the last six months :—

" Thirty three and a half couple of Woodcock ; 30 head of Black Deer, Commonly known as Elk, one of which was measured and proved 14 hands 2″ (4 ft 10″) ; 1 Jungle Sheep ; 3 Wild dogs ; 7 Bears ; 7 Hogs ; 1 Royal Tiger, length 9′-7″ ; 1 Cheeta ; 100 brace and upwards of Jungle Fowl and Spurfowl; 20 Brace and more of Hares, some weighing as much as an English hare; 12 brace or more of Peafowl; Brace of quail, often 8 or 10 brace a day; Snipe often 4 or 5 brace a day; Imperial Pigeon about 20 brace ".

The fact that only one Jungle Sheep was accounted for in this land of plenty, may be attributed to the difficulty of getting a clear shot with a rifle at this " Jinky ", clever animal, a difficulty experienced even today.

It must not be supposed that the thirty head of " Black Deer ", as Sambur were then known, were all stags or anything like it. Walter Campbell (" The Old Forest Ranger ") who posed as a devoted big game sportsman, records in his journal, in such a matter of fact way that it was no unusual occurrence, his bowling over of a hind and bagging a small brocket (stag in its second year). This same gentleman states, that, Mr. C. M. Lushington, a leading sportsman of the time on the Hills, spared " Neither sex nor age—a hind with a calf being quite as legitimate as a stag ". Describing a beat in which he took part he says " everybody fired at everything within sight—Stag, hind and calf alike and without reference to distance ".

Writing of a stay in Ootacamund in 1832 Campbell's attitude to small game is related as follows :—

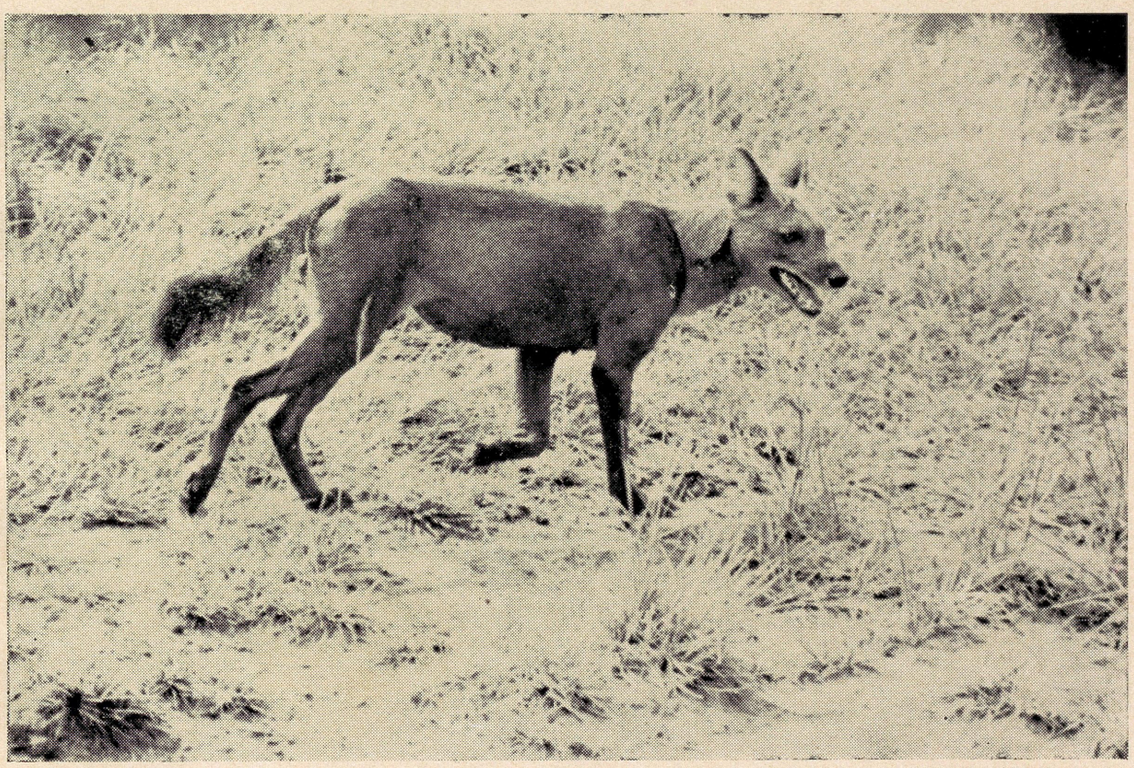
" As far as I can judge from one day's experience of small game shooting—for I could never be persuaded to try another, this style of sport

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black



Wild dogs

Photo : E. R. C. Davidar



Wild dog *(Cuon alpinus)*

Photo : A. J. T. John Singh

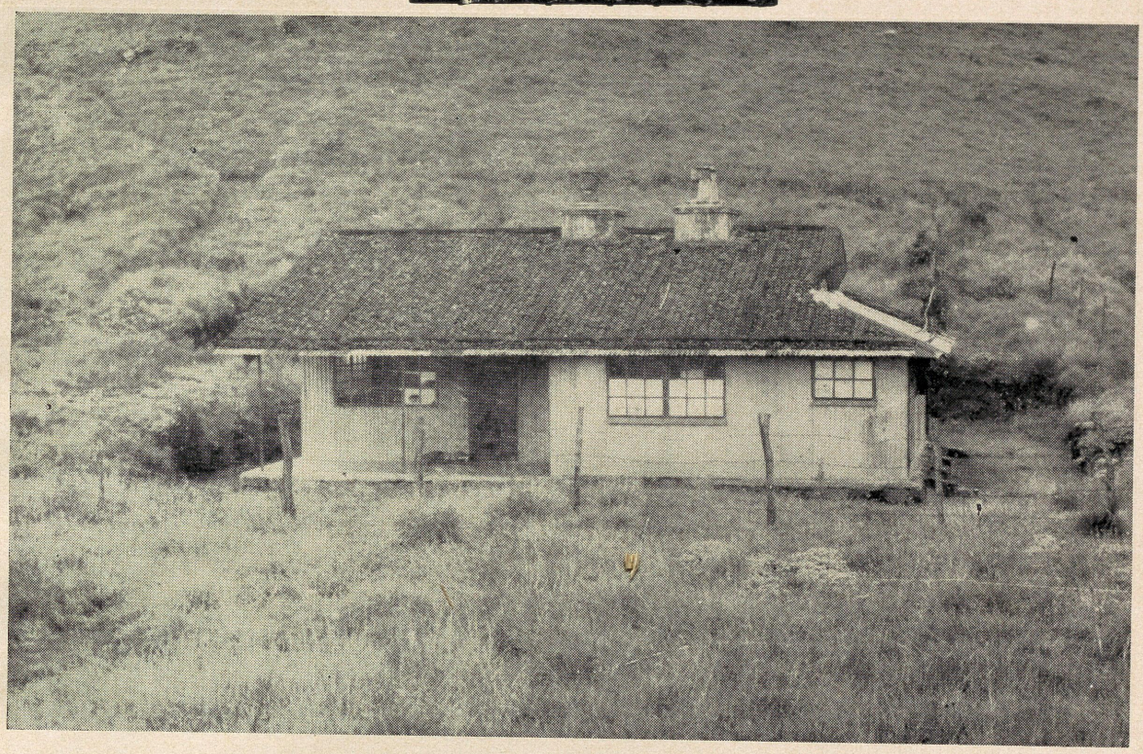
Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

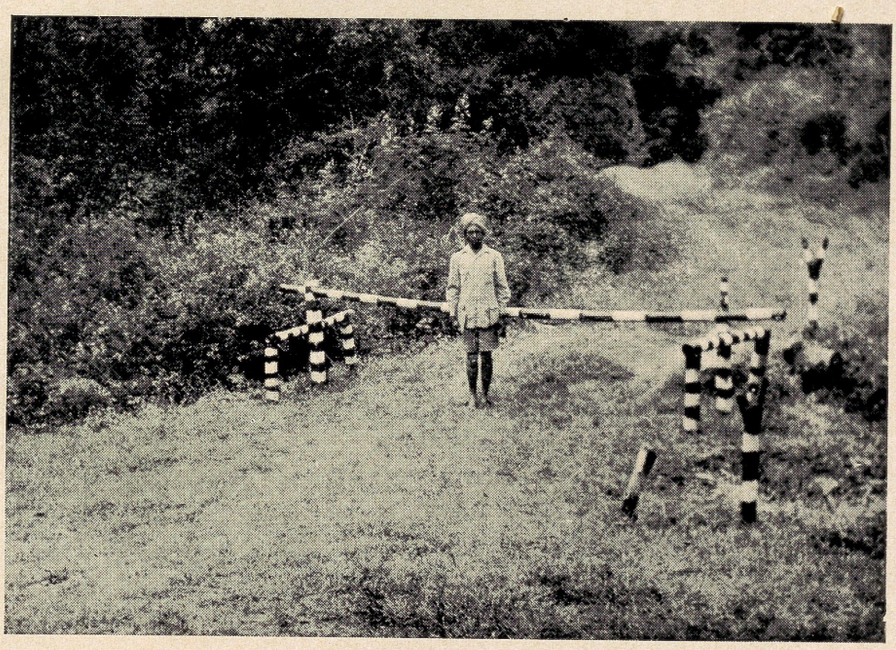
Cow gaur or bison and calf

Photo: E. R. C. Davidar

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches
© The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

MUKERTI BUNGALOW
[redacted]





[redacted]
An Anti-poaching gate
Photo. E. R. C. Davidar

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

Wild tusker in the Sigur Reserve

Photo : Peter Davidar



Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches
© The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

on the Hills is very poor work. Jungle fowl, although tolerably numerous, are hard to find and harder still to beat up; I have never heard of more than three brace being killed in a day. Snipe and Quail abound in the valleys. Hares are plentiful enough; but as they always lie in the thickest cover not one in twenty is shot. Peafowl are only found in the larger and thickest woods, where shooting is almost impossible, the man who bags one in a month considers himself a mighty hunter". Behind this, one may find a large bunch of "Sour Grapes"; to be a good small game shot, with the weapons then available, called for a high degree of skill and judgement; to shoot a grazing Sambur with a "two ounce ball" being a relatively simple matter, this was his favourite form of sport which he refers to as "insane love for the hard work of stalking."

Dr. Baike, writing in 1834, speaks of Woodcock and Snipe as not plentiful, but a bag of five or six couple of the latter in a forenoon, may be considered fair for a tolerable shot. Jungle and Spur Fowl are mentioned as being very numerous. He speaks of Sambur, as being found in large numbers; and of the frequent occurrence of Jungle Sheep.

For a period of thirteen years after 1834 there appear to be no records of shooting at Ootacamund or on the Nilgiris. Lt. Burton in his "Goa and the Blue mountains" in 1847 speaks of Woodcock and Snipe as abounding about Ootacamund. Three or four couple of Woodcock being considered a good bag. By now, the game population must have diminished considerably; this could hardly have been otherwise, for by August 1847 there were, in Ootacamund, one hundred and four Officers on sick leave and a resident European population of three hundred and forty two. From Ouchterlony's survey of the same year we find listed, amongst the various trades; "Twenty-two male adult Shikaries having eight male children; these no doubt, would follow in fathers' footsteps in due time. The year 1854 finds the new barracks, at Jackatalla, as the headquarters of H.M. 74 Highlanders in India. The 74th, being a well known sporting regiment, without doubt, enjoyed the shikar available to the fullest extent".

In 1862-63 Sir Victor Brooke (he of the record eight foot elephant tusk) writes to his family, from the present "Blackwood Cottage", glowing accounts of the sport to be found around Ootacamund. To him there did not appear to be any dearth of game. To one but recently out from "Home" his observations may be considered as being relative. About this same time another character, General Richard Hamilton writes freely and regularly in the South of India Observer of his shooting hinds and does, one small example will suffice. "At last, spied a head

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

looking at me over a bush; aiming at the white collar of the neck, I plugged it, and threw her in her tracks ; a fine and very fat Doe. This old rascal became, within a few short years, the strongest advocate of a Game Control Act for the Nilgiris. Was it old age or conscience ?

From this time on game of all kinds was steadily killed off, shooting went on all the year round and everything in the shape of game whether winged or four footed was ruthlessly slain without regard for age, sex or season. To add to the destruction meted out by the Europeans a race of local shikaries had grown up and a very lucrative business was established in the supply of meat, both to the market, and private employees.

The consequence was that by the early seventies, everything not migratory had been pretty well cleaned out for many miles around Ootacamund. Sambur, which in the late fifties and early sixties, were fairly plentiful on the Dodabetta and Snowden ranges had entirely disappeared.

On reviewing the foregoing it gives one pause to wonder how any game survived at all, even upto the seventies. Let us now retrace our steps to the early settlement days. As a point of reference we will take the year 1830 as seeing Ootacamund well on the way to popularity as a settlement and health resort.

## IV

Until 1831, when a new act radically changed the British Game laws, no one below the rank of Esquire was allowed to pursue any kind of game. The penalties for infringement of these rules would today be considered barbarous. Shooting or the pursuit of game was, therefore, restricted to the Nobility and landed Gentry. Scions of such families, brought up to the sporting way of life from an early age, there were, without doubt, on the Hills, the majority however, could not have had the opportunity of developing skills with ball or shot.

For young men coming out to India it was considered " de rigueur " to have in their kit as sporting weapon of sorts and a pair of pistols. No doubt, the European male element of the Nilgiris would be so equipped. Just imagine, to be turned loose on the hills with an abundance of game and no feudal restrictions, these young men, and young they were, if we judge by the tombstones; must have had a wonderful time learning the art of shooting. Many a bird and beast must have been wounded but very many more missed to live another day.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

The weapons in use up to well into the 1830's would be mainly flintlocks, little changed from those in use in the mid 18th century, single barreled and smooth bored, these guns could be used with either ball or as it was known in those days " grit " shot. The calibre would generally approximate our modern 12 bore but due to vagaries in finishing the barrels, 10, 11, 12 and 13 bores were common; suitable bullet moulds being made to match the particular weapon. Flint rifles there were, both single and double, but these were regarded as novelties, mainly of Continental origin.

Colonel Hanger in his book " To All Sportsmen ", 1814 says " A soldier's musket, if not exeedingly ill bored, will strike the figure of a man at 80 yards, it may be even at a hundred, but a soldier must be very unfortunate indeed who shall be wounded by a common musket at 150 yards, provided that his antagonist aims at him ". This then, with a few minor refinements as to weight and finish would be the weapon of our Nilgiri sportsman.

In addition to the inaccuracy of the flintlock, misfires were common. Official trials covering several thousand shots, flintlock versus percussion, showed 6.5 misfires for the flint to one of the percussion. The ignition of the flintlock was also very slow. A well known gunpowder manufacturing company found, by tests and calculation, that a bird flying at the rate of 60 feet per second, would cover a distance of 5.4 feet during the time which elapsed between the fall of the flintlock hammer and the exit of either ball or shot from the muzzle. Crossing or quartering game, be it fur or feather, would probably in all cases be missed behind, a feature common to the tyro even with the sophisticated weapons and ammunition of today.

From the mid 1830's the percussions lock rapidly gained in popularity mainly due to the reliability of ignition; rifled barrels of various groove characteristics became common, giving greater accuracy. From writings of the period we learn that those commonly in use on the hills were 8, 10 and 12 Bore. These weapons suffered from the usual bugbear of black powder fouling, the grooves of the rifle bocoming clogged after a few rounds, making it almost impossible to force the bullet down the barrel. At the same time all benefit of the rifling was lost since the lead of the bullet could not displace into, and so follow, the fouled grooves. It was for this reason that many of the old timers preferred the smooth bore in the same calibres.

Bullet weights were high in relation to the charge, and muzzle velocities were correspondingly low. The resultant trajectory could be likened to that of a cricket ball being lobbed back to the bowler. It will

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

be seen then, that to hit an animal at little more than point blank range, required a very accurate estimation of distance. A great many of these weapons were in use up to the late 1860's but by then the breech loader with its compact centre fire cartridge had come to stay. The early breech loading rifles still continued to follow the 8-10-12 bore calibres of the muzzle loaders with little improvement in performance. There were, however, manifold other advantages, ease of loading, ease of cleaning and above all a standardised cartridge. A long stalk for ibex with one of these tools must have called for a fair amount of stamina, since the average weight would not be much less than 14 pounds. Small wonder that one breakfasted on steak and claret in those days!

From the foregoing then, it may be safe to assume that a great deal of game of all types survived, because of man and his weapons — and not in spite of.

At the close of the 1870's the advent of the Black powder "Express" rifle of .450, .500 and .577 Calibre entirely changed the scene. Tremendous strides had been made in rifling, mainly due to military research; low bullet weights and high powder charges produced velocities in excess of 1,500 feet per second with an attendant accuracy before unheard of. A precise instrument, specifically designed for long range killing, was available to all.

V

We have now come to the year 1877, sixty five years after the first European set foot on the plateau with any purpose. The Nilgiris had by now become recognised as a first class Shikar centre for all kinds of game from elephant to painted quail. There was a large resident Civil and Military population and the growing Railway network made access to the hills, from almost any part of India a simple matter, the new express rifles were rapidly taking toll of the available game. What more natural then that the dedicated local sporting gentlemen should view the situation with apprehension. What was to be done?

For years General Richard Hamilton had agitated in the South of India Observer for "Fence" months, better known as a close season. In 1871 he brought to the attention of Government his idea of a Game Act, a sound and reasonable proposition, but various Government officials were against what was considered to be the "Hobby Horse" of a well known old Leopard who now wished to change his spots! Accordingly the files gathered dust awaiting the day of resurrection; October the third 1877, the first meeting of the Nilgiri Game Association.

At this first meeting, it having been unanimously agreed:—

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

"That it is advisable to establish a Voluntary Game Association amongst the residents and visitors on the Hills". The following rules were submitted.

"That a close season be established as follows :—
Sambur, Ibex, Jungle sheep, 15th April to 15th October.
Jungle sheep, 15th April to 15th October
Hares 1st March to 1st July.
Jungle fowl, Spur fowl, Hill quail, Peafowl 1st March to 31st August.
Hinds Calves and cow Bison not to be shot.

"That Government be requested to pass a short Act Establishing the close season and providing penalties for the head thereof and also for selling game out of season, and for shooting without a licence".

"That in the interim the members of the Association bind themselves to conform to the Rules that may be passed by a general meeting"

Subsidiary Rules :

(1) That all shikaries should be registered.

(2) That no member should employ any but registered shikaries.

(3) That no member should buy game out of season or, when in season, from any except registered shikaries.

(4) That Govt. be requested to authorise a gun tax or licence at the following Rates. Rs. 15 per annum, Rs. 10 for the half year. If this cannot be done, to put the Arms Act into force so far as the provisions thereof may be applicable.

(5) That deer when found in the cultivation may be killed at any time by the proprietor of a plantation or someone duly authorised by him.

(6) That lakes and streams on the hills be made over to the care of the Association with a view to the preservation of fish which is now being destroyed wholesale at all times and is in a fair way to becoming extinct.

(7) Members of the committee residing at outstations and at Naduvattam and Kotagiri to be requested to exert themselves to promote the objects of the Association within their respective limits.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

At a meeting held on November the Third, it was agreed that a deputation would wait on His Grace the Duke of Buckingham and Chandos to explain the objects of the Association, and to request his co-operation in obtaining legislative enactment.

*Newspaper comment* "The meeting of the Game Association last Saturday at the Library was successful and well attended—Perfect unanimity prevailed. The general conviction is that Government Assistance must be had and that speedily. If His Grace the Duke of Buckingham and Chandos (Governor of Madras) makes a move towards giving us a game law, the Nilgiri Association may be expected to go up like a Rocket; But—if His Grace frowns on the project, it is very probable the Association will come down like a stick".

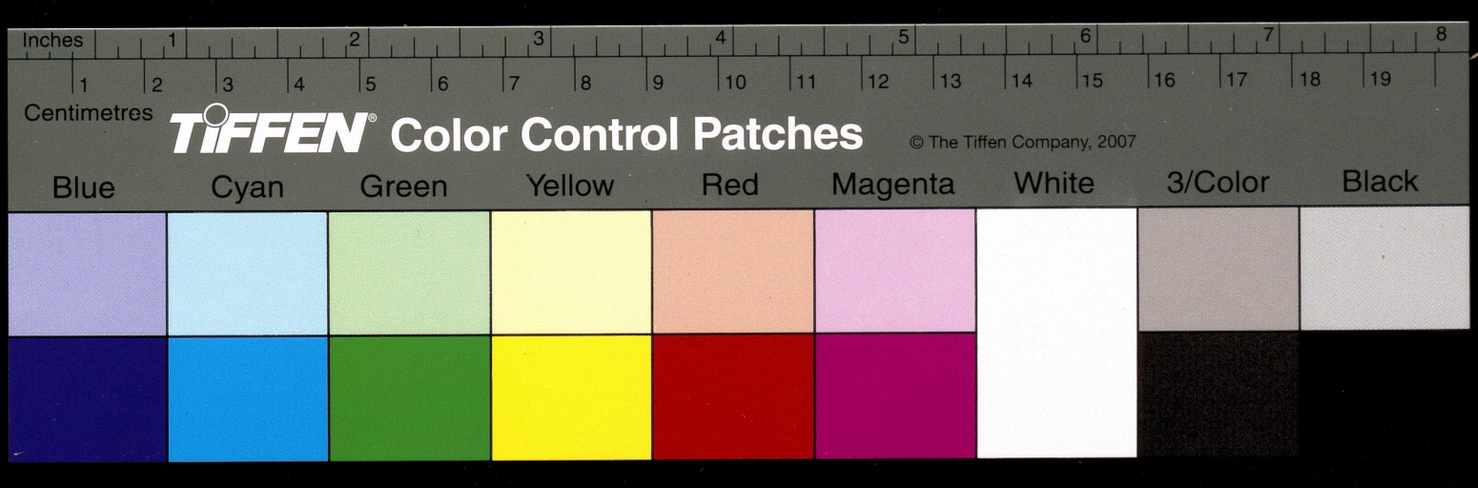
His Grace smiled; the Association went up like a rocket, and is still in orbit 100 years later!

## SPORT

I can truly affirm that life holds no joy so keen, so exquisite, so unfailing as the study of the Book of Nature, spread out afresh each dewy morning for the training eye to read. Trust me, the man who allows his success to depend entirely on the skill of any army of native shikaris, and whose personal share in that success is limited to pulling the trigger of the newest and deadliest thing in rifles when the game is found for him, knows nothing of the true delight of sport. For my own part, I would rather bag one tiger or bison by my own efforts than a hundred which I owed to the exertions and skill of my native shikaris. Mere killing is not sport: the real charm lies in the feeling that you have pitted your reason against the quarry's instinct, and won the equal fight; that your trophy is the reward of your own skill. This feeling is the very essence of true sport, and it makes success doubly sweet.

*F. W. F. Fletcher*

in 'Sport on the Nilgiris and in the Wynaad'



## MANAGEMENT OF GAME BY THE ASSOCIATION

**E. R. C. Davidar**

*"The objects of the Association shall be the preservation and management of Wildlife in the Nilgiris"*

*— Constitution of the Association.*

It may be wondered how a non-official organization such as the Nilgiri Game Association, by which name the present Nilgiri Wild Life Association was known for a long time, was able to not only influence game conservation policy, but also play an important role in the management of game in the Nilgiris. The greater part of the credit for this goes to the founders of the Association. Besides being men of standing, whose names still rank amongst the giants of shikar, they established their bona fides by voluntarily placing restrictions upon their own hunting in the form of close seasons etc. This act of self-discipline gained for them, and the Association they brought into being, immediate Government recognition. Once the acceptance of those in power was gained, of the need for game preservation, the rest was comparatively easy.

The Nilgiri Fish and Game Preservation Act of 1879, the first legislation of its kind in India, which came into force on 6th May 1879, was largely the work of the Association. Besides the Nilgiris, it extended to parts of Coimbatore Malabar Districts. It provided for the fixation of close seasons and afforded protection to game and such fish as may be introduced to the district.

The Nilgiri Game Act was followed by the Madras Forest Act of 1882. This Act provided for the notification of Reserved forests and restriction of the rights of people entering Reserved forests, one of these being hunting in contravention of the rules. Section 26 of the Act empowered the Government, amongst other things, to make rules for the regulation of or the prohibition of hunting. Section 63 provided for the appointment of Forest Officers to carry out the duties prescribed by the Act.

In 1911 the Madras Government framed special rules for the Nilgiris called the Nilgiri Game Rules. The Collector of the District was empowered to issue game licences and regulate hunting. Females and immature males of deer, bison and ibex were protected. The Collector was further empowered to frame and notify in the district gazette such other conditions of the licence as may become necessary.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

The Collector as the ex-officio president of the Association was advised by its Committee and the general body which was composed of all Season game and fishing licence holders, on matters of policy and in framing or modifying the special conditions of the licences. The Association thus provided expert advice to the rule making authority and so became directly involved in the rule making process. The District Forest Officer, who was responsible for enforcing the Act and rules was made the honorary secretary of the Association. Thus, at one stroke, not only was close co-ordination between officials and non-officials in wildlife management established but also the association of the sporting public towards that end. Wildlife conservation through joint management was achieved. It must be acknowledged that, with rare exceptions, every one of the Collectors and District Forest Officers and other officers of the Government who were connected with the Association fell in with the spirit of the adventure and co-operated fully and helped the Association to function effectively.

The provision for the appointment of " Forest Officers ", under the Madras Forest Act, was taken advantage of to confer on the field staff of the Association and some of its members, appointed as honorary game wardens, the powers of arrest. confiscation, etc.

The finances of the association accured from the sale of game and fishing licences, which the Government made over to the Association. The shooting licences fetched Rs. 6,000/- to Rs. 10,000/- and the fishing licence fee collections ranged between Rs. 5,000/- and Rs. 8,000/- in normal years. When compared to the lakhs of rupees spent on wildlife conservation projects of doubtful value this was a pittance. But as far as the Government was concerned it was a bold move without precedent, and as it turned out, a wise investment. The Government on its part had provided the tool. Let us now examine how the Association used it. The Association, with limited financial resources could not undertake any grandiose schemes; but what was lacking in material resources, was made up for by voluntary effort and dedication as enjoined by Hawkeye (Maj. Gen. R. Hamilton) in his book 'Game'—" Remember, all good sportsmen, that it depends upon yourselves whether it shall be a *dead* law or a *living* law ".

In order to control poaching and apprehend offenders, the Association employed its own watchers. At one time it had 17 watchers, in its employ who, as reported in an annual report of the Association, " worked as usual with the regular forest subordinate establishment and their work was often guided and supervised by range officers and the inspector (of

the Association)". When it was found difficult to carry such a heavy establishment their number was reduced, and a system of payment of rewards to regular forest staff for poaching cases detected was introduced.

When the Association assumed control of the trout fishery in 1926 and the income went up, fish watchers were also appointed. In place of the Inspector, Mr. C. Fraser was appointed first, as the Fishing Superintendent and later as Superintendent responsible for the organisation and control of the activities of the Association. Besides the Superintenent some of the committee members supervised the work of the watchers in their respective areas. When the Superintendent resigned in 1941 one of the members of the Committee took over his duties and was designated Honorary Superintendent, which post continued until it was abolished in 1976 when the Association relinquished control over shooting and its constitution was amended.

Game was and is pursued during the hours of daylight which hunters visiting the Nilgiris from other parts of India, who are used to night shooting in jeeps, find it difficult to believe!

When motor car poaching became a serious problem anti-poaching gates were put up at points of entry into the Anaikatti jungles in the Sigur reserve and were manned by the Association's watchers.

Although the Collector was the authority for issuing game licences under the Nilgiri game rules, these powers were *de facto* exercised by the Association. The Association processed and recommended applications. In doing so it exercised informal control over the number of licences issued and the persons to whom they were granted. Through the exercise of this power, it was possible to keep shikar on a purely amateur basis and professional shikar organisations were debarred operating in the Nilgiri area.

Due to the lead and example given by some of the senior members the standards of sportsmanship have been high in the district and this acted as a check on unsporting practices common elsewhere.

The Association, at one time, owned four game bungalows at Karurmund (Hodgson's hut, donated by H. P. Hodgson—a founder member of the Association), Mukerti, Billithadahalla (de Heriez hut donated by de Heriez Smith), and Mudumalai. These were principally meant for the convenience of licence holders (and were not claimed to be a conservation measure!) and the periodical occupants did help to keep a check on poaching activities in game country. As a matter of historical interest it may be noted that the de Heriez hut was submerged when the Upper

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

Bhavani reservoir was formed; the Hodgson's hut became redundent when the Krurmund river was dammed higher up and the Mudumalai game hut was handed over to the forest department when the sanctuary was extended.

In the exercise of the rule making powers through the imposition of special conditions of the licences the Association, as an expert body, was able to render a most useful service. Local conditions and changing circumstances were taken into account when framing such special conditions. Being a body of individuals unhindered by red tape it was able to act with speed (unlike the slow moving government machinery) which was of the essence in matters of this nature. For instance, whenever bison suffered from set backs due to rinderpest epidemics their shooting was closed until they recovered. Nilgiri tahr were protected until they increased in number to allow culling by shooting a few saddle backs. Black buck shooting was closed off and on to help them to make a recovery. The bounty on wild dogs, which many considered " the inveterate enemy of game and of the hunter ", was withdrawn when they suffered a set back due to distemper. Bag limits of game were progressively reduced to prevent over shooting.

Before anyone else thought of preserving the tiger, the Association took steps in this direction. It raised the tiger's status (and also the leopard's) by declaring them game and imposed a bag limit. Shooting of cubs and tigresses accompanied by cubs was banned. A restriction on the number of baits which may put out for tiger was imposed. Shooting on either side of the Ooty-Mysore road between Tappakadu and Thorapalli which was frequented by game, especially tiger, was prohibited. On wounding dangerous game, the holder's licence was suspended until he followed the animal up and took all possible steps to finish it off: any, wounded game counted as game killed against the bag limit.

Small game shooting on the plateau had to be carefully managed, since small game was never abundant. Jungle fowl were brought in and released from time to time. Heavily shot over areas were given rest. Jungle hens were protected whenever the jungle fowl population showed a decline.

The Association maintained at one time samai (a kind of grain which is locally popular) plots for jungle fowl feed near nesting sanctuaries and around sholas where birds captured from the low country were released. Controlled burning of grass was undertaken annually, to stimulate fresh growth, for the benefit of the tahr.

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

Cropping good stags year after year is certainly not good game management policy. It was not as if the Association was not aware of this. Pythian-Adams wrote in his note 'Game preservation in the Nilgiris' (1927)—" The sambur hinds outnumbered the stags on an average eight to one, and need thinning, but the difficulties in the way of this are obvious. The total absence of lime on the Nilgiris plateau is no doubt chiefly to blame for the small size of the heads, but another contributing case is undoubtedly the shooting off of the best stags year after year, leaving to breed chiefly immature animals and those past their prime". As Phythian-Adams pointed out there were practical difficulties. Restrictions were necessary to curb the pot hunters. Given a free hand they would have finished off the stock. The Nilgiris is a vast area compared to some carefully managed deer hunting preserves in Europe and elsewhere and has a fairly good deer population. Also there were the cunning, warrantable stags, which did not leave the security of the sholas until night fall. They also had sufficient inaccessible country to hide in and the number of stags shot in the district remained within reasonable limits. If all these factors are taken into consideration the policy of the Association in permitting the shooting of stags (both sambur and cheetal) *subject to prescribed antler size* will be seen in its true light.

In respect of small game management, Phythian-Adams wrote—" There are two well recognised principles of small game preservation, namely, destruction of vermin and conservation of breeding stock". It was on this principle that the Association acted and introduced a system of payment of rewards for destruction of vermin. This has come in for certain amount of criticism on the ground that it is bound to upset the balance of nature. It must be appreciated that when the Association introduced these rewards, they had only the example of the small game preserves in U.K. before them. There keepers were paid to keep the population of predators down. This may be necessary in heavily shot over areas and Nilgiris was such an area as far as small game was concerned. In the latter years, due to increase in the cost of ammunition (the rewards having remained stagnant) few, if any, bothered to shoot " vermin " for the sake of the reward and they remained unmolested. This coincided with the decline in popularity of small game beats and the " balance " was once again restored.

A system of registering professional shikaries as guides was introduced. It soon became a condition of the licence that visitors to the district should be accompanied by registered shikaries. This served a four fold purpose. It brought shikaries under association control ; helped

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

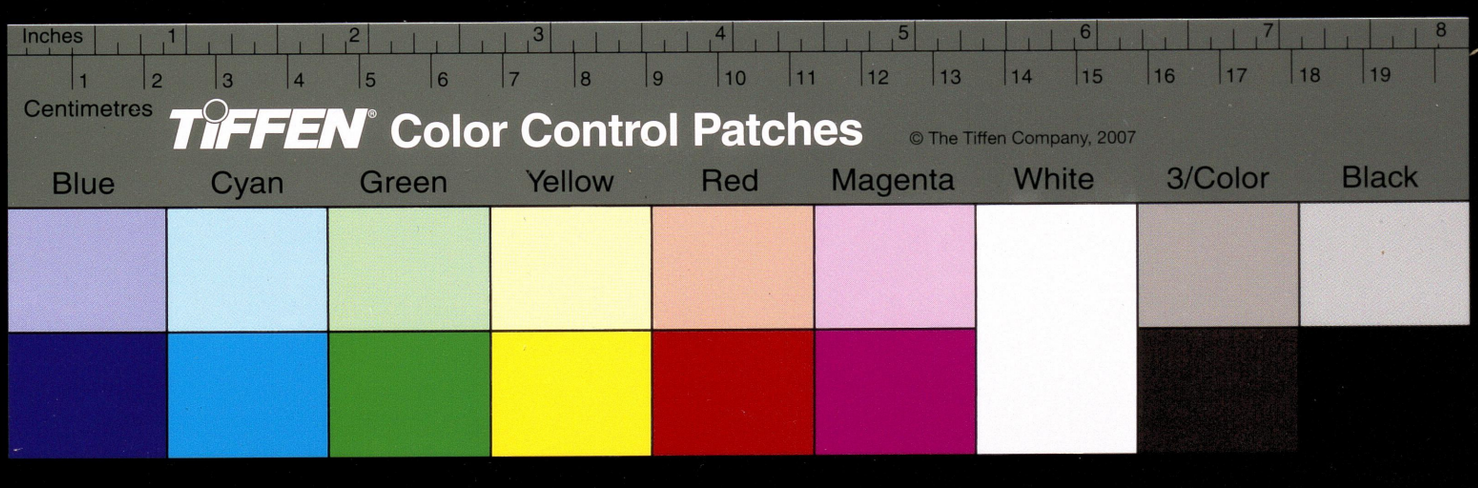
to keep track of the movements and activities of visitors; helped them find their way about and, most important, to assess the merits (antler and horn sizes) of trophies with expert guidance.

The Association afforded help in conducting census operations and wildlife studies. The members of the Association kept a close watch on the status of wildlife in the district to take such corrective action as necessary in due time.

It is a matter of great regret that the Wildlife (Protection) Act came almost a century too late and that the Association was not given the opportunity of administering it. The exclusion of private property from the application of game laws was the greatest stumbling block to effective game management. Much of the slaughter of game took place on private property and in the reserved forests adjacent to them, whilst those entrusted with the management of the game laws had no option but to stand by helpless. However, in spite of the handicap the association could still offer excellent sport for the true shikari goes to its credit.

Enclaves of revenue land in forest areas (some of these being across important trek routes) have been a source of temptation to various departments of the Government, who wanted to seize them for their own. But for the Association's protests the local officials would have had to yield to these demands, to the detriment of wildlife in these areas.

In the final reckoning, it was not the rules and regulations that kept the Association going and gave it its authority. There were loopholes in the law and some of the special conditions of licence were not notified in the gazettee through oversight and ignorance. Had they been challenged in a court of law there would have been no answer. So also in the case of people who were refused licences. With rare exceptions, everyone co-operated and tried his best to observe the rules of the game which, in the earlier years were mostly unwritten. As far as the Nilgiris was concerned, it was not the arm of the law so much as the social stigma attached to the game law violator that was feared. The Association was more of a moral force than a legal weapon. The Nilgiri experiment has proved beyond doubt over many years that wildlife can be *preserved through management* and that the hunter can be trusted to help in the management.



## INTRODUCTION OF EXOTIC FAUNA

In pursuance of one of its initial objects, namely, the introduction and preservation of animals, birds and fish, the Nilgiri Game Association conducted experiments with exotic fauna between its founding and 1916. A record of these attempts is given below:

**Chikor:** 39 were imported in 1892 but these died. Between 1910 and 1916—90 were imported from Quetta and shared a similar fate.

**See-see Partridge:** 8 were imported in 1911, and 11 in 1916, but disappeared.

**Red Jungle Fowl:** 7 were imported from Ganjam in 1901—they were kept in captivity, bred from, and 74 of their progeny were released between 1903 and 1907 but it was evident that breeding in the wild state was not successful. These likewise, disappeared.

**Ceylon Jungle Fowl:** 5 were imported and turned down in 1906. No success, but little could be expected from such a small stock.

**Guinea Fowl:** 6 were imported in 1893; but the experiment proved a failure and it was decided in 1895 not to repeat it.

**Pheasants:** 12 English birds were imported in 1892, and, earlier, some Himalayan pheasants. None survived. An attempt to obtain Silver pheasants from Burma fell through as it proved impossible to obtain either eggs or birds.

**Peafowl:** 10 from Godaveri were turned down on the plateau in 1901 but by 1903 they had all made their way down to the low country or been killed by vermin.

**Francolin:** A recent proposal to import Francolin from East Africa fell through owing to the breakdown of arrangements at the last moment. In view of previous experiences, it is doubtful whether they would have proved any more successful than other species already tried.

**Rabbits:** Appear to have been imported and released many years ago, as in, 1892 it was reported that they had proved a failure.

Efforts were made to introduce African antelopes and gooral, but had to be given up because of the cost factor.

It is, perhaps, just as well that no further attempts were made to repeat these somewhat risky experiments; as without a proper study, some of the exotic fauna may, well have upset the balance, and endangered the native fauna.

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

# A SHORT HISTORY OF MAN MADE FORESTS IN THE NILGIRIS

J. C. Kala, I.F.S.

The Nilgiri District has been blessed by nature with enchanting Sholas and Rolling Downs, a cool and pleasant climate and an amiable and friendly local people. Such charms are irresistible to tourists who fall in love with our hills at first sight.

The plateau has enjoyed a sheltered political past, and due to peculiarities of climate and topography; and protected by the dense malarial forests of the foothills whatever the change in rulership of the territory the effect of such changes was little, if ever felt by the indigenous inhabitants.

Early Rulers, bordering what is now the district having disregarded it, any influence on the forest was mainly due to the immigrant inhabitants of the plateau and not to occupying invaders.

It is a matter of record that the Badagas have been settled on the hills for approximately 400 years whilst no one can assert with accuracy just when the Todas came, or where they came from. The Todas being a pastoral tribe caused little or no destruction with the possible exception of a small amount of injury to the Sholas due to their immemorial custom of the annual burning of grass lands in order to stimulate fresh pasture.

It was mainly the Badagas who enjoyed an unenviable reputation for destruction of the forests. The following statement made in 1890 by Collector MaCartie is worthy of note.

"No people need protecting against themselves more than the Badagas. They have systematically destroyed every tree in the neighbourhood of their villages and for miles around, leaving nothing standing for their requirements but stunted shrubs such as Dodonea, Berberis, Carissa, etc."

The Nilgiri Hills came into the possession of the Hon. East India Company in 1799 by the treaty of Seringapatam and the first phase of European Settlement may be said to have taken place between the years 1820 and 1830. By this time Ootacamund was becoming recognised as a growing hill station and in due process the settlements of Coonoor and Jackatalla,—later to be known as Wellington—followed.

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

With the British occupation of the Plateau the destruction of forest growth continued unabated and, indeed, may be said to have considerably increased as the station developed; the nearby Sholas being the first to suffer for the supply of small timber and firewood. Meanwhile the insidious depredations of the Badagas also continued side by side.

**The Introduction of Exotics**

The Australian Blackwood (Acacia melanoxylon) together with Silver Wattle (Acacia dealbata) were first introduced into the Nilgiris about 1832 by Captain Dun and the bluegum (Eucalyptus globulus) in 1843 by Captain Cotton of the Madras Engineers. The seed for these exotics in all probability came from Tasmania, and not Australia as is commonly supposed.

By 1853 we find that the systematic planting of blackwood and wattle had begun in the neighbourhood of Jackatalla.

1856 Major Morgan, the Special Officer whose charge was Jungle Conservancy, ordered a large consignment of several varieties of Eucalyptus seeds from Australia. Some of these seeds were sown on a definite plan in the old Tudor Hall Estate, many fine trees from which exist to this day. The remaining Tudor Hall seeds were distributed to the settlers.

The Government also sanctioned grants for the planting of acacias whilst Mr. E. B. Thomas, Collector of Coimbatore, under whose jurisdiction the hills came ordered the filling up of the blanks in the Sholas around Ootacamund, Mr. McIvor, the Father of Cinchona, and to whose efforts the present Botanical Gardens owe so much, was responsible for the trees we see planted round the Lake, but it was Morgan who planted the magnificent specimens still to be seen on the Mysore Road towards Pykara.

These works were carried out in the period 1856-58. In 1858, Dr. Cleghorn, the first Conservator of forests on creation of department in 1856, was called upon to advise on the conservation of forests in the Nilgiris since the early efforts had not come up to expectations. Amongst his many suggestions were, to appoint an English Forester and to portion out the woods, limiting the cutting to one year in ten for each, preserving a certain number of the best trees to the acre and re-planting, after cutting, quick growing trees in and around each wood. He also envisaged an ambitious plan for the planting of 10,000 trees for ornamental purposes in Ootacamund. Peat was also suggested as a fuel.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

The first Government Eucalyptus Plantation in Ootacamund was the Aramby planted in 1863, 1864 and 1865 consisting of some 38 acres. 30 of which was Shola land and rest grass. Many fine examples of this planting still exist.

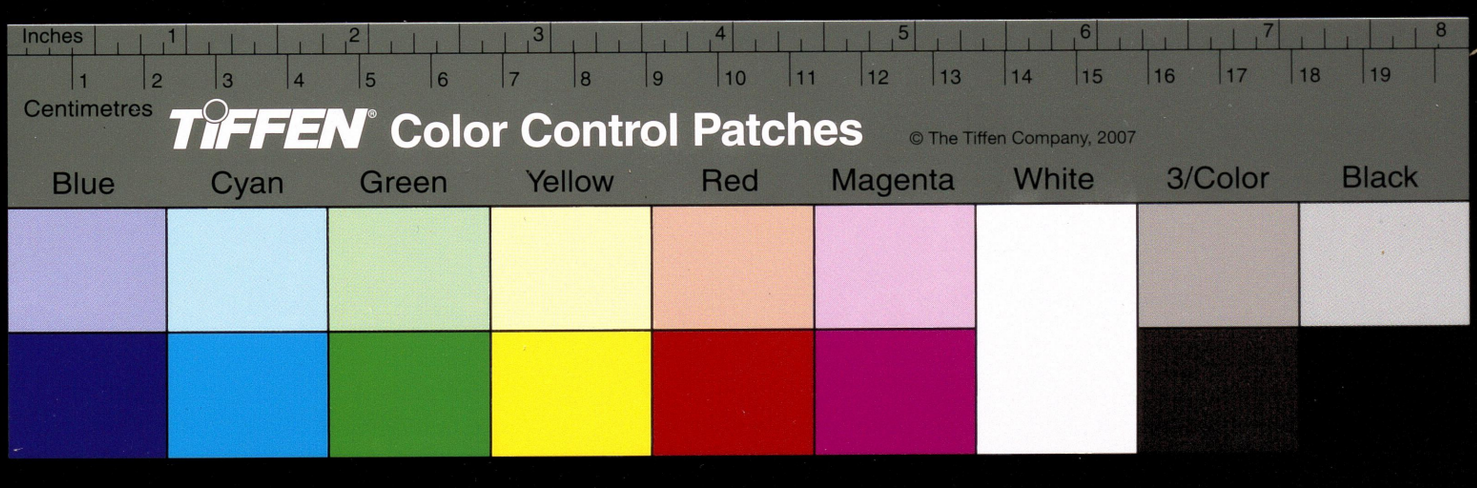
Thereafter, Government Plantations were formed with great rapidity and most of the fuel requirements for the growing settlements were met from these plantations in the following years. The firewood supply of the station of Ootacamund for the year 1875-76 was 1,832 tons " to be on the safe side we may say we require to cut over annually from 25 to 30 acres of our plantations " (Conservators inspection report 1876). So, with this rapidly developing aforestation plan there was no further need for recourse to the Sholas for any organised clearing for fuel.

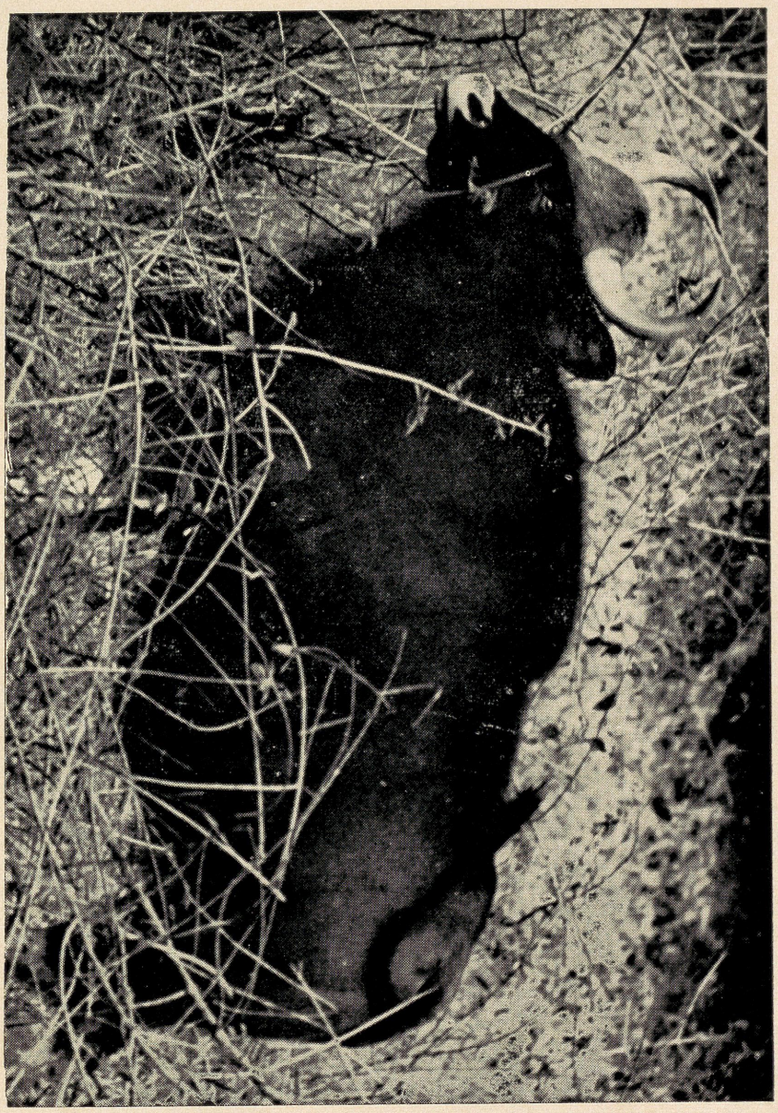
Major Morgan, now Deputy Conservator of Forests was not only responsible for the Sholas and Plantations on the Plateau but also the forests to the North below the Ghats. This left him with but little time to give the necessary attention to planting on the Plateau. A stronger establishment was needed and in 1863 Major Jago (best remembered for his long tenure as Master of the Ooty Hunt) was appointed Special Officer under the Commissioner to superintend the Conservancy and Planting Programme. From this time on large areas were planted with blue gum as being a more economical proposition than the exotic acacia species.

Various management schemes followed, notably by Gamble in 1882-86. It was he who adopted a rotation of 10 years for blue gum, a practice followed for many years. His name is best associated with the planting of such species as Pinus longifolia, Cryptomeria japonica, Cupressus torulosa and Casuarina quadrivalis.

So popular had the Eucalyptus become that, in about 1892, difficulty was experienced in selling firewood from Government Plantations in view of the large supplies available from private sources.

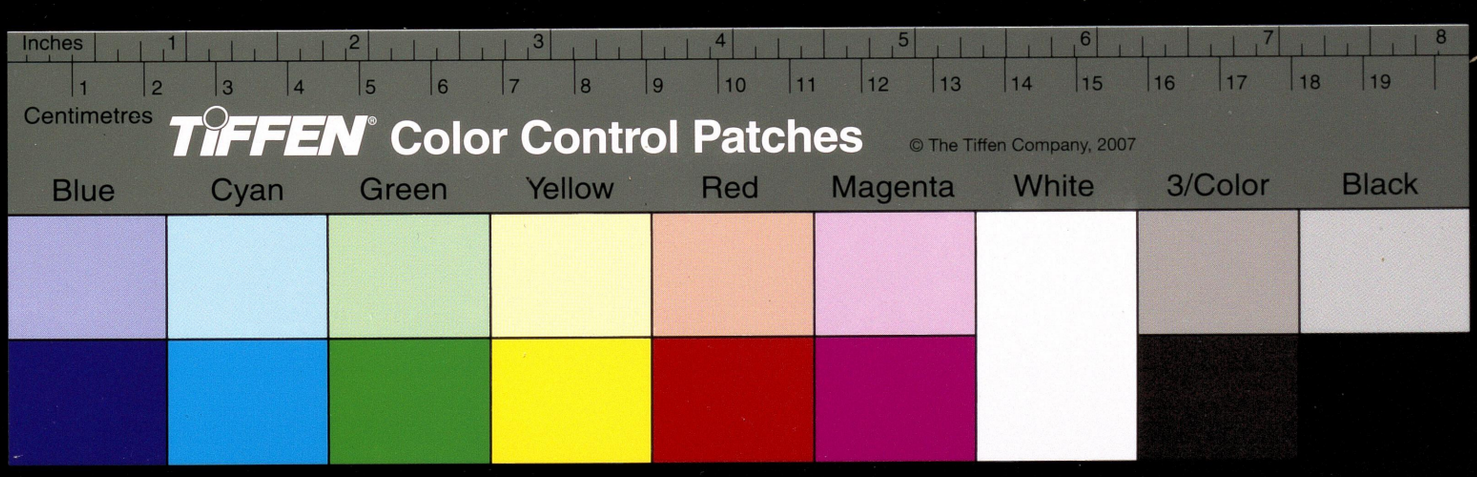
In the light of this situation, Conservator Cherry suggested in 1894 that the existing Government Plantations be converted into High Forests, but subsequently this was not found ot be desirable. C. R. Ranganathan held that blue gum should be worked on a rotation of 18 years, and where, at the end of three rotations, the yield fell short by 15% of the potential, replanting with mossed seedlings was advocated. This plan was followed from 1938 to 1945. During this period large areas had to be worked to meet the increased demand for fuel as a result of World War II. The post war demand was equally great, and accordingly, rotation was reduced to 12 years.





Bull Gaur

Photo: B. N. S. Deo FRPS





Rainbow trout on spawning beds

Photo : E. R. C. Davidar

Wattle plantations were raised systematically from 1940 onwards. With the increasing strained trade relations with South Africa imports of wattle bark dwindled and it became necessary to increase our own resources. Large scale plantations were raised in Mukurti, Avalanche, Naduvattam and the Kundahs. With the exception of areas subjected to high winds, and poor soil, the plantations have, generally, been successful. The systematic planting of blue gum and black wattle has changed the vegetational map of the plateau. Today we have 8,000 hectares of blue gum, 16,000 hectares of black wattle and 1,100 hectares of eucalyptus grandis.

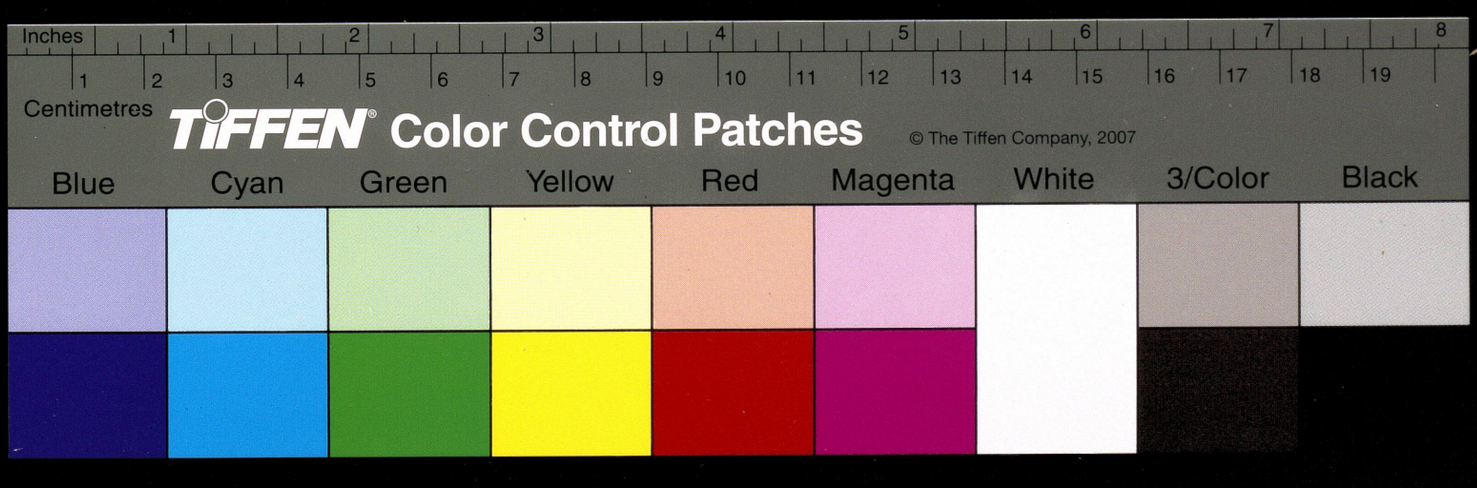
The forests of the District support four major wood based industries—South India Viscose, Tan India Wattle Extracts, Gwalior Rayon and Seshasayee Paper & Boards. From such industries, considerable revenue accrues to Government. Other benefits may be considered such as meeting the firewood requirements of the people, thus protecting the remaining Sholas, and the provision of a sizeable employement potential for local people.

*Eucalyptus grandis :* Attempts to propagate these exotic species in localities where ground frost is prevalent during the winter months met with failure; trees up to 4 and 5 metres high being killed. However, such areas, having deep soil and sub soil moisture, devoid of weeds and unwanted growth have considerable potential value. Various other exotics, such as pines, have been tried and *Pinus patula* has proved successful and at present there are 600 hectares in the district. The *Pinus patula* is a native of Mexico, graceful and aesthetically pleasing. The timber is soft and light, and may be used for box making, but the chief potential will probably lie in the making of pulp for newsprint.

A great deal may yet be done in the field of exotics, and the years to come may well see species as yet undreamt of.

## THE TALLEST TREE IN INDIA

Amongst the world's tallest trees may be numbered the blue gum, and, on the Nilgiris, some very fine specimens may be seen. A visit to the Aramby Tree Preservation Plot, planted in 1863, is very worthwhile. Here will be found, No. 48 in the plot, the tallest tree in India. The height being 78.12 metres or 226 feet 10 inches.



# THE ROMANCE OF THE NILGIRI RAINBOW TROUT

E. R. C. Davidar

The ice cold, gin clear hallas, puzhas and aarus of the Nilgiri plateau reminded the British expatriate of the brooks, burns, becks and rivers back home. The absence of "native" fish, with the exception of a few small minnows, instead of being a handicap, was found to be an advatage which set him thinking in terms of one of his favourite fish and his favourite sport. The thought was soon translated into action and the era of trout culture on the hills began.

In 1863 Dr. Francis Day, an authority on Indian Fresh Water fishes, initiated experiments with Brown trout ova Imported from England; McIvor, the Superintendent of the Cinchona plantations, who was also in charge of the Government Gardens, was the next to enter the field. He imported fry from Scotland in 1867 and after two years, transferred the survivors to ponds in the Government House Gardens from where they were distributed to the Ootacamund Lake, the Kundah River, and other waters. The fish failed to breed. And a host of enthusiastic amateurs continued to experiment with equal lack of success.

The venue of these experiments changed from the slopes of Dodabetta and Snowdown, in Ootacamund, to Pykara. But again the results were unsatisfactory. By 1906, after over 30 years of untiring effort—trout culture still remained in the experimental stage. Naturally the enthusiasts were disheartened and in the same year, the Nilgiri Game Association, which had supplied the bulk of these pioneers, approached the Government of Madras through the Governor, Sir Arthur Lawley to engage a full time pisiculturist to carry on from where they had left off.

The Government accepted the suggestion and the Governor himself wrote to the Government of Ceylon and obtained the services of H. C. Wilson who was appointed Fish Conservator. The professional, who turned out to be a dedicated and gifted expert, replaced the amateur.

Wilson went into the problem with systematic thoroughness, and it did not take him long to find out where the amateur had gone wrong. He decided to move the centre of operations to a place with a more equable climate and with better and fresher running water supply.

He found in Avalanche 23 Km. West of Ootacamund the ideal location he was looking for and built, what was then, an up to date

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

hatchery and it was here that he discovered that the Brown trout, which was the main stay of earlier experiments would never successfully breed in the Nilgiris since the hen fish spawned, and the cock fish came into milt, at different times. He, therefore, devoted all further attention to the culure of the Rainbow trout. It was considered advisable to breed from acclimatised fish and he went to Ceylon and brought back 100 yearlings of which only 27 survived. He then obtained fertile ova of acclimatised rainbow trout from New Zealand; it is from this stock that most of the Nilgiri Rainbows are descended. That which others failed to achieve in 30 odd years, he accomplished in 4 short years.

Incredibly, a highly prized game fish of the temperate region had been successfully transplanted in the tropics. The Rainbow trout and trout fishing had come to stay.

By 1911 the waters had been sufficiently stocked to permit angling, and several streams were thrown open for fishing for the first time on 5th September 1911. In order to celebrate the occasion, Sir Arthur Lawley entertained a large party at the bungalow, (Hodgson's Hut) by the Krurmund River and it was but appropriate that he should land the first trout.

The Nilgiri trout is a beautiful fish iridescent with the colours of the rainbow, hence the name. Descended from many strains, including the steelhead, it has its own distinct identity. As a sporting fish it exhibits splendid fighting qualities which are best appreciated on a light fly rod. As a table fish it has few equals.

The Government handed over the fishery to the Nilgiri Game Association in 1926 for management. Various members of the Association began taking a keen personal interest in the management of the hatchery and conservation, and as a result, this fish, became plentiful. The main problem then was overstocked streams and underfed fish, the waters being acidic, there was very little hatch of natural fly, so essential to the well being of growing fish.

Clan Fraser was appointed to superintend the management of the fishery. His services were lent to the Palani Hills and High Range Game Associations to render expert advice on the management of their trout fisheries. Ova and fry were imported from time to time to improve the stock by the induction of fresh blood. Besides the fish raised at the

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

hatchery, fish from over stocked waters were caught and transferred to under stocked waters. Various developmental works such as erection of check dams, etc and feeding programmes were put through regularly.

With the formation of the hydel lakes under the Kundah Hydro Electric Scheme, conditions changed so radically that an angler who was familiar with the country in the early fifties could not possibly locate his favourite fishing spots in the early sixties; having been submerged, they were simply not there. Very shortly after each of Fish which seldom exceeded 500 gms. in weight, had fattened to 2 kgs. and more in a short space of time, due to the large variety of insect food released.

The enlarged water spread needed a bigger organisation with larger resources than the Game Association could command, to efficiently manage the trout fishery, and accordingly, the Government Fisheries Department took over the hatchery in 1958, and control of fishing in 1965.

Plans are afoot to once again associate the Association with the trout fishery by leasing certain waters such as the Mukerti, Portimund and Western catchment dams complex, on a logn term basis. The Association will lay emphasis on wild (naturally bred) trout and the plans provide for conditions which will encourage breeding in the wild state. It also hopes to popularise fly fishing by reserving certain waters exclusively for the fly fisherman.

It is to be hoped that this second experiment in associating anglers with the conservation and management succeeds, and will bring back to the Nilgiris the golden age of trout fishing.

**Trout Fishing :**

Apart from the fact that trout fishing is a relatively rare sport in a trophical country, there are other considerations such as the location of the fishing spots and climate which makes angling in the Nilgiris such a pleasant pastime.

The Nilgiri lakes and streams are placed in beautiful settings, against a backdrop of forests and mountains, and an angler may cover miles of magnificent country in the course of a day's outing. and there is always the exciting possibility of seeing 'game' which adds to the charm of the sport.

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

Trout were fished, except in the coarse waters, exclusively with the fly but when the hydal reservoirs came into being, spinning became the order of the day. Now, practically every stream within easy reach of Ooty, has become a lake and except for small feeders at the top of some reservoirs and out of the way streams, there is little true fly water left. However, lake margins and shallows can offer good sport to the persevering anguler.

The trout lakes are located within a radius of 35 Km around Ooty and may be reached by good roads. However, for the angler who wishes to camp out and fish less frequented waters there is still scope, but the fish in these streams generally average less than 250 gms.

Trout breed in the winter months and the spawning ground and their approaches are closed to fishing during this period. In summer when the water level is low, spinning is restricted and only fly fishing is permitted even in the hydal lakes.

After the first flush of the South West Monsoon, and in the following months of August and September, the fish will improve in condition due to the food washed down from the surrounding hills, and the increased oxygen induced by the freshets and falls of the feeder streams. This, then, may be considered one of the best times for sport. Since the trout waters are usually clear and days are bright, dull coloured spinners are more effective. However, it is useful to have a few bright ones for use when the sky turns murky. Sizes 1 and 2 Mepps are the most successful lures. Any form of live bait is prohibited. Morning and evenings are the best times, but if there is a breeze and ripples on the water, any time is suitable.

Of suitable flies much may be written. If fish are taking, since there is very little natural hatch, almost anything may be presented. A good choice would probably be — Black Palmer, Wickhams Fancy, Greenwells Glory, March Brown, Coch-y-Bondhu, Butcher and Alexandra.

Licences to fish are issued by the Inspector of Fisheries, Fishdale, Ootacamund. Day licences are also sold at other centres, such as the Tourist Office and Clubs in Ooty and Wellington. Guides may be engaged to assist the angler, in locating the most suitable spots.

The size and bag limits are set out in the licences.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

**The Trout Hatchery :**

Except for a few modifications, Wilson's hatchery at Avalanche is still there as he built it ! A modern hatchery to meet the needs of the enlarged water spread is imperative. The fisheries department's experiments with other species of fish like the lake trout, Japanese Albino trout, Tiger trout and land locked Salmon have failed so far, proving once more that the Rainbow trout is probably the best invesment.

**Mixed Fishing :**

An account of the fishing available in the Nilgiris will not be complete without reference to the other types of fish in the district. The only other sporting fish on the plateau is the Carnatic carp, a cousin of the Mahseer, which was introduced into the Pykara from Moyar. Though plentiful, they are shy and are seldom caught. When they do take a bait they prefer fly or flyspoon to any other kind of lure. One of the main attractions of mixed fishing is the likelihood of landing a large old Cannibal trout. Any bait, live or dead may be used in mixed fishing waters.

It is strongly felt that consideration be given to the introduction of some of the American sporting fish, in particular the Bass species.

**Coarse fishing :** (a) The Plateau :

The Ooty lake and Sandynalla Reservoir (Kamraj Sagar) are stocked with mirror and other exotic carp varieties. Unfortunately these fish are not attracted to the " sporting " lures, spoons, spinners and flies. Any kind of bait is allowed in these waters but worm is the best.

(b) The Low Country :

The Bhavani River, a tributary of the Cauvery, and the Moyar, a tributary of the Bhavani, skirt the Nilgiris on the South, East and North respectively. These fast and rocky mountain rivers, besides holding the usual assortment of Indian fresh water varieties offer a limited quantity of the mighty Mahseer, the King of Indian sporting fish.

Mahseer weighing from 60 lbs. to 80 lbs. have been taken from the Bhavani and Moyar rivers respectively. Heavy tackle is necessary to a circumvent the mighty Mahseer; spoons, spinners and plugs being

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

the usual type of lure. For the Nilgiri Mahseer, i.e. those of the Moyar and Bhavani rivers the angler should be prepared to trek over difficult country, rough it out, face wild elephants and put in much hard work to get his fish.

The regulation of the flow of water in these rivers, for the generation of electricity adds to the vagaries of Maheseer fishing. Reasonably clear water, and plenty of it, is essential for success, winter being the best season for this sport. In summer when the rivers are low explosives are frequently used by the local people and the pools are fast silting up, and on account of this the Mahseer fishing has deteriorated considerably in recent years.

Bhavanisagar, at the junction of Moyar and Bhavani rivers, 35 Km. East of Mettupalayam offers excellent fishing. Murrel, Wallago attu, Cat fish, Butchwa and Carp may be taken by spinning.

## IN THE WORLD OF SHIKAR, SPORTSMANSHIP IS

Strict observation of the Game Rules in force.

Strict observation of the close seasons.

Shooting with care, for a clean kill.

Following up and finishing off wounded game.

Healthy physical exertion and the facing of danger to obtain a worthy quarry.

Learning jungle lore, the habits and behaviour of game.

Sustained efforts to prevent poaching.

Not to be selfish.

## IN THE WORLD OF SHIKAR IT IS UNSPORTING TO

Shoot from vehicles of any type.

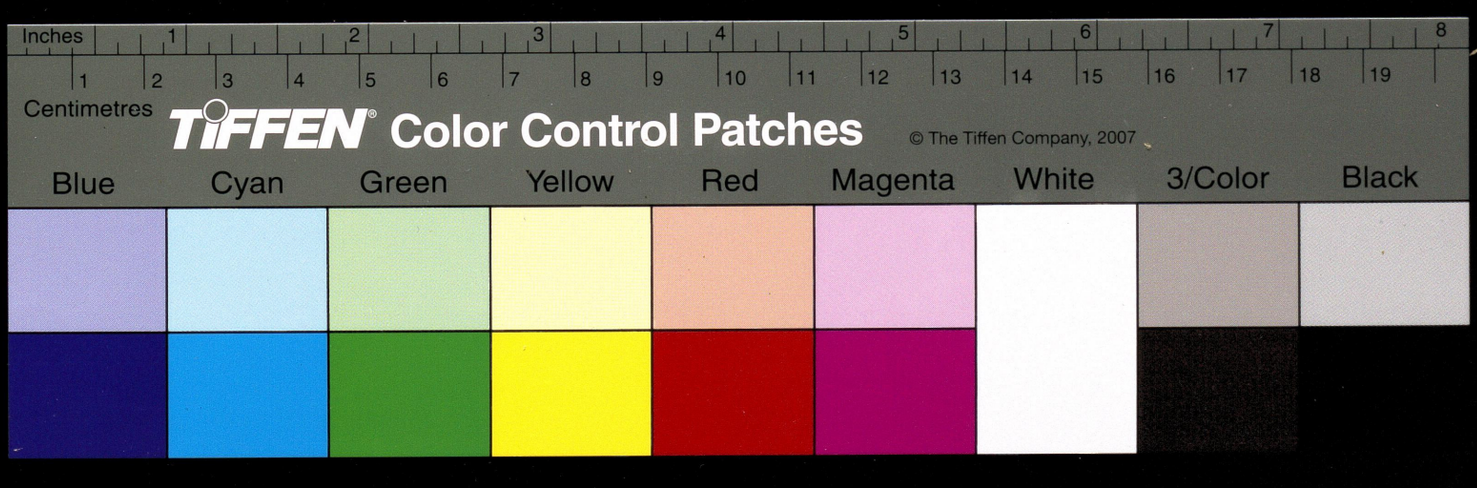
Shoot in the hours of darkness by blinding game with lights.

Shoot over water holes or salt licks.

Kill for the sake of killing without regard to bag limits and trophy size.

Take 'chance' shots in hope.

Let professional guides or shikaries shoot for you.



# HUNTING WILDLIFE WITH THE CAMERA

B. N. S. DEO, FRCS

"The aim of nature photography is to make the photographer a better naturalist and the naturalist a better photographer."

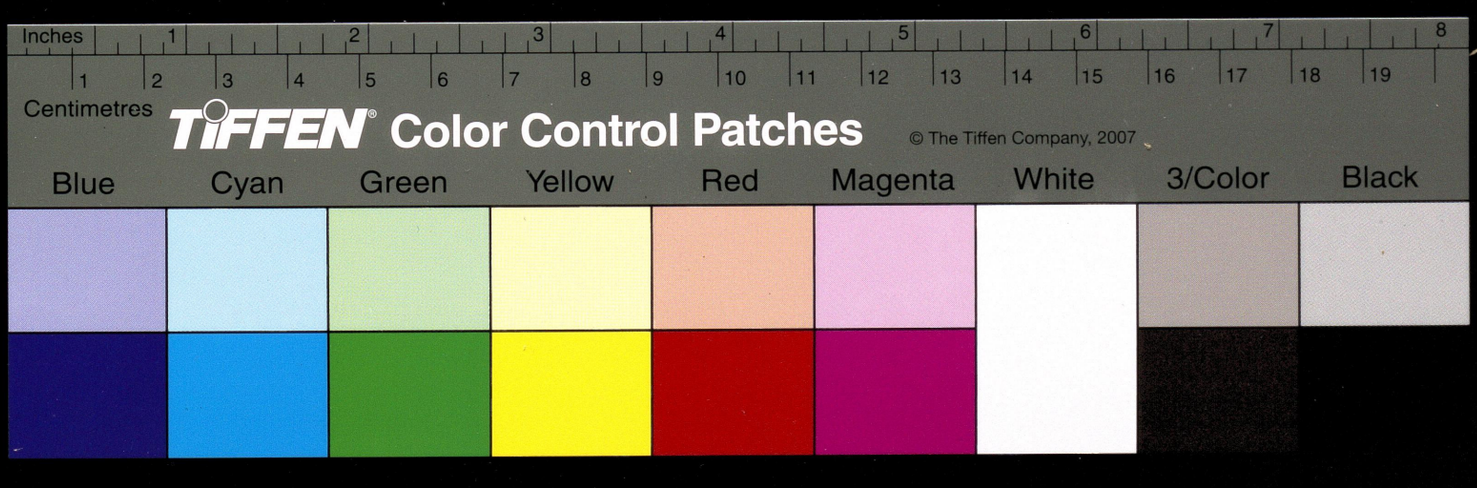
The prime requirement of a Wildlife Photographer is a genuine love of the wilds and wildlife and a desire to learn about them.

Everything today is highly specialised and wildlife photography is no exception. This note, however, is basically meant for the prospective general practitioner of this art with special reference to the Nilgiris.

There is an erroneous belief that wildlife photography requires expensive cameras and sophisticated accessories. While such equipment may be necessary if one is aiming at highest possible quality and for work in specialised fields some very good work can be done with an inexpensive 35 mm single lens reflex camera fitted with a medium telephoto lens of, say, 200 mm focal length. They are fast and easy to handle and no matter what lens or attachment one uses the viewfinder shows exactly what one is going to get on the film. This would meet the needs of 80% of wildlife photographers for 80% of their work which is saying a great deal. One more camera or camera body of the same make (as switching lens and accessories is possible without extra cost) would be useful for simultaneous work in colour and black and white. A good zoom lens would help to avoid carrying too many lenses. 400 mm and longer telephoto lenses have limited use. They are bulky, long, lack manoeuvrability and have an extremely shallow depth of field, small apertures and objectionable foreshortening. For Nilgiri tahr which live on open grass hills and among cliffs where close approach may be difficult a long telephoto lens may be an advantage. A medium tele and close approach is the best possible alternative for the larger forms of wild life in the Nilgiris. A word of caution — "Not close enough" with Cheetal and Sambur can be "dangerously close" to a lone tusker!

As for films my personal preference is for medium speed films of 125 to 200 ASA for B & W and 50 to 64 ASA for colour. These I feel give greater sharpness and definition with less grain. The fast films — 400 ASA for B & W and 160 ASA for colour — should be used only when necessary.

The fastest shutter speeds possible under the existing lighting conditions should always be used. As a rule of thumb the shutter speed



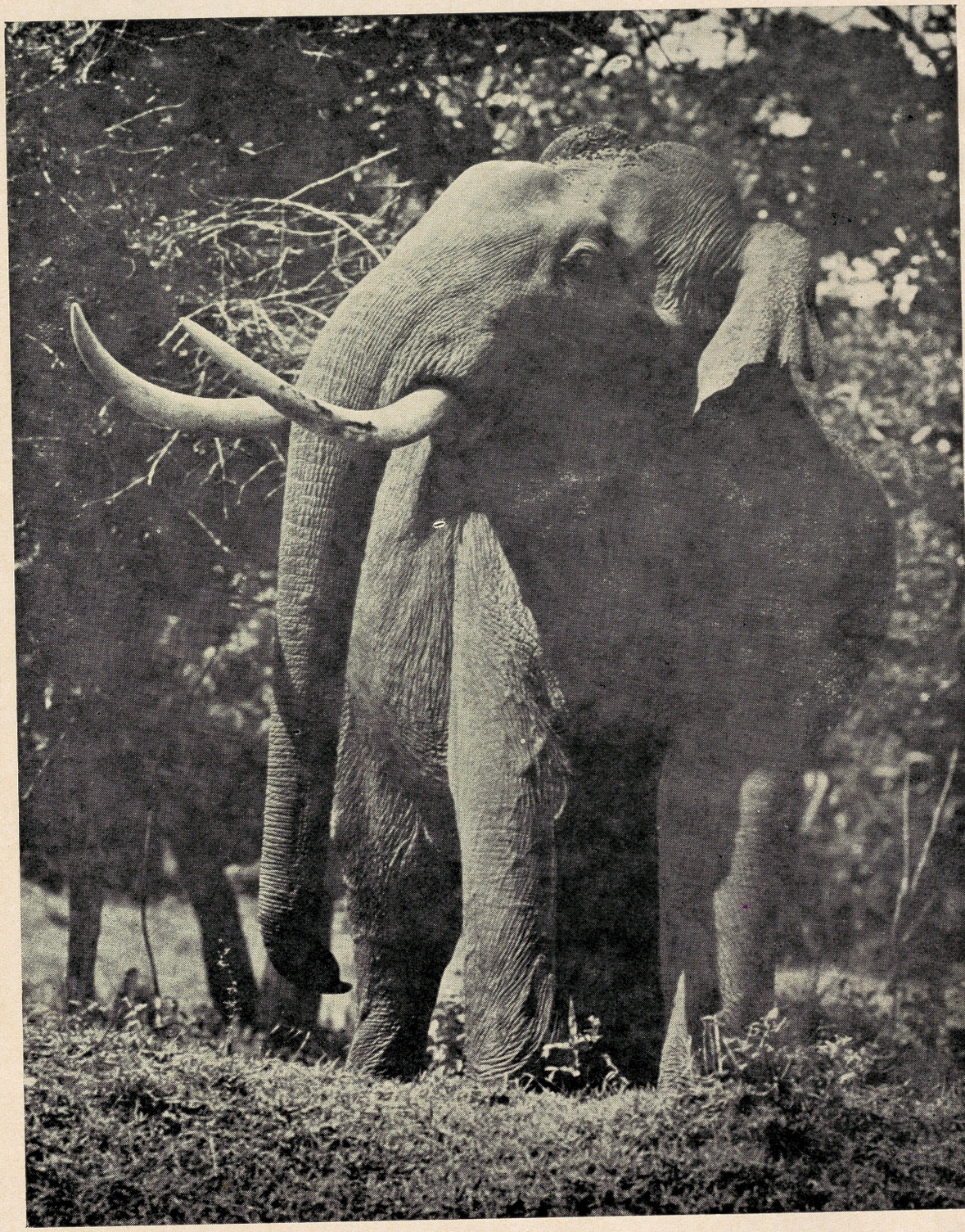




Leopard sequence — Mudumalai

Photos: B. N. S. Deo FRPS

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black



Angry Tusker

Photo: B. N. S. Deo FRPS

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

should atleast be equal to the focal length of the lens in millimeteres e.g. 150 mm lens — 1/150 of a second, 250 mm lens — 1/250 of a second and so on. This will help avoid camera shake. Movement of the subject however is another thing and a faster shutter speed is necessary specially with telephotos. Movement of the vehicle on which the photographer is seated — like vans, jeeps and elephants—pose an added problem. As the maximum apertures on tele lenses is not very great and at close quarters a certain depth of focus is required this is easier said than done !

As regards exposure — it would be better to be a little on the generous side inside the jungle. Uprating a film and trying to compensate it by overdevelopment leads to two things — both undesirable: more contrast and more grain !

What constitutes a good wild life photograph ? Tastes and individual preference may differ but only in degrees but not in basic requirements. A good wildlife photograph should be sharp and have good definition showing feather or fur texture. It should show the subject in its natural habitat, preferably doing something characteristic of its species. This adds to the natural history content of the photograph. The print should have technical excellence and should have good tonal range from the lightest to the darkest areas. The colours, as found in the subject, should be accurately translated into their equivalents in the varying shades of grey in the print. The print format should be well composed so that there is an aesthetic and pleasing arrangement. In the case of a subject very difficult to photograph, or one that shows beautiful action drama, the above standards can be relaxed to some extent but not totally.

G.U.N.

Photographing the rich and varied fauna of the Nilgiris is a thrilling and challenging adventure. A good wildlife photograph is a trophy worthy of a sportsman and gives one the additional satisfaction that the quarry still roams the forests — wild and free — none the worse for its encounter with the hunter with a camera.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

# THE MUDUMALAI SANCTUARY

**P. PADMANABAN, I.F.S.,**

**Wildlife Warden, Mudumalai.**

As the Wildlife Warden, I am often confronted with the question, from friends, "What is the attraction in Mudumalai Sanctuary". Although I try to tell them what a Sanctuary is, its objects and about the animals, I, myself, am not satisfied with my own answers, because I cannot justify or explain it all in a few minutes' friendly chat. Thus, my friends are not greatly enlightened. But still, they have not openly confessed that they cannot fully understand what it is really all about.

It is not possible to explain here the many purposes and functions of a sanctuary, but as a general guide, the following may be accepted.

It is a refuge for all wild life, from the Elephant to, in theory, the mosquito, and many smaller organisms; it is a place for the study of animals, and research work in animal behaviour; it is a place for the preservation of the flora-rich and varied—a paradise for the Botanist. It is a place where a peaceful elephant ride may be enjoyed, the pleasure of which, is, to observe the many forms of wild life in their natural surroundings.

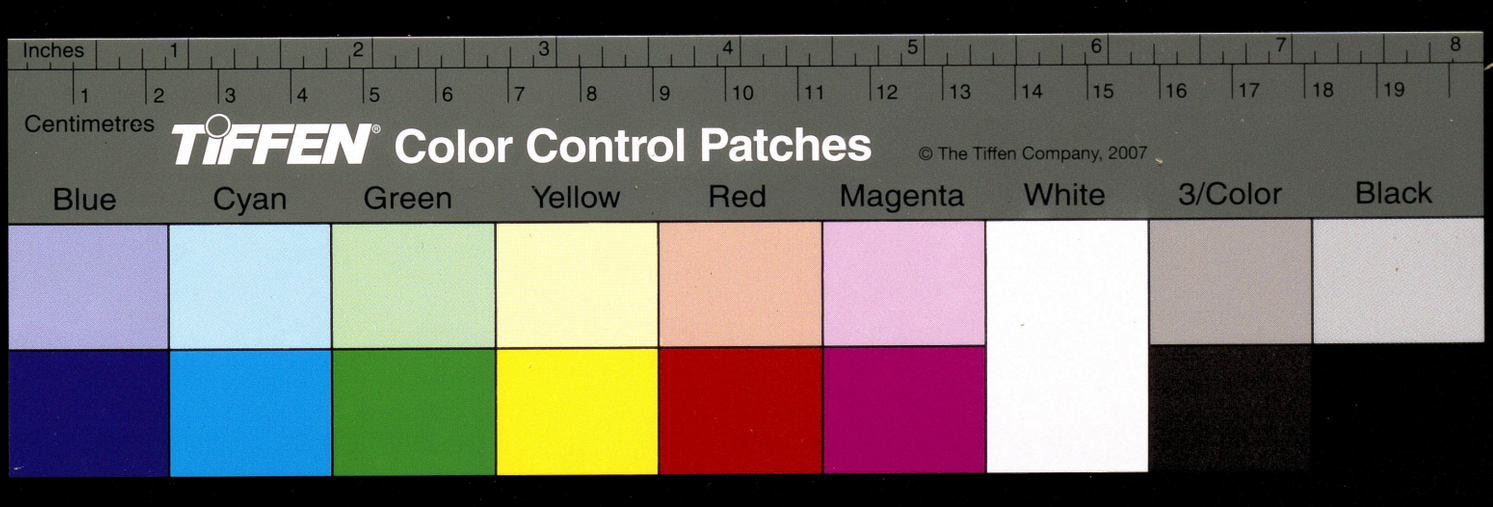
It is a place for a couple to enjoy a few days — far from the maddening crowd; it is a place for honeymooners; it may be a place for eloping lovers; it may be a place for a criminal to hide, for some time.

A sanctuary is there to be enjoyed, by each and everyone, in his or her own way.

So, I thought the best way to explain what a sanctuary has to offer—in this case our own Mudumalai, would be by giving you a few random excerpts from the many recorded in our visitor's book.

Tony and Yvonne from England write on 11-4-70 :

A beautiful, misty grey morning ! As we move off into the jungle on our first Elephant ride — a really successful one too; we saw two black sloth bears — the male as he stands on his hind legs — to weigh up the situation (perhaps) — must stand six feet plus high ! Also saw



Malabar squirrel, spotted deer, jungle drongos, langurs and golden backed woodpeckers — Many thanks to all concerned for a morning we shall remember — that plodding ponderous sure footed ride through the jungle".

A more serious Gentleman from Ceylon (perhaps a Zoologist) writes on 20.4.70 :

"Encountered a herd of elephants. Approximately 10 animals including a large tusker, a smaller one, several females, an infant— approximately 1 or 2 months old and another of 10-12 months. Also came across a leopard kill. A large middle aged male presbytes entellus. The kill had been dragged for at least ½ mile and was cached on the inside of a bamboo stand. We found the animal at 8.30 AM Rigor Mortis had not yet set in. Blood had not got completely coagulated, but the body was cold. Drag marks were evident on the posterior part of the langur. The fur on one side of the left hind leg was completely eroded, although the skin was intact. The neck was not broken, nor were there tooth penetrations into the skull. Deep punctures were found beneath the angle of the left chin — Cause of death was strangulation combined with loss of blood.

The trees are just beginning to bud — Fresh grass hillocks predominate — elephants are foraging — many thanks to Mr. Selvaraj and guide and the mahouts for their fine service"

Mr. Manohar Malgonkar (well known Historian and writer) records his impressions as follows :

"13-8-70 : Evening jaunt, saw a tusker, quite forbidding and who spoilt other game for us. And then a herd of Chital. Two particularly good bulls, (Bison) black with age. But more than what one sees is the jungle itself, the working elephants are a rare treat. This is without doubt a most successful experiment in preservation and those who are responsible for it deserve the highest praise. All success and hope that other sanctuaries learn from Mudumalai".

Mr. R. Selvaraj, Deputy Mayor of Madras has recorded 21-12-70 :

"In spite of the varied attraction of the man made scientific world, the charms of natural beauties still happen to be the main source of recreation and recuperation. The Mudumalai animal (wildlife) sanctuary is one of the places in our country which retains the charm of nature.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

It was a wonderful experience to have an elephant ride. The sanctuary deserves all encouragement ".

An American Lady writes. 23-1-71 :

" Enjoyed our elephant ride, must admit it scared me more than an aeroplane ".

A lucky Gentleman from Goa says. 3-3-71 :

" We saw 3 panthers, 6 elephants, 1 bear, numerous deer, monkeys of course. We enjoyed ourselves tremendously ".

An Australian writes. 16-11-71 :

" Two elephant rides have given me a glimpse of the wonderful wildlife that can be seen here. It has been well worth coming all this way for all that I have seen ".

A Gentleman from Kenya Records. 4-10-73 :

" Coming from the land of the big game, my wife and I thoroughly enjoyed the elephant ride, and then your majestic tiger appeared, and has made this trip one that will never be forgotten ".

A photography enthusiast had his life's ambition fulfilled. 9-4-74 :

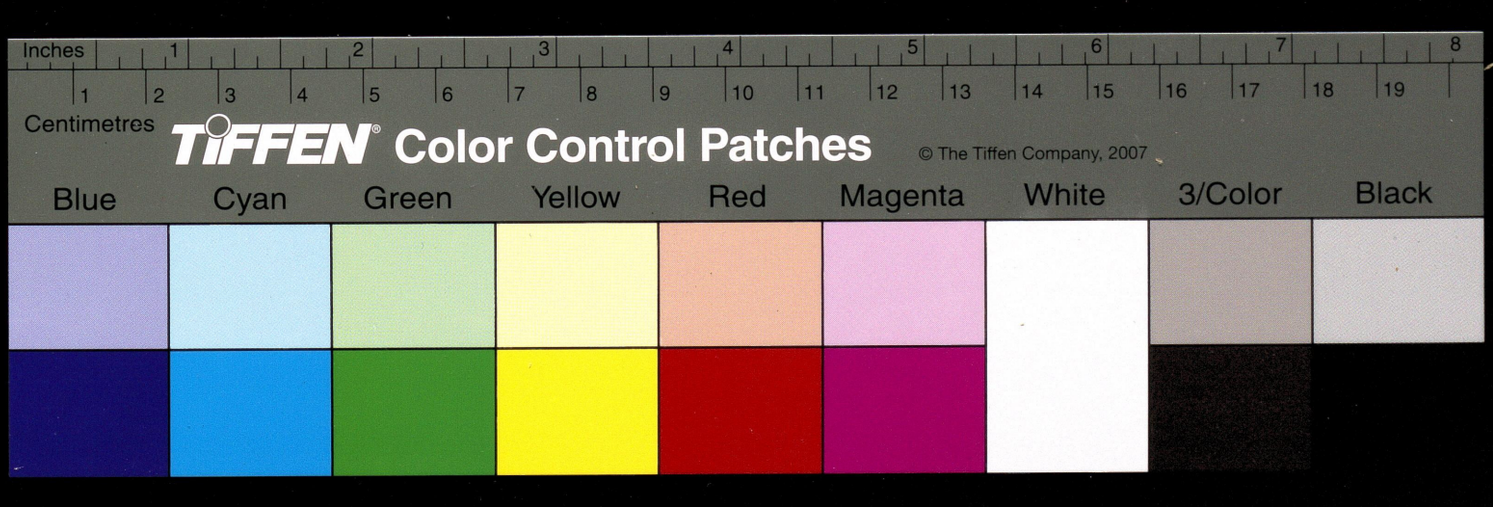
" We were fortunate enough to photograph tiger, wild elephants sambur, chital, langurs, four horned antelope and giant squirrels. It has been very pleasant to stay here and we specially enjoyed visiting the elephant camp ".

Listen to these Honeymooners ! 25-11-74 :

" A rather accidental visit to Mudumalai from Ooty on our honeymoon trip, proved something thrilling and more, gave us the chance to see wild animals — In short the trip to Mudumalai proved more enjoyable and memorable ".

A Gentleman of Philosophical mind : 16-5-75 :

" Nature in its wild form impresses more than the works of man. By leaving nature as it is man is conferring a benefit on himself.



Mudumalai is a piece of wilderness preserved, for the denizens of cities who live cooped up, artificial lives. A visit is highly educative, as well as pleasure giving ".

Here is a youngster's view. 13-10-75 :

" To go on an elephant is really funny. To be chased by a lone bull, that too, a big tusker is really thrilling. To chase a panther on elephant is really adventurous. We had all this fun. Above all this we had the most nicest, friendliest, most cordial treatment by Mr. Ponnusamy which we can never forget ".

From the above related experiences, I leave it to your own imagination as to what a sanctuary has to offer.

— WELCOME TO MUDUMALAI —

## ASIAN ELEPHANT SURVEY

The status of elephants in the context of containing inroads on their habitat and the exploitation of the animals themselves, has become a cause for international concern. The Survival Service Commission of the International Union for the Conservation of Nature and Natural Resources has therefore nominated a specialist group with members representing all countries in which the Elephant occurs, to examine the statut of the elephant in relation to its habitat and the impact of developmental activities on its environment and assess the effects of the environmental changes and habitat destruction on the future position of the elephant. The specialist group is to report to the IUCN by the end of 1978.

Co-operation and assistance of the members of the Association in this regard is requested.

J. C. DANIEL,

Co-Chairman, Asian Elephant Specialist Group,

Curator, The Bombay Natural History Society.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

## RECOLLECTIONS

**R. Radcliffe**

'The World is too much with us-late and soon-getting and spending we lay waste our powers; little we see in Nature that is ours . . . '

So Wordsworth, if he had something then, then surely what he said is more than relevant to these days ?

When the Association was formed 100 years ago, the objective was to control the shooting in the Nilgiris and certain adjacent areas; later activity was expanded to control and foster trout fishing in the Nilgiri streams, and provide accommodation in suitably placed Game Huts.

There must be many who recall in moments of solitary leisure, or when gathered with friends, many happy days spent in the grass hills of the Nilgiris or in the forests of the Low Country. Almost all will have been on some shooting or fishing activity, and some just resting and absorbing the quietness and beauty of the largely-unspoilt countryside, after long, hot days spent in City offices.

Days spent seeking the elusive Woodcock in the sholas in the cold, crisp days of Winter ; the excitement of stalking the now rare tiger on the grass hills or the watchful Nilgiri Ibex on the cliffs of the Western escarpment. All done in some of the most beautiful and pleasant country in India, so little known to those who live in Europe or the States and to whom recreation in India means the well-publicised Kashmir or who associate India only with the hot, arid plains common to India, malaria, snakes and other unpleasantness !

The enjoyment of the Nilgiris was largely only possible for those visiting the Hills or Forests, due to the organisation of the Nilgiri Game Association, now called the Nilgiri Wild Life Association, being available to help them set out, when once in the Nilgiris, from Ootacamund, Coonoor or Kotagiri towns. There were no roads then, criss-crossing the Hills, made to exploit the extensive Blue Gum plantations of the Forest Department, or to service the newly constructed dams and the employees colonies of the Electricity Board. A shooting or fishing expedition was then, often, an extended affair with plenty of time to stand and stare and gain a mental calm and absorb some of the tranquility that natural, unspoilt surroundings can give.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

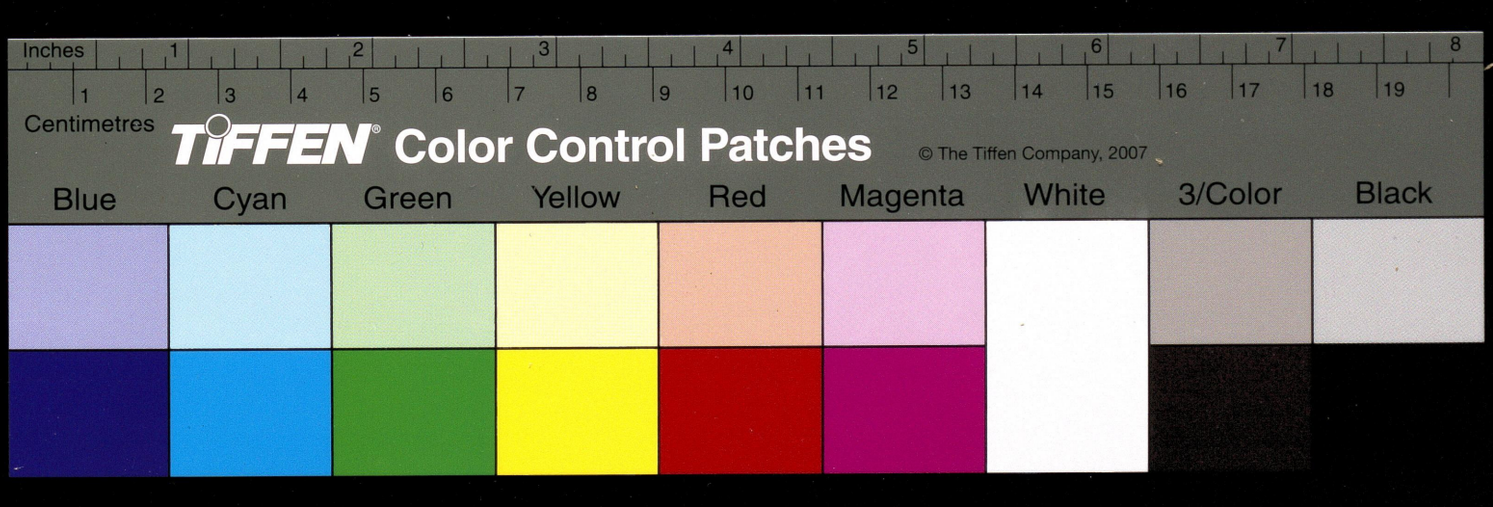
There is always present the challenge and thrill of the chase in any hunting affair. Man has always been ready to pit his wits and ability against a difficulty be it a high and dangerous mountain peak ; a perilous voyage across an open sea ; an antagonistic and predatory neighbour or a dangerous animal or wily fish. There is something satisfying in overcoming a hard task and if, as is the case with the sport of hunting or shikar, it takes you into wild, natural surroundings, then there is added pleasure.

I can recall many a happy day spent in pursuit of game and while any ultimate success which may have rewarded my attempt may have added pleasure to the time spent, it was not an essential part that the quarry should be bagged. My main attention in big game hunting was confined to the chase of Tiger ; Panther and Wild Boar and I have no twinges of conscience for what I have done and no shame in declaring this. All hunting was done on my own two feet with dogs and four or five helpers, in daylight and done the hard way. I scorned the machaan and the tied-up bait. I felt that with bait one might just as well shoot the cow or buffalo as the tiger or panther and that too, when perched up well out of harm's way in a tree.

It is fashionable now to decry the activity of hunting wildlife, fashionable to allocate human feelings and sensibilities to wild animals and being fashionable, most follow blindly without further thought, no attempt being made to understand the subject.

The hunting of wildlife was, no doubt, done primirily for the object of obtaining food and the quarry was killed in whatever way it could be managed, but there was also the need, and this was by no means inconsiderable, for protection of life, crops and property. In India these objects still hold good in very large areas and in the needs of a greater part of the population. It would be better, if in the formulation of Policy and promulgation of wildlife Laws, and their implementation, that this was better understood and appreciated.

Not so long ago the Tiger and the Panther were classed as Vermin. Rewards as I have seen myself, were given by the Collector of a District for their destruction. Have these animals achieved a transformation by a wave of Prospero's wand because they have become rare, or because Europe and the World Wildlife Fund want it this way ? The animals are still predatory, dangerous, and out of place near villages and human habitation. That they and other animals and birds that come in conflict



with man's activities should be preserved in places specially designed for them has my whole-hearted support. The fauna of this Earth and the preservation of natural forests and beauty in landscapes, at a time of greatly expanding human population in the World, must be one of our main concerns and care. There is so much thoughtless and also, deliberate destruction of our habitat at that it is of the greatest importance that such conservation is held always in mind, but conservation carried out in a practical and rewarding way.

When first I started on a planting career some 44 years ago, I was thrown on my own devices and resources for amusement. Car transport was not available, I had not yet bought a horse, neighbours were far off, so what more natural than for a young man to go out with the local shikar party from the estate and near-by villages.

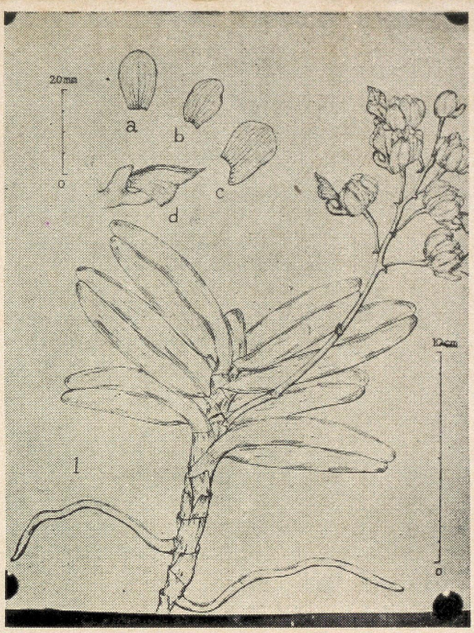
I can still recall my first foray in search of wild boar, after three months of being confined to the estate in the long, dull, wet days of the S. W. monsoon. A remembrance brought back, not by the recollection of a boar slain, but by the smell of crushed lantana leaves ! The effect of the smell is so strong that I always associate it with a day out, be it 40 years or more ago, in the wild, open country and the enjoyment by a mind, free and relaxed of simple, natural excitement.

Smell can be just as vivid and evocative as sight or even more so. The scent rising from the ground after the first rains at the end of a long, dry hot weather. Scent strong in the grass and jungle when wild elephants are not for ahead and then suddenly seen. Scent of tiger or panther in close undergrowth when tracks are being followed : the musty, unique smell of sholas in the Nilgiris. These all bring back memories, not of the shooting or death of an animal or a bird but of care-free days with a tranquil mind spent in the wilder places of this Earth—days that would not have been so spent if it had not been for the excitement and lure of the hunt.

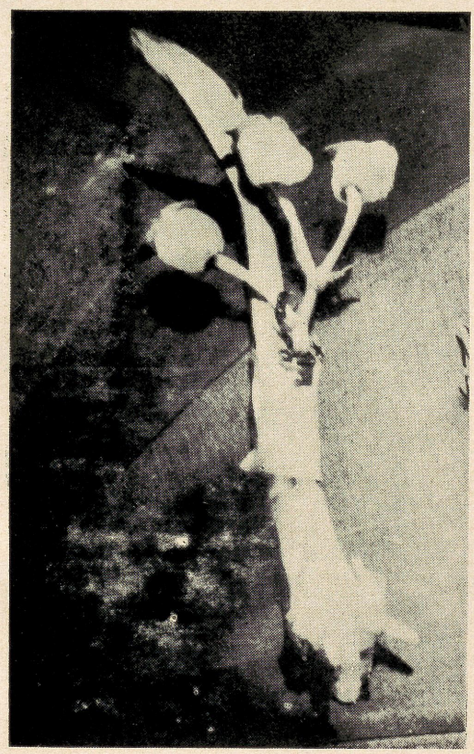
Sounds, too can summon up past experiences. The rush of a river over rapids brings back memories of days spent by the side of turbulent rivers in the foot-hills, seeking the impetuous mahseer : the song, if it may be called that, of the Cicada at dusk in the forest recalls long treks made in the dark, without torch or lantern to light the way, to return from visits made to ponds set deep in jungle areas to catch the fiighting whistling teal in the monsoon months : the stirrings and awakenings of birds and animals, at first light, when sitting perched on a cold,

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black






*Aerides crispum*
*A robust epiphyte with pinkish white sweet scented large flowers.*
*Plantanthera susannae A tall elegant orchid with ivory white flowers.*



*Acanthephippium bicolor*
*A rare robust ground orchid with globose white flowers.*

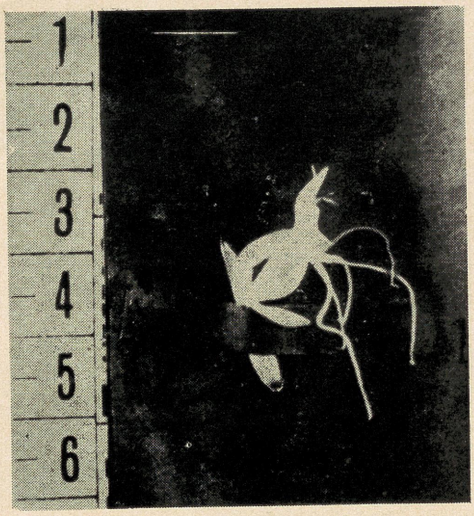
*Oberonia verticillata*



*A common epiphyte with penaulous infiorescence of small yellowish brown flowers*

Illustrations : Dr. J. Joseph.

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black



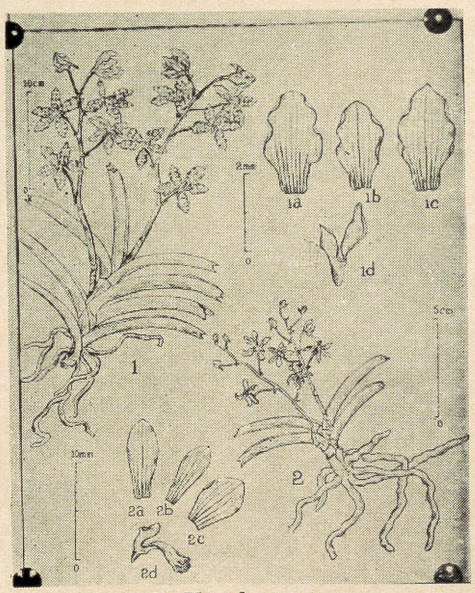
*Habenaria multicaudata*
*A single flower of habenaria multicaudata*



*Epipogium roseum*

*An ephemeral leafless ground orchid with creamy white flowers. (Photo with umberlla as the background)*

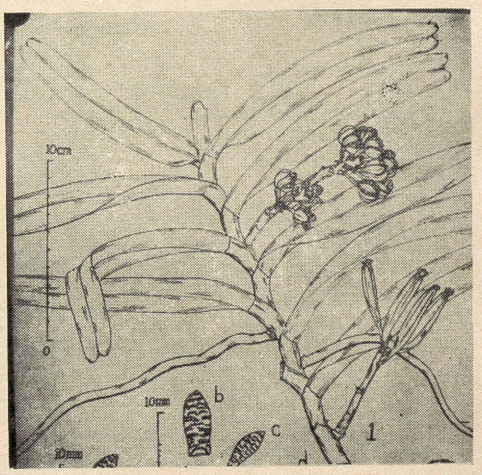
*1. Vanda tessellata*




*2. Vanda testaceae*

*Another low altitude epiphyte with small yellow flowers.*
*Acampe praemorsa*

*Vanda tessellata*
*Common low altitude epiphyte with large sweet scented flowers, yellowish green tinged with blue.*

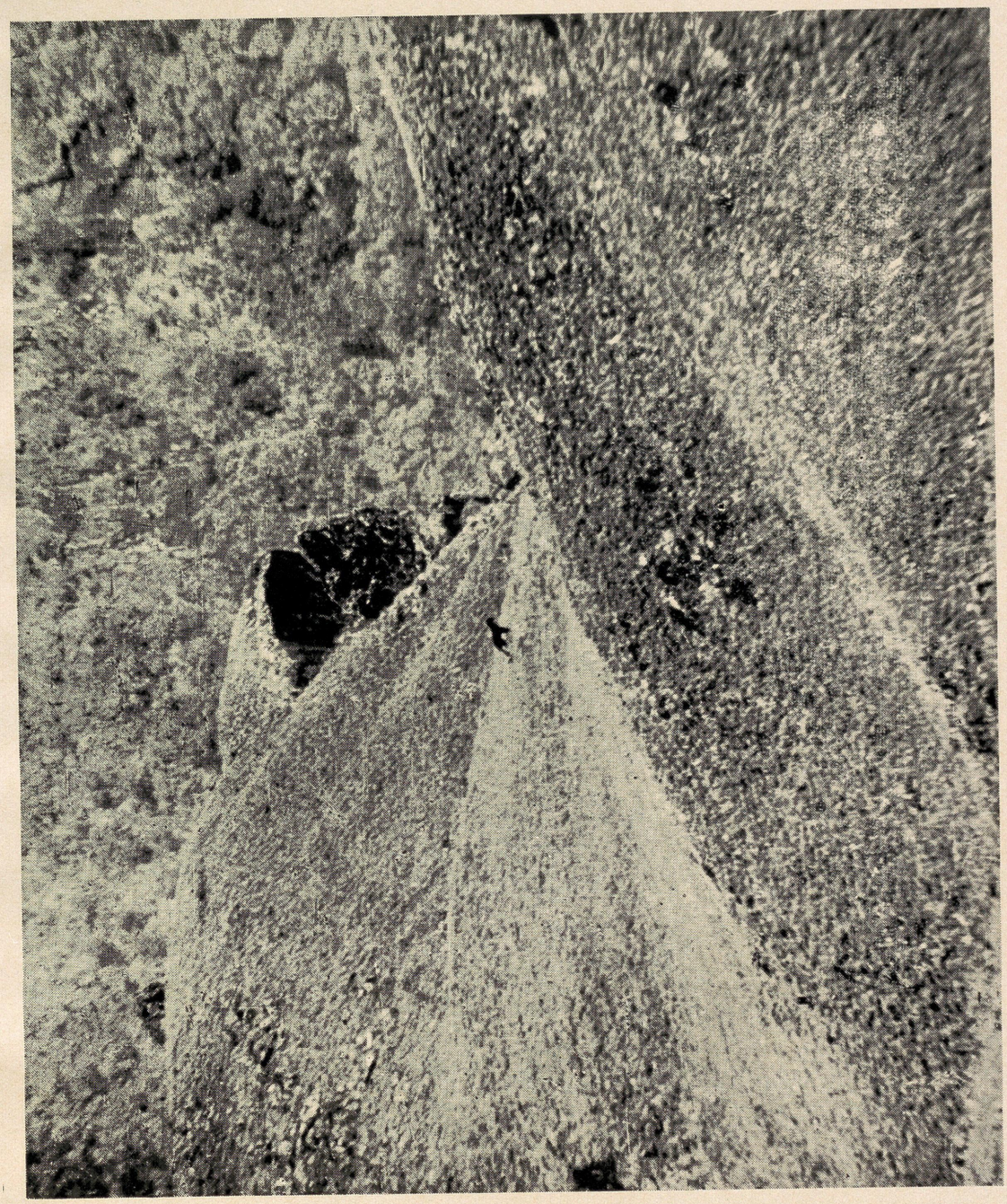



*Acampe praemorsa*

*A robust epiphyte with mildly scented yellow flowers in flobose cluster*

Illustrations : Dr. J. Joseph.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black



Black panther in tahr country

Photo: E. R. C. Davidar

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black





Nilgiri tahr (Ibex) studies in silhoutte—1975 census
Photo : E. R. C. Davidar

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

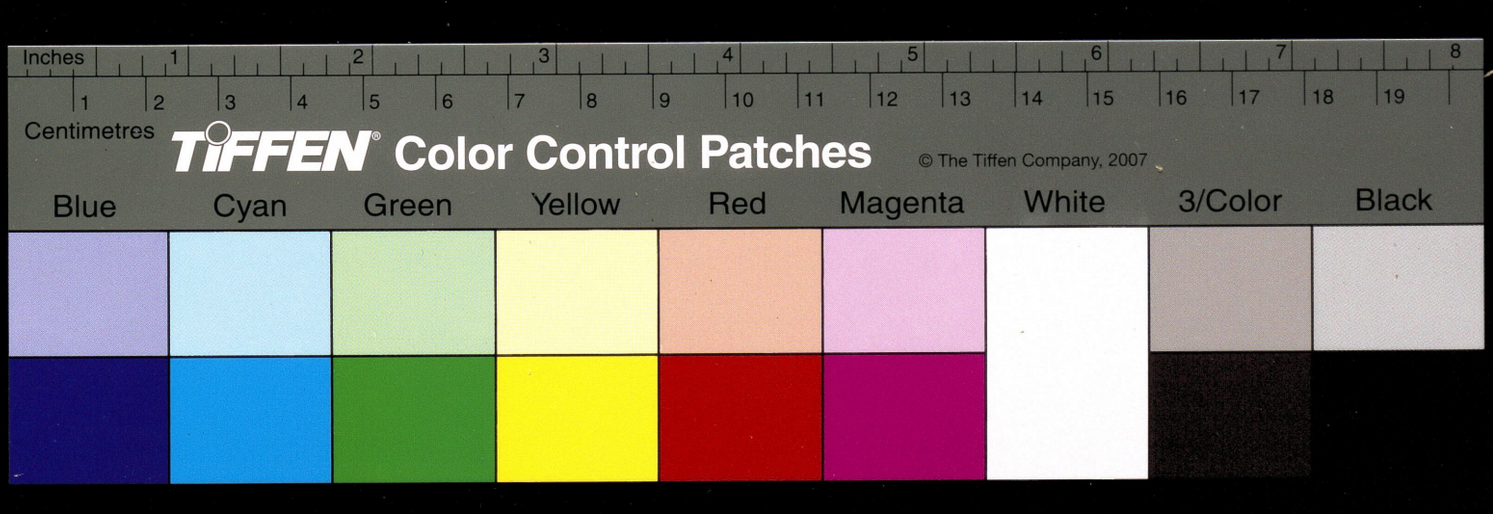
uncomfortable rock before dawn waiting to catch a predatory boar returning from the fields of village grain; the low, peculiar moaning sometimes made by a hunting tiger moving mysteriously through thick cover. All recall times spent away from houses, crowds, roads and noisy traffic.

The cry of cart-men driving their bulls at night along a country road to speed them up or demand the right way when passing others, brings back still, after 40 years, the memory of an all-night journey in a very hard cart to return to the estate for roll-call at 7.15 a.m. after having abandoned my old Ford car in a small town workshop. This in its turn had been dragged off the open grassland by bulls with a smash in sump—the result of returning too late with too little light left in the sky from a hunting trip!

Would such memories be possible without the initial bait of a hunting trip? Possible yes—but very improbable!

There must be many who can remember the comradeship shared in the shooting of duck on India'a many jheels; the wonderful evenings sitting in the dusk after the shooting was over, talking over the day and enjoying the evening peg and planning the next day out. The strenuous times shares with a companion where half or more of the enjoyment is found in being out and about at times and places unusual to the dweller in cities; the contact with the villager with his different philosophy and view of life. Listening to his 'tall' stories, so tall that Baron Munchausen could use them! Tales told in complete innocence and belief; tales which are hear-say, handed down in village gossip which he swears are true!

I recall an old Mohamedan who lives by catching fish on a hand-line on the banks of the Cauvery, telling me in all seriousness, when I was questioning him to the whereabouts of mahseer, of the monsters which lived in a certain stretch of the river and how one was caught years back by an angler from Bangalore, which, when landed, was found to have 50 spoons hanging from its jaws! left there by those anglers who had been broken by 'the one that got away'! But one day I **did** catch a large mahseer—40 lbs.— with a spoon hanging from its jaws—my own. Should anyone doubt this I have a picture of it. The fish took me, and for about twenty minutes I played it when, as so often happened with a mahseer, the braided teryline line broke and like the Scots Laird on the banks of a Loch—I was left lamenting. However, I

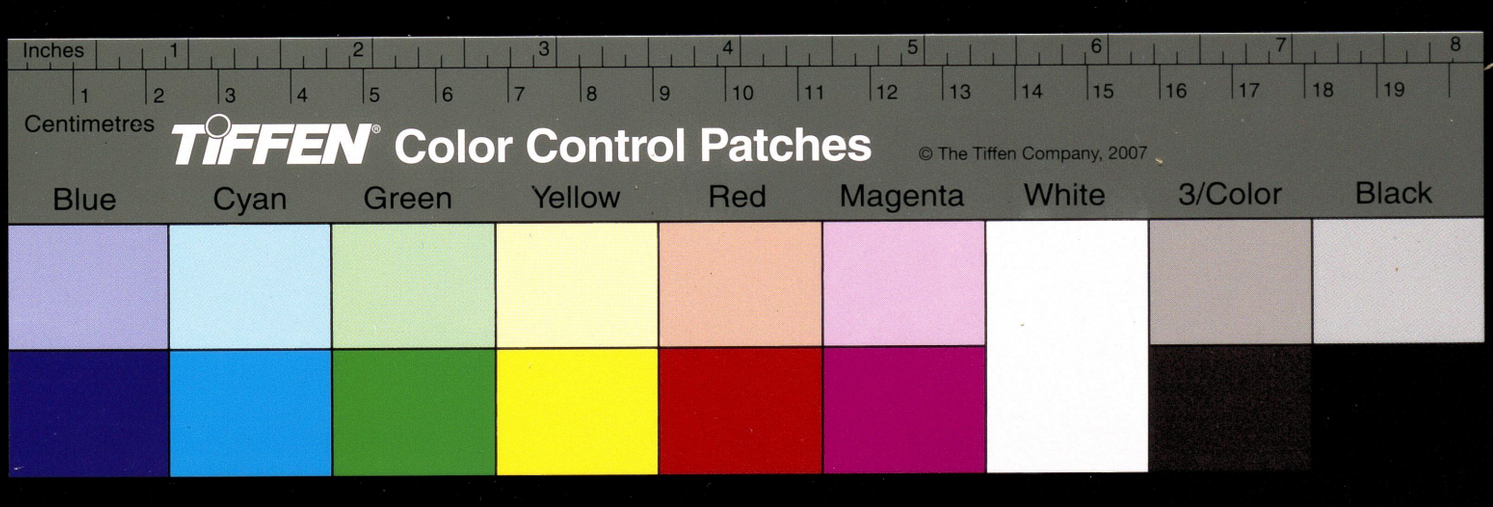


started up again with fresh tackle and was soon into a fish which I beached and on going to take the hook from its mouth, there, much to my astonishment, was my spoon of thirty minutes back with ten yards of line still attached ! Surely a greedy and insensitive fish !

Then there was the day when a fishing friend, co-operating with me and my driver helped land a 20 lb. mahseer.

The fish was hooked by me above some wild water rushing with a great deal of noise down some rapids and it made off down the river where about 100 yards down I stopped it. I was unable to follow as the banks had huge rocks which I could not pass near the river. Every now and then the fish would appear above the fast water with its huge mouth wide open swaying about in the river and then recovering to disappear to some cover. My angler friend, with the aid of much shouting above the roar of the waters was induced to cast his spoon over my line and draw the fish, now exhausted to the bank where, with much cunning and guile it finally came. Now was the turn of my driver to use the gaff but alas ! He was inexperienced in the specialised use of a gaff on a mahseer. Two attempts were made and two abysmal failures, the gaff coming back with one of the very hard large scales of a mahseer's flank. The noise of the rushing torrent, the excitement and confusion prevented river-side instructions in how a gaff should be used, but finally the hapless fish was gaffed and brought to land. An hour later it was being cooked to make a curry lunch for all of us by the side of the Cauvery.

Of such memories is Shikar made — not the mere killing of the quarry. Long may they continue to be made.



# ORCHIDS; AND ORCHIDS OF NILGIRIS

**Dr. J. Joseph,**

**Botanical Survey of India.**

Orchids are a highly specialised group of flowering plants of great horticultural importance, architectural beauty, and with un-paralleled physiological adaptations. They are cosmopolitan in distribution, in both hemispheres, and are very prolific in tropical and subtropical rain forests. Orchidaceae, is the largest family of flowering plants comprised of some 20,000 species all over the world; of which 2,000 are from India. Nevertheless, they are not at all as common as other flowering plants, owing to their peculiar habits and diversity of habitat and further, because of the limited number of plants belonging to each species available even in the most conducive environment. It is interesting to note that there are species which are restricted to a particular mountain peak — a condition known as 'narrow endemism'. Instances of this phenomenon are met with especially amongst the species of *Dendrobium* and *Oberonia*..

The term Orchid has been derived from the Greek word 'Orchis' meaning testicles. It was so named by Theophrastus — a pupil of Aristotle, the renowned Philosopher of Greece, — who had been prompted to do so, by the fancied resemblance of the twin underground tubers of the common ground Orchids of Europe, to the testes of a dog. Decoctions of the tubers of ground orchids have been taken widely by the people of the middle ages, in Europe, to enhance sexual virility and to effect rejuvenation. The aphrodisiac properties, attributed to Orchid tubers, has its origin in the belief of the 'doctrine of signature' which means that the utility of a plant part may be deduced from its similarity to the organs of the human body.

The Nilgiri mountain ranges and valleys, form one of the richest natural abodes of Orchids. Out of 200 species of Orchids reported from the erstwhile Presidency of Madras (Kerala, Tamil Nadu, Karnataka and Andhra) about 125 hail from this region alone, of which, about 33 also have their distribution in the tropic and subtropic Himalayan ranges. This richness is due to the conducive climatic and edaphic factors. The Nilgiri Hills form the junction of three mountain systems of Peninsular India, namely, Sahyadri, the Southern and the Eastern ghats and receive a rainfall of upto 7620 mm from the North East and South West monsoons.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

Orchid flowers are held in high esteem for their varied architectural beauty and aesthetic appeal, colour combination and the keeping or lasting quality of the cut flowers. They can be easily distinguished from others, by the presence of a peculiarily shaped floral part called the lip or labellum at the lower portion of the flower, which is quite distinct, from other parts, and most attractive in shape, colour and structure. Often it is larger than the other five floral parts, lobed in various ways, and with a long or short spur or sac at the base containing nectar. In the centre of the flower, there is a stump, varying in length, called the column.

Orchid flowers are fantastic mimics; the lip, in combination with other parts, gives the orchid flowers a striking resemblance to various forms of animal life. So much so that there are the 'Bee orchids', 'Spider orchids', 'Butterfly orchids', 'Scorpion orchids', 'Lizard orchids', 'Frog orchids', 'Dove orchids' and even 'Man orchids'. Many of these are foreign orchids and some of them come up very well in private gardens of the Nilgiris, especially the 'Dove orchid' and 'Scorpion orchid' varieties.

*Habenaria multicaudata,* a rare Nilgiri orchid looks like a spider. It is a terrestrial orchid of small, dull greenish brown flowers, having a spreading lip resembling the legs of a spider; so also *Habenaria elvisii* a shade loving common ground orchid.

It is believed that many orchids can be pollinated only by a single specific insect, such as a bumble bee, wasp, ant, moth, snail etc. It is reported that the lip of *Ophrys speculum* (a temperate foreign orchid) resembles the female insect of *Scolia ciliate* in its metalic blue colour, subtle scent and shape. Thus, it attracts the male for a 'pseudo copulation'. During the visit to the flower, the insect exhibits peculiar movements of the body which results in the dislodging of the pollinia of the flower to the insect's head. These pollinia are transferred by the insect, to the next flower during its subsequent visit. Study in this line (entomophily) in relation to our orchids, has yet to be initiated and pursued.

Generally orchids grow on the ground (terrestrial) or on various types of tree (epiphytes). The ground orchids flourish in shady places, having soil rich in humus. Some of the common Nilgiri ground orchids are *Calanthe triplicata, Goodyra procera, Geodorum densiflorum.* These can be successfully cultivated in a leafmould based soil. They have a swollen, or bulbous base which stores reserve food and water. *Acan-*

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

*thephippium bicolor* is a very elegant, robust, and rare orchid of the Nilgiris, with large gibbous white flowers in a bunch produced from just above the base. Species of *Liparis* and *Malaxis* are quite common on the ground in dense forest. These produce small flowers at the apex, on an elongated axis. However, the common ones to be found in the shady places of Nilgiris, are *Habenarias*. They have underground tubers, the flowers being greenish or white with long or short spurs or nectaries One other orchid common along the wayside grassy slopes of the hills is *Satyrium nepalensis* which is very attractive with rosy pink flowers on a congested apical axis. It is an interesting ground Orchid in its distribution, and is reported from all South Indian Hill Stations, as well as from the Himalayas, exhibiting variations only in the size of the flowers, degree of congestion of them, and the shades of colour. The distinctive character of this species is the possession of two nectaries on the upper side. There are still others with a single large round leaf which is well pressed to the ground as though they are only the fallen leaves of some near by plants. These are the *Nervilias* which, when flowering, the leaves disappear. There is another curious Orchid in the dense forest of the Nilgiris known as *Epipogium roseum* which is leafless throughout its life, and having its growth in decaying vegetable matter. Annually, only the small creamy white drooping flowers are produced on a tall fleshy flower bearing axis. It is interesting in the sense that within a few days, after the production of flowers, the dispersal of seeds is effected, the aerial portion decays and disappears leaving a large underground tuber. As a result of its ephemeral nature they often escape the notice of the collector. *Plantanthera susannae* is another beautiful ground orchid, which one comes across, in restricted spots, in and around Nadugani having a few very large, ivory white, terminal flowers, with elongated nectaries. *Vanilla walkarii* is the wild species, allied to the commercial Vanilla found in the Parali forest. It is a large leafless (unlike the commercial one) climber with a green swollen stem, white flowers, and long cylindrical green fruits. This species, when cultivated, may prove to be a source of Vanilla essence from the pods.

However, the most attractive orchids of Nilgiris, as elsewhere, are the epiphytic ones. Although they are found growing on the branches of trees, they do not depend on the host for their food, as the parasitic plants do. On the other hand, they absorb nourishment from the atmosphere through the special aerial roots known as *velamen* roots. That they do not betray the host plant, but use it only as a perch is proved by the fact that they can easily be cultivated on dead logs as well as on rocks. *Cymbidium aloifolium* is one of the common orchids

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

found growing in large clusters on the main branches of trees in the lower altitudes, producing a long pendulous spray of inflorescence of attractive creamy white flowers, with maroon bands. *Aerides crispum, Aerides ringens, Vanda tesellata* having sweet smelling flowers, on erect inflorescence. are also commonly met with on tree trunks. While these are leafy throughout, the species of *Dendrobium* look like dry twigs, while flowering, as they shed their leaves. The flowers vary in colour, from yellow to bluish pink. There is still yet another group of epiphytes conspicuous by their either globose or ovoid swollen stems, crowded together or scattered on creeping slender stems on the branches of trees. These are, the *Bulbophyllums, Coelogyne* and *Pholidota* species. *Porpax reticulata* is a small, pretty, epiphyte common in the Cherambadi area having discoid stems in clusters, bearing very attractive bell shaped blood-red single flowers. The structure of this flower is unique in that there is union of the floral parts.

The seeds of orchids are dust like and dispersed by wind. Lakhs of seeds are produced in a single fruit. They are without stored food and depend solely on external aid for germination and the growth of seedlings. In nature *Fungi* are considered to furnish this assistance. This delicate balance between the Orchids and fungi, which may easily be upset to the detriment of the seedlings, is another reason for the comparative rarity of Orchids.

Success in the cultivation of Orchids depends on the reproduction of the natural habitat in an artificial way. For instance, those which are collected from forest floor humus soil, can come up well when cultivated in a pot or in the ground with leaf mould under natural shade, or in a green house. Similarly, those which have been gathered from other tree branches can be tied on short logs of wood and kept in an appropriate place, according to the requirement of light, as observed in the field. However, in order to retain the water on the log perch, coconut husk fibre, or moss plants can be used to cover the substratum. Rain water, collected and stored, is ideal for watering. Water well, when watering at all, and never water a wet plant. Dipping the whole pot in a pail is the ideal way of watering. Orchids may be heavily and frequently watered, while in full root action. But frequent watering when the plant is resting will decay the roots. Freshly potted plants will need less frequent watering. Drainage is an important factor both for the ground and epiphytic ones. Fresh air is vital to the plants. It should be always remembered that orchids do not enjoy the sun's direct rays. They are highly resistant to diseases, especially in view of the fact that the moist conditions under which they grow, are most favourable to disease

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

development. It is advisable not to repot a plant when it is about to flower. Every orchid should be overhauled and repotted every second year. Most of the orchids require from 60 to 80% relative humidity to enable them to absorb the optimum quantity of moisture, from the atmosphere through the velamen roots. A minimum temperature of 70°F. by day and 55°F. by night is necessary to carry on the vital process of food manufacture and respiration at satisfactory rates.

It is deplorable, to note that many of the attractive orchids of Nilgiris are fastly disappearing, owing to the clearance of forests, and indiscriminate collecting. It can be predicted without any hesitation, that unless and until strict measures are adopted for the conservation of climax forests and control of collection, very soon many species will become extinct. It is also absolutely necessary, that side by side, with the foregoing measures collection and cultivation in a scientific way must be taken up, to multiply the rare varieties. There is also a great deal of scope for the successful introduction of attractive exotic species from the tropical Himalayas, Malaysia and the East Indies. Tropical orchids are highly valued in Western countries as cut flowers and for hybridization to evolve better varieties. If the local orchids could be raised on a commercial scale, quite a lot of foreign exchange may be earned. In fact, now a days, the cultivation of Orchids has become a very lucrative avocation amongst the aristocrats both in India and abroad. The aesthetic temperament of man, which separates him from the lower orders of creation, is well satisfied by the extraordinary beauty of the orchid flowers, in many curious ways unparalleled by any other group of flowering plants.

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

## TWO DAYS IN THE JUNGLE

Lt. Col. E. G. Phythian-Adams

Mudumalai, has for the last 27 years been my favourite centre for big game shikar, and from my diaries I could extract sufficient material for a small book. (This was before the sanctuary was extended). But with conditions so greatly changed now in many parts of India from what they were in the past, I think that my readers will prefer an account of what things are like today (1951), even though the outings are for a few hours only and not serious shikar.

It is the 21st April and my first jungle trip this year. A Brain-fever bird is calling, but it is early in the season and he can manage only the first half of his monotonous notes. As we came through the forest yesterday from Kargude, I noticed that fire had swept right through the Wild Life Sanctuary. The question is whether it was held up by the big Mudumalai Swamp which forms a natural fire-line, or whether it has continued on to Narati and Benne. On this will depend our chance of seeing game. It is therefore with some relief that after passing the causeway I find that the whole area has been burnt, and that visibility is from 100 to 200 yards. There has been no rain for some days, but the debris in the roadside drains shows that heavy storms have occurred recently. Everything looks fresh and green. The young grass is sprouting, and the trees are putting out their new foliage in many shades of green and russet brown, the monotony being broken here and there by a gorgeous yellow laburnum, or what looks like it, in full bloom. Though it is the hot weather there is quite a nip in the air, and with the wind-screen up I am glad of my muffler. My driver evidently thinks the same, as he has donned a pull-over. As we turn a corner near the second milestone we see a jungle-sheep (kakar) standing by the side of the road 150 yards ahead. The glasses show it to be a female, and though the game rules permit them to be shot, I prefer not to fire. Probably she has a fawn in the lantana thicket close by which, though scorched by fire, still affords good shelter.

We continue on our way, and as we approach the 5th mile I wonder how the elephant encampment has fared. All has gone up in smoke and only a few charred uprights remain to show where the numerous huts stood. The high arched bridge over the stream appears derelict and proves to be so, but a low wooden structure has been built alongside which we cross. Half a mile further on, while I am looking out to the

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

left watching a pair of honey buzzards mewing round the top of a tall tree and no doubt selecting a site to nest, my driver suddenly stops the car and whispers 'Bison'. I look to the right, and there on the open slope above us and not 60 yards away stands a grand bull still munching the young grass which he was plucking when the noise of the car disturbed him. His jet black colour shows him to be a mature animal, but the horn spread is no larger than what I already have, and the points are sharp and unbroken. He shakes his head and advances a few paces towards us. I cannot help thinking that if he does decide to be nasty, the downhill impetus of that mass of bone and muscle will knock the car flying. However, my experience is that 90 times out of 100 bison are mild tempered beasts, and this one proves no exception, for after a good stare he swings round and trots off. We resume our way and are soon passing the big swamp which runs down from Narati hill. Usually there is a herd of chital to be seen here but today it is blank, so we turn to the right a little way up the forest road and park the car. I send George off with Ankan to work the ground across the stream. Veeran is left to mind the car, while I start uphill with Vasu and Masty.

The road, rising by easy gradients, runs along the hill-side, and judging by the number of fallen trees has not been used by traffic since early last year. The first part passes under high arching bamboos whose dew soaked leaves thickly cover the ground. Springing up through them are numbers of a pale mauve and white crocus, and I am admiring a large cluster of these, when a jungle sheep dashes across the road and down to the swamp on our right. Vasu, whose eyes are exceptionally keen, points out what looks to me like the stump of a half hidden dead tree below us and says it is the buck, but before I can verify it the animal bolts. Continuing our way, soon after I spot a smalll herd of chital high up on the open hill-side above us. They have seen us too and disappear round the corner of the hill, but the only buck with them has half grown horns in velvet, so we leave them alone. Two shots from the direction of the car now show that George is in action. I hope he has got something, preferably a pig for the men, who are so fond of pork. On again up the winding track, moving very slowly all the time, for 2 miles an hour is the utmost for still-hunting. We see fresh marks where a pig has been rooting, and I carefully stalk a re-entrant where I shot a big one last year, but there is nothing there today. We should by now have seen more game, but probably they have not yet returned after the recent fire. Malabar squirrels, however, make their presence known by their sharp chattering cry every few hundred yards. Lovely creatures, with their bright cinnamon and orange coats — quite rightly they are on the protected list. There is a certain amount of bird life even in this heavy

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

tree forest. On the edge of the swamp below us a Malabar whistling thrush is giving a fine rendering of his 'Idle Schoolboy' theme — an unusually fine performer. The monotonous call of green barbets also breaks the silence, and occasionally the heavy flight of a golden-backed woodpecker, but the chief sound is the continual chatter of many pairs of Southern grackles, obviously nesting.

We pass the fire-line, looking down on the road crossing the swamp far below us, and are now approaching an exceptionally favourable spot where only last year I shot both jungle sheep and pig, and even saw a small herd of elephants with a fine tusker, but today our luck seems to be out. However, it is time for a halt, so I take up position on the slope covering a glade below and wait hopefully. Above us is a huge tree whose crown must be in full flower judging by the sickly sweet scent and the hum of hundreds of bees overhead. After some time a doe jungle-sheep appears, so I wait a little longer in case she is in company with a buck, but apparently she is alone. I decide to give it up, so we stroll back slowly to the car, again seeing our friend of this morning who is far too wide awake now to give another chance. Shortly after George turns up also empty handed. He had an easy chance at a fine chital buck which he estimated at 36″ (and in my experience his estimates are generally on the conservative side), but the cartridge missed fire. The buck bolted, and his two shots which I heard missed.

We start back, seeing nothing till we reach the causeway near the Hut. Here some 20 grey langurs are sitting out in the swamp, all with their backs to us and quite 100 yards from any tree. They are widely spaced, and I cannot make out what they are doing, but Ankan tells me that they are feeding on a small white berry to which they are very partial, and which ripens in this season. They are too intent on their business to pay any attention to the car. It certainly is extraordinary to see so many on the ground at once and right out in the open. And so ends a very pleasant morning. True, we have got nothing, but personally I am quite satisfied with my outing, though I am afraid my companion is less so.

Two days later I decide to prospect up the Doddakatte path, a favourite route of mine. Last evening I had sent George to clear away any fallen tree etc, so we hope to cover the first three miles by car, though generally the track is only jeepable. Again we leave at dawn, and a few minutes run brings us to the stream which is likely to prove our biggest obstacle. The bridge was burnt many years ago and has not yet been replaced, but George has laid a corduroy of logs and branches across the

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

water, and with some wheel spinning the old 'A' model Ford (an ideal car for shooting) crosses and climbs up through the heavy sand on the opposite bank. The forest road we are following forms the boundary of the Wild Life Sanctuary which lies on our right, and almost at once we see a herd of some 25 chital with several good bucks, but all in velvet. The sun has not yet risen and their coats look unusually dark in the dawn light. After a good look at us they swing round and make off. All this area has been burnt, so visibility is good — usually one is shut in by walls of tall grass for the first two miles. For me the road is full of memories of panther, bison, deer, and wild dogs over the many years I have been using it.

As we top the rise we run out of the big tree forest. Here the jungle is lighter and the grass never more than two feet high. It is a favourite locality for chital, but today we see nothing, and shortly after we reach the Honurhatti cross roads where the car is parked under a tree in which I have often had a machan. George turns off to the right here, along the north boundary of the Sanctuary, making for the salt licks near the Mysore frontier 3 miles away. I continue along the path towards Doddakatte which soon sweeps round in a mile long curve with clear visibility to the end, as the low tree jungle has been cut back some way on each side. We have not proceeded far when I notice the tracks and droppings of a big tiger which had gone overnight in the same direction. It was just here many years ago I found the bleached bones and skull of a man who, according to Masty, had been killed and eaten by a tiger. As evidence he produced a silver ring which he said he had found in the animal's dropping. However, nothing remains today of that tragedy, and shortly after we see some chital feeding about 500 yards ahead, so slip down to the edge of the jungle on our left for a closer approach. This presents little difficulty, and we are soon within 100 yards of the deer. The thick growth of saplings somewhat obstructs our view, but after watching for some time I satisfy myself that no really good buck is present, so we move on.

The road now forks, the branch on the right going downhill to the Doddakatte maidans, while that on the left runs uphill round the side of Karadibetta hill. I take the latter and almost at once spot some chital coming down it about 400 yards away. There is a good buck with them— his antlers have a wide spread and incurving tips, and I can see that the latter are white. I estimate him at 35″ and decide to have a closer look, so again we slip into the jungle on our left and work towards them. But the wind is tricky, and as we approach I feel a puff on the back of my neck. The inevitable happens, and with a rush the deer bolt across the

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

road to our right and disappear downhill. A fleeting glance at the buck's head shows that I was not mistaken as to its size, but they are now alarmed and it is not worth while to follow them. We mount steadily and as we top the rise Vasu spots some sambar feeding uphill on our right. The stag is in hard horn but the head is small, so we proceed slowly only to run almost at once into another herd of chital who bolt on getting our wind. These are all bucks, some 20 in number and most of them are in velvet. There must be a master buck somewhere about who has driven them from the herd.

The wind is so fitful that I decide to halt for 15 minutes to give it a chance to steady. We sit with our back to the hill, with an uninterrupted view over miles of forest to the Nilgiri hills standing stark and clear after last night's rain — a wonderful panorama. Around us are numbers of pre-historic graves, so far undisturbed. Presumably they have some connection with the big fortified hill of Gopalswamibetta not far away on our left which was occupied in the first and second centuries, but has not yet been excavated. I am wondering what manner of people these were and how they managed about their shikar, when my reflections are cut short by the roar of a buck downhill on our right and not far away. Evidently this is the master buck; he should be worth looking at. The wind seems to have steadied so we go after it and almost at onec run into a herd of bison. But the wind has swung round again and betrays us, and off they go like a cavalry charge, unfortunately taking with them a big lot of chital who make for the top of the hill. In hopes that this lot did not contain the master buck we work on still down hill. Every where are fresh droppings and tracks of bison and chital, in fact the game path across one nullah looks like a regular farmyard road, but the deer have gone.

Time is passing and I have arranged to be back at the car by 10 am. so we circle back to the road above us. We have not gone far when I see something black moving through the grass about 80 yards away. Only the top of the back is visible and at first I think it is a pig, but the glasses show it to be a sloth bear, the first I have seen in this forest in so many years, though their tracks are not uncommon. I do not want it, and a minute later am glad I did not fire, as a small cub now appears some yards behind following its mother. We leave them in peace and move up to the road. Just beyond the spot where we halted some more chital are viewed uphill on our left. They have seen us and bolt round the corner of the hill, but the wind is, for a wonder, in our favour, so they are not seriously alarmed. Some large rocks overhanging the valley afford cover and soon I am within easy range, but the best head does not exceed 32″ so I let them go.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

I have no regrets for a blank day, as my chief object is to view the forest life, and to discover how far the chital have recovered from the war years, when all this area was handed over to a Jungle Warfare training school. That game has now returned in good numbers is obvious, and when I meet George I find that his impressions coincide with mine. He had come across great numbers of chital as well as bison, but pig, of which I hope we would bag one for the men, were conspicuous by their absence. Curious this, as we used to see them almost every day.

Two blank days running! Hardly worth recording, some may think. But this is an account of memories of the jungle, and not a mere record of slaughter, so I hope the majority of my readers will not be disappointed that I brought no record head to bag. With me, at any rate, the pleasure derived from the hunt and the enjoyment of the sights and sounds of the jungle far outweigh other considerations.

[The late Lt Col E: G: Phythian-Aoahs, O.B E., was a member of the Committee of the Association from 1922 until his death in 1959 and was intimately associated with the management of game during those years. This account is taken from his 'Jungle Memories' with the permission of the Bombay National History Society in whose Journal it was published.]


# NILGIRI WILDLIFE ASSOCIATION

**MEMBERSHIP RATES:**

| | |
|---|---|
| Life Membership (£ - 25) | Rs. 300-00 |
| Annual (1st April to 31st March (following) (£ - 2) | Rs. 25-00 |
| Student | Rs. 10-00 |
| Institutions - Educational | Rs. 50-00 |
| All others | Rs. 100-00 |

PUBLICATIONS:

| | |
|---|---|
| Constitution of the Association (1977) | Re. 1-00 |
| Spare copies of Annual Reports | Re. 1-00 |
| Shikar Map of the Nilgiris | Rs. 5-00 |
| Centenary Souvenir | Rs. 10-00 |
| Sticker (Members only) | Re. 1-00 |

**THE NILGIRI WILDLIFE ASSOCIATION**
**Nilgiris. 643 001**


TIFFEN® Color Control Patches © The Tiffen Company, 2007

# STATUS OF WILD LIFE IN THE NILGIRIS

**E. R. C. Davidar**

On such an occasion as the Centenary of any organisation, it is usual to look back to see how far it has lived up to its hopes and aspirations, take stock, and look towards its future. Since the Nilgiri Wild Life Association formed in 1877 has been intimately connected with the management of 'Game', from 1879 when the Nilgiri game and fish preservation Act came into force until 1976, when the Wildlife (Preservation) Act of 1972 was enforced, it is but appropriate that the status of at least the larger forms of wildlife in the 'district' (which extends to the Bhavani river in the Coimbatore revenue district) be reviewed. It is with this object that this note is written.

TIGER *(Panthera tigris)*:

In his book 'Sport on the Nilgiris and in the Wynaad' (1911), F. W. F. Fletcher a planter and keen hunter in the Nilgiri-Wynaad, which is now part of the present Gudalur taluk of the Nilgiri district, recounts several successful tiger hunts between the latter part of the nineteenth Century and the early part of the twentieth century. According to him, netting and spearing of tigers by Panias was common in his area at that time. He mentions — "Still tigers promenade on the Devala road; and still the beat constables get skeered as of yore". In the 'Guide to Shikar on the Nilgiris' (1924) "Big Bore" was more concerned with records than with the status of the Tiger. But, the Rev. Edmund Bull mentions in a chapter in the same book — "There are plenty of tigers to be met with in the Nilgiris" and called Anaikatti "a regular tiger walk".

The late Lt Col E. G. Phythian-Adams, who hunted in the Nilgiris between 1923 and 1957, in his notes 'Jungle Memories' published in the Journal of the Bombay Natural History Society in a series commencing in 1948 speaks of the Nilgiris, especially the plateau and Mudumalai, as the place for chance met tigers. In a note on the Association published in 1939 JBNHS he wrote — "There seems to be no decrease in their numbers either on the plateau, or in the low country, fresh animals turning up in a short time to replace those shot". It may be noted that Sigur and Mudumalai ranges on the lower plateau (particularly the Sigur Range) are generally referred to as the low country. The annual reports of the Nilgiris Wild Life Association do not, unfortunately, refer to the status of the tiger except in the game returns, since it was not classified as 'Game'! Between 1912 and 1939, an average of 11 tigers were killed

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

annually and between 1940 and 1964 (when Sigur reserve was closed to tiger shooting) the average dropped to 4. (In the latter years the annual bag depended more on the tenacity of pursuit than on other considerations).

Tiger shooting was banned in the State by the Government in January 1966. The Association which had, on its own, taken various measures to prevent over shooting felt that the ban should have been preceded by adequate preparation and followed by practical but imaginative conservation measures. The sudden withdrawal of sportsmen from the scene, had an unsettling effect. The villager was left to his own devices to defend his cattle against the depredations of tigers. He, naturally, resorted to the use of poison to eliminate his enemy. "Enemy", is what the tiger had become. Until then the villagers, especially those in Anaikatti. Mavinhalla and others similarly placed, had a vested interest in tigers as they made a good living taking part in beats etc. and made sure that not too many were shot. The Nilgiri tigers were extremely clever and seldom allowed themselves to get caught over 'kills', And if beating was resorted to the experienced ones often broke back. But their cleverness and experience failed them against poisoned 'kills'. Only a few 'game killers' living on inaccessible slopes survived. It was the writer's misfortune to come across the carcasses of two tigers in the Masinigudi-Sigur area, which had obviously been poisoned. No one had even bothered to remove the skins.

The writer has had a holiday cottage in Sigur, midway between Masinigudi and Anaikatti since 1964. Thus he had the opportunity of following the fortunes of the tiger, particularly in the low country. Between 1964 and 1967 there was considerable tiger activity in the Sigur Reserve as evidenced by tracks of tigers, claw marks on trees, kills, calls and occasional sightings. Between 1968 and until about two years ago, tigers had vanished from the area. He also did a carnivora survey in the Mudumalai Sanctuary in 1971/72 and from this time on there has been a slow but noticeable improvement.

Had the villager been compensated for the losses sustained in time, most of the tigers there could have been saved. The writer's proposal to introduce a compensation scheme was accepted with much reluctance in 1969, and that too in a attenuated form covering Mudumalai sanctuary only. After further representation it was extended, after some years to a 1 Km belt around the sanctuary. It was only recently that the scheme was extended throughout the state, but by then considerable damage had been done. This scheme was also not given adequate

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

publicity, and its implementation was tardy. Except for one suspected case, there are no reports of poaching for a trophy after the ban on shooting was placed.

In the Nilgiri-Wynaad there are no tigers left, except for an occasional straggler from the Mudumalai sanctuary, where some still remain. The Masinigudi area, and the slopes get an occasional visitor, whilst Anaikatti, the home of the tiger in the low country, has no resident population. On the plateau, in the Kundhas, (the mountains along the Western edge of the plateau), tigers normally keep to the cliff line and rarely venture into the interior. The Bangitappal/Sispara areas still hold some residents. From all accounts there are a little over a dozen tigers all told, which along with those round about, are sufficient to keep the genetic pool viable.

With the loss of habitat in Kerala and in the Nilgiri-Wynaad; the Western region of the Nilgiri plateau, Sigur and Mudumalai ranges have an important role to play if the tiger in this region is to be preserved.

LEOPARD *(Panthera pardus)*:

Invariably referred to as 'panther', the leopard was considered a nuisance by the early sportsman not only because of its numbers but since it interfered with the carefully laid plans to bring about the destruction of the tiger. Between 1910 and 1930 the annual average number of leopards killed was 23. Between 1931 and 1940, the average dropped to around 10. Between 1941 and 1966 when shooting was closed the average dropped to 5. Writing in 1939 (JBHNS Vol. XLI No. 2) Col. Phythian-Adams states that leopards had decreased on the plateau and as a result, wild pigs had increased enormously. The present writer's note published in the same journal in 1968 (Vol. 65 No. 2) summed up the position thus — "There are more panthers in the low country than on the plateau, but they are by no means plentiful". The situation has not changed since. The Nilgiri-Wynaad which held numerous leopards in Fletcher's days now holds very few. Black leopards also occur both on the plateau and in the low country, but are far fewer in comparison, and are more or less confined to the Western and North Western parts of the district.

BEAR *(Melursus Ursinus)*:

F. W. F. Fletcher writes: "In my part of the country (Gudalur taluk) the sloth bear is indubitably the rarest of all game animals. By

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

this I do not mean to imply that he is less common than, say, the tiger; on the contrary, on the rocky range of hills on which my estate (Rockwood) is situated, bears are fairly numerous. But, save for the short season during which the fruit of the Atti is ripe, the bear is nocturnal in his wanderings and his day retreat is always chosen in some remote spot. Hence it is that he is so seldom seen".

In 1939 Phythian-Adams reported "From the table (of game shot) sloth bears seem to be on the decrease but it is doubtful whether it is so as they are very nocturnal and have never been numerous."

Except for the Nilgiri-Wynaad area, there are probably as many bears in the district as there were at the start of the century; may be more. They are found mostly on the slopes, including Mettupalayam slopes and in the Mudumalai-Sigur lower plateau. During the honey season in May-June they are abroad even during the day.

ELEPHANT *(Elephus Maximus)*:

Fletcher writes: "In the year of grace 1911, it seems scarcely credible that so late as 1873 the indiscriminate slaughter of elephants was not only permitted in the Madras Presidency, but was encouraged by the Government by the offer of a large reward for every elephant killed; and even after this lapse of time the elephant lover must feel a pang of regret at the thought of the wholesale butchery that was perpetrated under the aegis of this deplorable system. Here in S.E. Wynaad, the slaughter was enormous and I have heard (I believe this is strictly true) one man who was then resident here was credited with the killing of three hundred elephants, mostly cows and calves".

With reference to the position in his area at the turn of the century he states—"In regard to elephant shooting, I, at one time, occupied a unique position, for over a large area in which elephants are numerous, I had the sole right to "Kill, capture and pursue them" and had I thirsted for their blood I could easily have gratified the craving". "In this part of the country, a herd may contain any number of individuals from four to forty. Possibly much larger herds exist. Always a few are to be found in the jungles at the foot of the Northern slopes while at times their numbers rise to fifty or more."

Phythian-Adams writes in his "Jungle memories"—"Thanks to the protection afforded, elephants have increased to such an extent that they

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

have become a serious menace to the cultivator. ..... The movements of elephants depend largely on climatic conditions but there are always a few to be found in the jungles at the foot of the Northern slopes while at times their number rise to fifty or more."

It was not only the Madras elephant preservation Act of 1873, but the vast unspoilt jungles where the elephants could roam and breed in peace that brought about such a dramatic change, since the eighteen seventies.

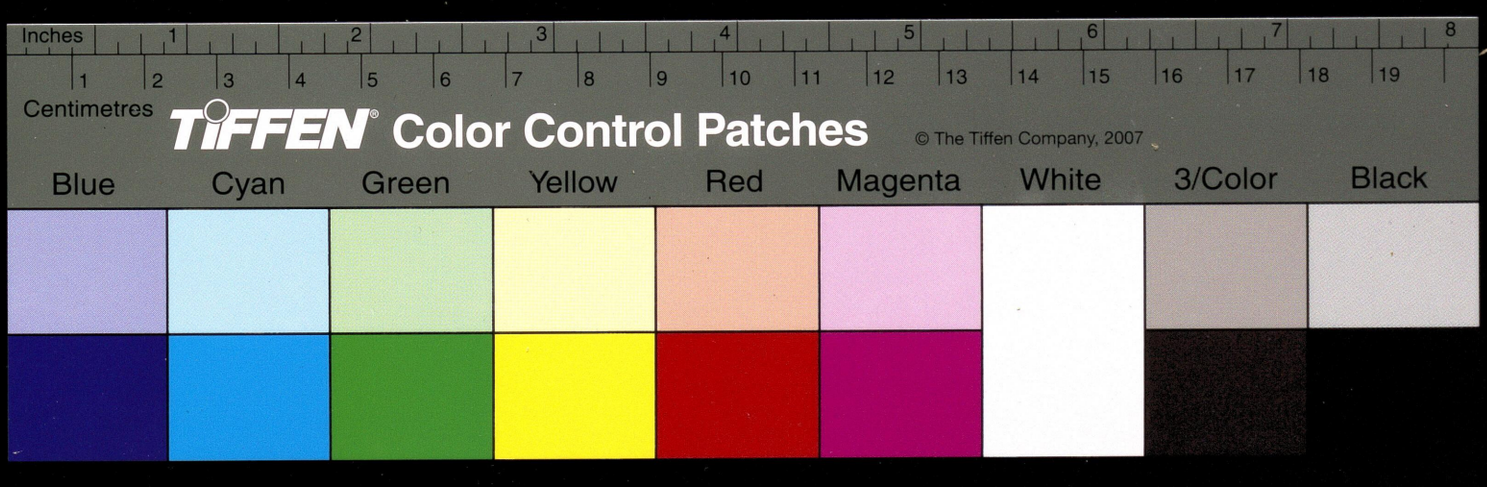
In the writer's own experience of the past twenty and odd years more elephants are met with in the district today than in the fifties. Some believe that this is deceptive and attribute the apparent increase to the shrinkage of the elephant's habitat by the denudation of forests all around, particularly in Kerala and some clearfelling in the district itself; especially, in the Nilgiri-Wynaad. But the large number of young seen in the herds does not altogether support this theory. Even if the population in the region as a whole has not increased, there are certainly more elephants in the district now than there were, say, fifty years ago. Elephants used to visit the plateau but rarely. Nowadays such visits are nothing unusual and there are a few permanent residents. Every year half a dozen or more people are killed in the district, but proscribed as 'rogues' of which one was shot. But some half a dozen or more elephants are found dead in the jungle each year, some from gunshot wounds.

GAUR *(Bos Gaurus)*:

If F. W. F. Fletcher's accounts are to be believed the Nilgiri-Wynaad must have been teeming with gaur at the turn of the century.

Phythian-Adams writes in his 'Jungle Memories'— "It was not until I settled down in the Nilgiris that I found how easy it can be to bag one of these grand animals. They are of course no longer found on the plateau, except for a very occasional wanderer, but in the low country they are so numerous that seldom a day passes without seeing them

Writing in 1939, he states, "……they are now confined to the low country on the North and West where they are definitely on the increase. There was a serious outbreak of rinderpest in the Mudumalai forest in 1909 affecting both bison and sambur and the numbers of the former were so depleted that their shooting was prohibited in 1912, for



five years. In 1929 there was again a small out break of disease in the same forest but only a few animals died and since then with the exception of a single unconfirmed case of foot and mouth disease the herds have remained healthy".

Besides the areas mentioned by the above writers, gaur also occur on the Southern and Eastern slopes, on either side of Mettupalayam, though not in great numbers, and have maintained their strength over the years.

There was a serious outbreak of rinderpest in 1968, in the Mudumalai and Sigur Ranges wiping out most of the gaur in the area; in terms of numbers — hundreds of animals. For the next five or six years it was a rare sight to see gaur in the area, except on the upper slopes. In the last two years gaur have reappeared especially in Mudumalai which could be considered their home. But the danger from disease is ever present, as decrepit and diseased cattle, enroute to slaughter houses, are driven through the area every week. Scrub cattle in thousands, including many unhealthy ones are grazed in the low country jungles.

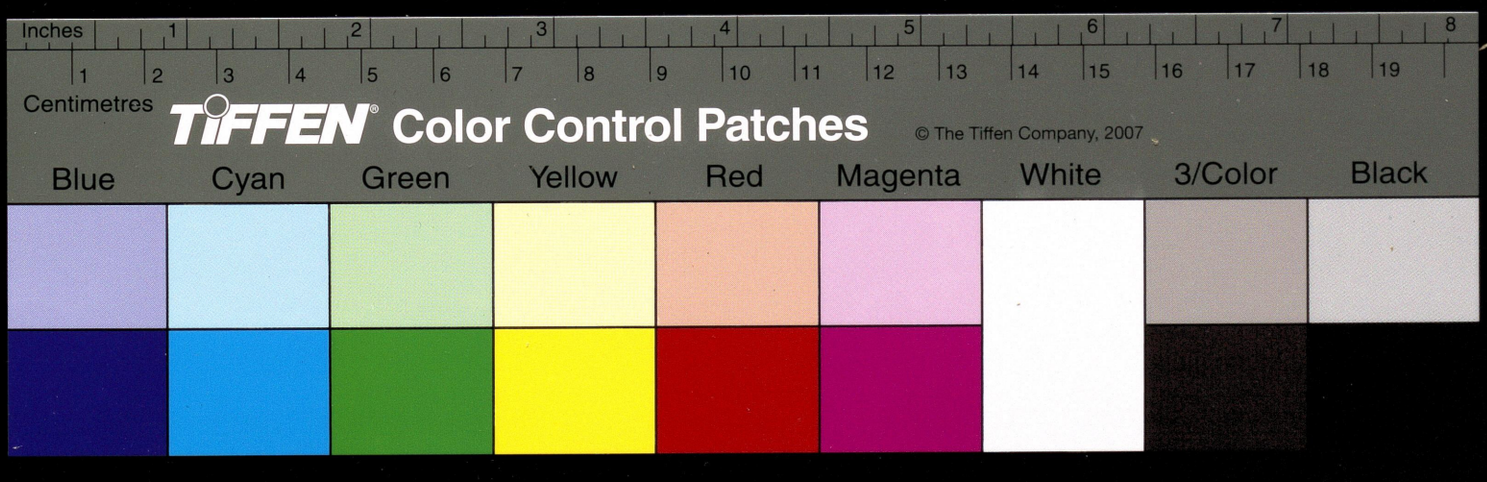
As far as the Nilgiri-Wynaad is concerned, much of the Gaur country of Fletcher has been cut up and developed and is no longer an ideal habitat of this forest loving animal. A few herds still occur on the slopes and in the forest adjoining the Mudumalai sanctuary.

NILGIRI TAHR *(Hmitragus hylocrius)*:

"Not a great many years ago, ibex could generally be found all along the precipitous rocks forming the line of ghats skirting the hills from Rungaswamy's Peak (Kil Kotagiri) to Makoorty, Sispara and Mailkoondah. Now they are with difficulty found at some more favoured spot than others" — 'Hawkeye' (Gen R. Hamilton) in 'Game' (1876).

"In former years this animal was plentiful in certain favoured localities in these hills ..... These unfortunate animals have been persistently persecuted and greatly reduced in numbers. The incessant harrying they are subjected to will certainly lead to their absolute extinction of persisted in unless the game laws, since adopted and promulgated save them from this fate" Lt. Col. A. Pollock in 'Sporting days in Southern India'.

F. W. F. Fletcher notes—"In former days — the halcyon days of sport on the Nilgiris — "Ibex" (as the animal is commonly referred



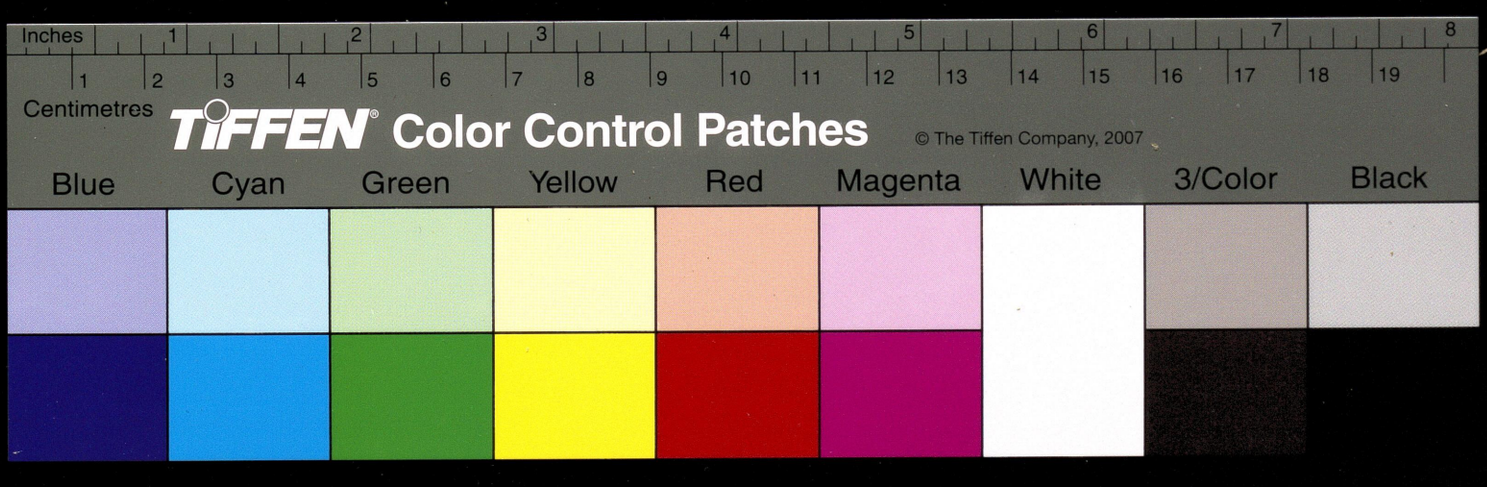
to in these parts) were found in very large herds, an assembly of even one hundred being not uncommon according to accounts of old-time sportsmen. But owing to incessant persecution the numbers were thinned at such a rapid rate that at one time the ibex stood in imminent danger of extermination. The Nilgiri game and fish preservation Act of 1879 did much to avert this calamity; the absolute prohibition of ibex shooting, which followed a few years later, did more. Under this salutary legislation there was such a steady increase in the herds, that in 1908 it was found possible to permit the shooting of one 'saddle back' (as old males with saddle marks on the back are called) under each licence issued in a season. I need hardly add, a saddle back does not fall to the lot of every sportsman. The largest herd I ever saw was at Bettmund on a glorious morning in 1890, and they numbered twenty-nine".

In a note on Game preservation published in the JBNHS in 1927 Phythian-Adams wrote "The total of the herds in the Kundhas cannot now fall much below 400". In 1939 he estimated their number at 500. But no systematic enumeration appears to have been undertaken to arrive at these figures.

In 1963 and 1975 the writer conducted, thorough census operations, and a summary of the 1975 count is given given below:—

| | SB | BB | LBM & AF | Yearling | Young | Total |
|---|---|---|---|---|---|---|
| Mukerti— | 2 | 3 | 22 | 9 | 9 | 45 |
| Western catchment | 2 | 4 | 24 | 6 | 6 | 42 |
| Nadgani/ Sispara | 8 | 15 | 130 | 23 | 31 | 207 |
| Bangitappal | 3 | 3 | 26 | 2 | 6 | 40 |
| Grand Total | 15 | 25 | 202 | 40 | 52 | 334 |

Classification: SB— Saddle Back; BB—Brown Buck or dark brown male; AF—Adult females; Yearling—slightly less than 1 year to about 2 years; young—upto 9 months. Altogether 334 animals were counted. In spite of favourable conditions. it is probable that a hundred or more tahr remained out of sight, and unenumerated along the cliffs. The total tahr population was estimated at 450 compared to 292 and 400 for the 1963 census.



Some overlapping in the classification is not ruled out. No attempt was made to classify LBN and AF separately as this would have slowed down the work considerably. From the samplings it may be stated that the ratio between males and females was 1 : 3. The Glenmorgan herd which numbered about 30, and which enjoyed protection for many years appears to have disappeared. The tahr on the isolated cliffs of the Northern and Eastern face of the Nilgiris, which were not legally hunted also appear to have disappeared long ago.

Poaching is expected to increase with the opening up of the Silent Valley in Karala. Banning Tahr shooting is not the answer as game licence holders perform a useful function by their very presence in the area. Forest staff rarely penetrate into the interior. Every case of tahr poaching that has been detected was on the initiative of licence holders. The movements of the game licence holder, unlike those of the poacher can be watched and controlled as the entry and exit points are known. Taking all these factors into consideration a half-yearly bag limit of 2 saddle backs (which are old males, a majority of them past breeding) was suggested. This was accepted by the Association. However, since then the control has passed into the hands of the wild life department. As the Nilgiri tahr has been placed in Schedule II of the Wildlife Act, a special game licence from the Chief Wild Life Warden is required to pursue it. None has been issued in the last two years, and so no patrolling was done.

One of the worst problems that the tahr faced was the extension of wattle and eucalyptus plantations into their habitat, in spite of protests by the Association. Fortunately most of these have failed because of the high winds on the exposed slopes of the Kundhas and lack of depth of soil.

SAMBUR *(Cervus Unicolor)*:

Fletcher reported on Nilgiri-Wynaad—" Living as I do in Sambur country.....any afternoon or morning I came across a dozen sambur within a few hundred yards of my bungalow, while frequently they came into my verandah in their nightly rambles ". " During the reminder of our trip (Rockwood and Needle rock peaks) we saw several more stags with heads of about the same size (33″); but as I had redeemed my promise of sport I did not go after them ".

The slaughter of sambur on the tea and coffee plantations in the name of protecting young shade trees and nurseries was immense as seen

from various reports. Phythian-Adams in his "Jungle Memories" writes — "Though a fair number are to be found in the low country the great majority are on the plateau where they have so increased in spite of the ravages of tigers, panthers and wild dogs that it has become necessary to have a few hinds shot annually". The ban on shooting of hinds was reimposed shortly afterwards.

The present low horn limit of 28″ was fixed in 1932 in order to permit the shooting of old stags whose horns were going back and whose retention is undesirable. But a glance at the table shows how few mature animals are shot annually, though it must be remembered that the present bag limit is two against three previously".

Between 1912 and 1923 over 40 stags were killed on the average annually. But then there must have been a dozen or more stags to each one shot. The average annual bag dropped to less than 20 between 1924 and 1945. Thereafter until 1975 the average bag remained at around 10. In some years as few as 3 were accounted for.

The Nilgiri-Wynaad is no longer the sambur paradise it was in Fletcher's days. The reason for this is not far to seek—development, both authorised and unauthorised. But the area, particularly the wooded slopes, still carry a reasonable sambur population. There is no appreciable fall in the number of sambur in the low country in spite of the set back following the 1968 rinderpest epidemic, which affected the sambur also.

Reporting on the status of wild life in the Nilgiris in 1968, the present writer noted — "Alas, the position of the sambur on the plateau is far from satisfactory. Except in a few pockets where there are between half a dozen to a dozen animals, the sambur is scarce. Estate labour with dogs killed quite a few. But poachers could not have accounted for all the missing sambur, for poaching never got out of hand in the Nilgiris as in other districts. How they could have disappeared even from areas where no poaching took place is a mystery. However, it is comforting to know that there are more sambur on the plateau today (1968) than there were a few years ago. But, unfortunately, as soon as there is an appreciable increase, wild dogs invade the plateau from the low country in numbers and bring down the population. In 1960 there was such an invasion that in one bay of the Pykara lake alone 14 sambur skulls and a jumble of bones were recovered. It is hoped that the new wattle plantations of the forest department on the plateau will provide more cover for the sambur and help it, to some extent, to make a come back".

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

Sambur have increased on the plateau particularly in the Bangitappal/Sispara area. On the slopes also, there are more now than there were some ten to fifteen years ago.

CHEETAL *(Axis axis)*:

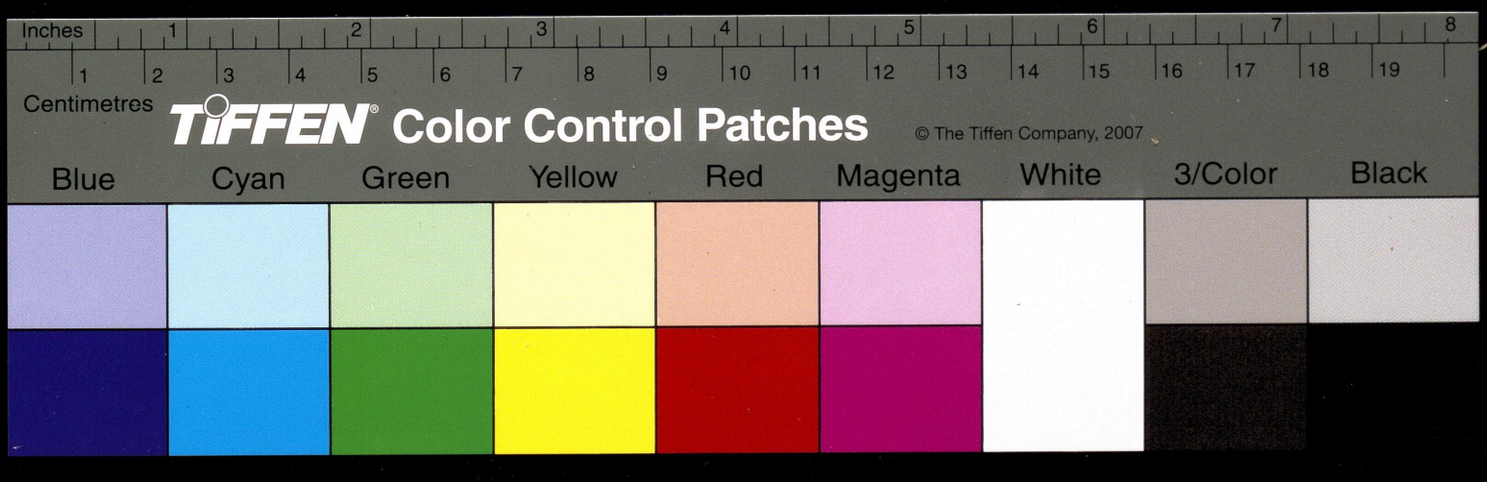
Fletcher writes of Nilgiri-Wynaad — " Light open forest on the banks of streams, interspread with glades of short grass, is the country the dappled deer love and hence they abound in the jungles at the foot of the northern face of the Nilgiri Plateau, and below the Western Ghats in Malabar where their special taste in the matter of habitat is suited to a nicety ".

" On several occasions prospecting work has taken me to a place at the foot of the hills, where the whole country is alive with spotted deer. ..... I have come across herd after herd, which together must have numbered fifty at least ". (which is not a big number in Masinigudi for instance). An idea of Nilgiri-Wynaad cheetal is gained when Fletcher's largest head measured only 32 ". Big Bore in his ' A guide to shikar on the Nilgiris', calls Masinigudi the home of the spotted deer. They were said to be fairly plentiful in Mudumalai also.

Phythian-Adams reported in 1927 — " very numerous in the low country, but much persecuted by wild dogs and patta land shooters ". In his 1939 report he writes — " cheetal are confined to the low country, their favourite centre being the Mudumalai and Benne forests. In spite of the appalling ravages of wild dogs and to a lesser degree of tigers and panthers, large herds of 30 to 40 may be seen including a number of fine stags. The way in which cheetal heads have improved under careful system of preservation is shown by the following instance. Writing in 1880 a well known local sportsman and taxidermist refers to a head of $32\frac{1}{2}''$ which he had recently obtained as the largest shot to date in South India. Nowadays such horns are common in the Nilgiris and heads of $34''$ and $35''$ can be obtained without difficulty, while several over $37''$ have been shot in recent years, the best being two of $38''$ bagged in 1916 and 1926 ".

The average annual bag was 22 between 1912 and 1939. Between 1940 and 1959 the average dropped to 13. Between 1960 and 1974 the average shot up to 38 stags.

In his 1968 report the writer stated — " This species has recorded a spectacular increase. Herds of one hundred or more are not uncom-



mon — the concentration has moved east (from Mudumalai of Phythian-Adams' days) and large herds are found around Masinigudi and Anaikatti ".

55 stags were accounted for in 1968, the largest number shot in any one year in the last 10 years. It was even considered that some old does should be allowed to be shot. But after the rinderpest epidemic the deer population declined and wild dogs increased. However, in the last 2 years there has been a marked improvement in their status in the low country. But in the Nilgiri-Wynaad their position is precarious. There are some herds on the Mettupalayam slopes.

BARKING DEER *(Muntiacus muntjac)*:

It is commonly known as the jungle sheep in the Nilgiris. Fletcher writes — " Both on the Nilgiris and in Wynaad the muntjac is very common. In the Wynaad he feeds at all hours of the day at the edge of some cover into which he can retreat instanter ".

Phythian-Adams in his 1927 note wrote — " are sufficiently numerous and call for no remarks ". In 1939 he reported — " are found mostly on the plateau but they occur also in the Nilgiri-Wynaad. The number allowed on the licence was reduced from 6 to 4. — their position is satisfactory ".

In 1968 the present writer reported on the position of the barking deer thus — " is more partial to the plateau than the low country. The conditions on the plateau are so unsettled because of work on the Kundah hydro electric project and the extensive wattle plantations of the forest department that these deer venture out of the security of the sholas only late in the evenings thus making it difficult to assess their status. The bag limit has been further reduced to 2 ".

Although the conditions have more or less returned to normal on the plateau, but because of extensive wattle and bluegum plantations it is difficult to sight this animal, unlike in the old days when there were more open grasslands. They are holding their own on the slopes wherever cover is available. A pure albino specimen was shot on Dodabetta in 1938.

FOURHORNED ANTELOPE *(Tetracerus Quadricornis)*:

Phythian-Adams wrote in 1939 — " is found chiefly at the foot of the northern slopes and in the broken ground covered with light jungle along the edge of the Mysore ditch, as the great rift of the Moyar

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

river is called. They are few in number and seldom shot" In 'Jungle Memories' he states — "They are extremely wide awake little animals and it is not easy to get within sporting range, while the fact that under the rules only males may be shot makes it still more difficult to bring one to bag.

The Association recommended the closure of the shooting of this antelope and since 1955 the ban has been effective. Some have been seen near Masinigudi (Manradiar Avenue). There does not appear to be any improvement in the status of this animal and it continues to be scarce.

BLACKBUCK *(Antelope cervicapra)*:

Phythian-Adams wrote in 1927 — "Were closed to shooting from 1923 to 1926 and are still not numerous, but sufficiently so to allow the inclusion of one on the licence for those who care to shoot so poor a trophy". In 1939 he reported — "For several years their shooting was closed and there seems little doubt that they need renewed protection, as they suffer severely at the hands of patta land shooters and from wild dogs".

Blackbuck shooting was again closed, this time permanently from 1948. Between 1930 and 1948 the total number of bucks bagged by licence holders was 18 only. Blackbuck have completely disappeared from their old haunts in Kargudi, Moyar and Masinigudi. However, on the district border, between Bhavanisagar and Thengumarada they are now plentiful.

NILGAI *(Boselaphus Tragocamelus)*:

Phythian-Adams wrote in 'Jungle Memories' — "In the Nilgiris 25 years ago there was a solitary bull near Kallar at the foot of the Mettupalayam Ghat, and at my suggestion the Nilgiri Game Association afforded him and his kin full protection. But no doubt he has passed on long ago and I never heard of any other in the district".

MOUSE DEER *(Tragulus Meminna)*:

"Every year a few are shot in small game beats" wrote Phythian-Adams. Between 1958 and 1964 mouse deer shooting was closed. Few beats were organised in the last twelve years and as a consequence very few mouse deer were killed by licence-holders. Being nocturnal they are

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

seldom seen except after a heavy shower when it is possible to see them on the margins of roads in the low country and on the northern and western slopes, at night. There does not appear to be any change in their status since the beginning of this century, except in places where forests themselves have disappeared.

HYAENA *(Hyaena Hyaena)*:

" Except for an occasional straggler on the plateau they are confined to the dry belt at about 3000 ft elevation round Anaikatti where they are common ", Phythian-Adams stated. Now they are by no means common even around Anaikatti. It is possible that their numbers came down when cattlemen poisoned tiger kills. However, their status has improved as compared to, say, five years ago as seen from their tracks

WILD DOGS *(Cuon alpinus)*:

Fletcher wrote of the wild dog —dhole— " crafty, untiring, cruel and relentless as fate, the wild dog is the curse of the country ". " This pest, which unfortunately is very numerous in the Wynaad..... "

Big bore advised " The wild dog should never be spared but shot on sight ".

In his 1927 note Phythian-Adams wrote " Up till 1923 a reward of Rs. 25.00 was paid for every wild dog killed in the area of which N.G.A. gave Rs. 15/-, Government contributing the balance. The results were satisfactory in that some 40 to 50 were destroyed annually. Unfortunately the adjoining districts did not co-operate, and skins of dogs shot outside the area were brought in, in such numbers that the N.G.A. in 1923 was forced from lack of funds to discontinue the reward. In 1926 it was decided to renew the N.G.A. reward (Rs. 10/-) ". This was raised to Rs. 20/-. Bounty was paid until 1976 when the Wildlife (protection) Act was enforced.

In 1939 Phythian-Adams wrote — " The marked variation in the numbers of wild dogs killed from year to year, is due partly to the reason already given but also doubtless to the periods of decrease and increase to which these animals are liable. Whether such decreases are due to disease is not known but certainly some of the wild dogs killed in 1937 were in a very mangy condition, and a number were found dead, probably from distemper in 1893-94, sometimes as many as 3 and 4 together in one spot ".

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

In 1949 in his series " Jungle Memories ", he wrote — " Wild dogs are resident in the Anaikatti area and have their breeding places there. They will not as a rule be, found at Mudumalai and Benne except during the dry months ". Phythian-Adams was of the view that long grass is an impediment to hunting; while affording cover to the deer the sharp grass blades cut up their pads.

In 1968 the present writer reported—"This animal seldom takes up residence on the plateau. Some years they do not visit the plateau at all. They are numerous in the low country and do considerable damage living mostly on young deer ". Three years ago a pair bred near Pykara and some packs were seen on the plateau right round the year. In the last few years the packs in the low country have taken to preying on domestic cattle, mostly calves, regularly. There do not appear to be any residents in the Nilgiri-Wynaad. Their population is subject to fluctuations. and distemper, seems to be the main cause. In 1965/66 there was such an outbreak. Following it, the bounty on the wild dog's head was withdrawn for 4 years. Dhole recovered from the set back in 2 years. To the dismay of the villagers in the low country wild dogs which have been considered vermin all along are now placed in Schedule II of the wildlife (protection) Act, requiring a special game licence for their pursuit which has not been issued in the past 2 years. Some control on their numbers especially during the years when the dhole population is on the increase, is necessary if people are not to take the law into their own hands and devise their wholesale destruction.

WILD BOAR *(Sus Scrofa)*:

In 1951 Phythian-Adams wrote in " Jungle Memories " — On the Nilgiri plateau they do great damage to the potatoes which form the main crop of the district and at one time the Government used to pay Rs. 5/- on each pig killed ".

In 1968, the present writer reporting on the status of wild life in the District wrote — " The pig population fluctuates. For some years they go on increasing then for some unknown reason their numbers go down ". They are plentiful at the time of writing.

Small game — Jungle fowl etc:

In 1968, the writer wrote—" There are fewer jungle fowl on the plateau today chiefly because the natural sholas are either being destroyed or replaced by bluegum or wattle plantations. Some of the famous

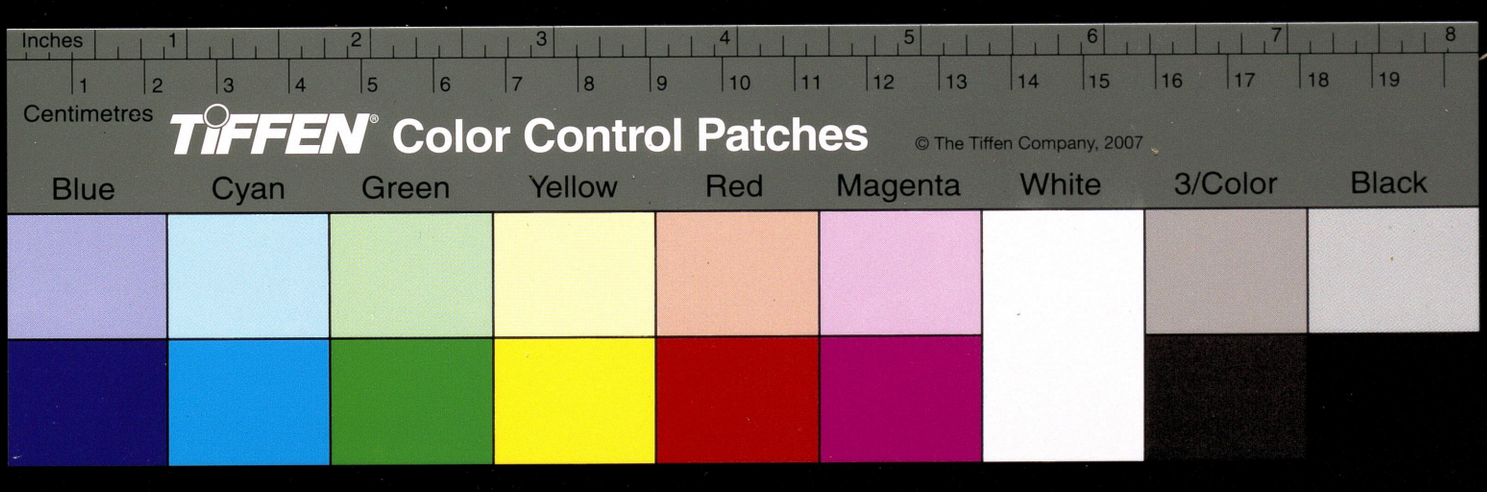
Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

wood-pigeon sholas have vanished. So far as the winter visitors namely woodcock and snipe are concerned there has been no appreciable change. But with the exodus of the resident European sportsmen who were chiefly interested in small game and practised beating for small game, there are fewer pursuers of game birds now. In the low country hare and jungle fowl have increased as compared to a few years ago. Peafowl have registered a larger increase".

The pressure on small game is much less as compared to the first half of this century. Very few, if any, small game beats are organised these days. Jungle fowl are on the increase in the plateau. In the low country their population is subject to fluctuations. A few years ago when bamboo flowered extensively in the low country, there was a big increase in the number of jungle fowl. Since then there has been a drop in their population.

Area wise the Gudalur area ('Nilgiri-Wynaad' is no longer used to refer to the area) has suffered the most loss. Forests have been cleared for cultivation and extension of tea and coffee plantations. In the transition from the Janmam system of land tenure obtaining there to the ryotwari tenure, there have been large scale encroachments followed by denudation of forests. Besides, except for a few privileged planters like Fletcher and others who resided in the area, the ordinary licence holder seldom penetrated the area and it therefore remained, for all practical purposes, outside the influence of the Association and to a lesser extent the jurisdiction of the Forest Department because the bulk of the forests there were private property. Further loss of wildlife habitat may be expected when the Pandiar-Punampuzha Hydro-Electric Project is taken up for execution.

On the whole the wildlife position is quite satisfactory, and could be considered very good indeed when compared to areas, which set out with a comparable stock of game as the Nilgiris one hundred years ago.



# THE FUTURE OF SHOOTING IN THE NILGIRIS

**R. Radcliffe**

The Nilgiri Wild Life Association, was born of the necessity to control the pursuit of Game in the Nilgiris as many undesirable practices were gaining influence: the slaughter, i.e. indiscriminate shooting and killing of animals and birds was taking place. The wholly discreditable actions of some arms license holders had to be curbed and what better way of doing this than by the institution of a voluntary organisation of interested persons, largely residing in the Nilgiris District.

The State Game Laws which the Association had been helping to implement has been replaced by the Wildlife (Protection) Act 1972, a Central Act. The Act and Rules have been designed for universal application all over India and thus do not have the same close association with the needs of the Nilgiris as the old Madras Acts and Rules, but they do serve as a basis on which local Rules and Requirements can be made. For proper and practical implementation of the new Act, it is essential that local Rules are made to suit individual areas which while carrying out the basic Policy, are flexible and suited to regional requirements.

The administration of the Act and Rules is now in the hands of a special Wildlife Wing of the Forest Department, and Wildlife Wardens have been appointed in the State along with their Staff. At present, both Big and Small Game licences are being issued but with very restricted limits on game that can be pursued or bagged. This is the first year of implementation of the Act & Rules in the Nilgiris and no doubt from experience gained, modification will be made in existing regulations. The Association works in close touch with the Wild Life Warden and there is an amicable and fruitful liason between the Department and the Association with a continuous exchange of ideas.

The Nilgiris form rather a special area in South India as being largely forest and less-heavily populated than most Districts and having a wide range of Game in considerable numbers. These conditions have attracted visitors from many parts of the Country and abroad seeking sport.

If the shooting of Game and the sport of fishing is to be allowed to be continued and there is every reason why this should be, for there is nothing unethical in this activity, then Rules are necessary, just as they were a century ago, to manage the sport. This sport not only satisfies the natural hunting instinct inherent in man but provides opportunities for the enjoyment of Nature and natural surroundings in a way that

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

nothing else can do. Also, there is the need to control the numbers and depredations of wild game in areas of habitation and agricultural activity. This is at present being recognised in the granting of Big Game Licences for the destruction of Wild Pig which do so much damage to the potato crop of the Nilgiris. However, this should not be the basis of granting licences to shoot only pig that the pig is a rather unlovely animal and eats potatoes ! — the Sambur can be equally destructive in its own way in a forest plantation and in the establishment of young shade in tea and coffee estates. Similarly, the elephant is a most destructive agent in cultivated and indeed, forest areas and left to its own devices will devastate its own habitat and cause very bad soil erosion. These considerations apply equally to many other animals and birds.

The cliche, " Balance of Nature ", so often heard when game shooting is discussed forms a shield behind which the ignorant, lazy or prejudiced hide to prevent game shooting by arguing that the balance of nature alone provide sufficient control. There is, of course, a Balance in Nature maintained in truly wild, unihabitated, unspoilt areas—a balance that is carried out in what we may term, a very savage and ruthless way. Those who have seen Wild Dogs' disembowel a fleeing deer—a panther maul and play with its quarry before killing and eating it—a tiger, wantonly killing far more than it can eat or needs — seen the starvation and death of herds of Wild Elephant in drought and famine conditions, a condition often created by their own over-population—the poor condition and miserable growth and slow death of fish in over-stocked rivers or ponds—will have some idea of the true meaning and implications of the term.

Some control of the numbers of various types of Game in the Nilgiris is essential if a reasonable and healthy stock is to be maintained, in what must be admitted, by even the most prejudiced against shooting, is an unnatural or not fully-natural living condition. The best way to exercise control is by well-regulated shooting by Game Licence Holders and it is hoped that this will be adopted as a policy by the State Government and that the Association, by its expert advice and experience, will be very closely associated with the making of Rules, issue of Licences and implementation of control measures.

*Sambur* are plentiful on the Plateau and increasing in numbers quite rapidly. In the Low Country they are not at all scarce.

*Cheetal* in the Low Country are plentiful but not increasing to any extent owing to over-grazing in the Sigur R.F. by thousands of head of scrub cattle and the destruction of trees by elephant, both causing erosion of soil and poor grass growth. They are tending to move into the more protected areas of the Mudumalai Sanctuary.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

*Bison* are increasing in numbers and are by no means scarce.

*Wild Pig*. The numbers remain much as before both on the Plateau and in the Low Country.

*Tiger & Panther* are able to exist and some increase in numbers is seen but any large increase can be ruled out as this is effectively curbed by poisoning by villagers and cattle owners.

*Nilgiri Tahr*. This certainly holds its own and herds increase. It should be possible to restore the herds in the Glenmorgan cliff areas by the planting of animals there after capture and strict control over the poaching which occurs in this area from near-by tea estates and local inhabitants.

*Woodcock & JungleFowl* are less on the Plateau than previously, this being largely due to destruction of Sholas and the undergrowth in them by Locals and Electricity Board Project employees who gather fire-wood in an unrestricted manner. In the Sigur R.F. and other Low Country areas jungle fowl are as plentiful as before.

*Hares*. These are numerous.

*Nilgiri Woodpigeon*. These have retreated to the bigger and more inaccessible jungles due to small sholas being disturbed and destroyed by fire-wood gathers and are therefore difficult to enumerate.

Licences for shooting could well be granted to take in a limited number of head of Cheetal: Sambur: Bison: Tahr and all small game with the latter category being inclusive of Wild Pig.

The granting of Licences and control in use would have to be most carefully carried out. Possibly there could be different Licences issued to Residents of the Nilgiris and those coming from outside with issues restricted both as to numbers and periods of validity with total, annual, regional bag limits for the District.

For the coming Year it would be as well to restrict all licences to present conditions but a commencement should be made now to formulate a satisfactory Policy and Administration for 1978/79 so that a sound shooting Plan may be evolved.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

# SHIKARI JOE

H. L. Townsend

I recently had occasion to seek professional opinion, as to the best way of trapping the hundreds of pigeons which are creating havoc with the Nilgiri Library roof. What better man than Shikari Joe.

As is always the case when kindred spirits meet, reminiscences of the good old days become inevitable. Joe is now 76 years of age and started his career as a gun bearer, under the watchful eyes of his father, who was also a shikari of some note.

The majority of sportsmen visiting the Nilgiri plateau combined shooting with fishing, both forms of shikar being readily available from any of the many camping sites, or the several game huts, set in beautiful and, in those days, undisturbed surroundings.

It was not long before young Joe became one of the best fishing guides on the hills and skilled in the practice of this art. In the meantime, under the expert tuition of his father he learned the holding grounds and habits of every type of game, not only common to the plateau, but also the low country.

In those days it was customary for resident sportsmen to retain their own personal shikaries but this was not for Joe. He became the guide, general factotum and (as many of his chits show) friend, of visiting sportsmen, mostly senior military officers, whilst Government House was his special preserve. A large book could be written based on the stories, stored up by Joe over the years, but a few random incidents will suffice to illustrate his versatility in the profession.

For Joe, elephant shikar held few charms. A rogue was proscribed and a Captain Southey went in pursuit. The elephant was located near Sirur. Joe relates how the brave Captain fired seven shots from a .423 rifle, in his own words " all over the body " and " was left wounded. " This elephant was finally accounted for by the late Lt Col E. G. Phythian Adams.

Of tiger there were many. Almost every shola along the western hills held one or more in due season. Machans were not used on the plateau but beats were organised and, if specifically for tiger, whatever else came out was spared. This form of shikar was Joe's speciality and he was in at the death of over 50 tigers, not all in beats, but most of them.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

Tiger did from time to time come close to the town. Near the old Boat House, a pony was taken and the tiger lay up behind Woodcock Hall (now the hotel Brindavan). The cover was good, cultivation had not then denuded the property. Dr. Willoughby-Grant had a chance shot but missed. Some days later the tiger was reported as lying up in the Aramby forest, and Joe organised a beat for H. H. the Maharaja of Bhavnagar. The tiger was wounded, near the Wadia school on Ampthill road, and turned back into the beat. "What happened then Joe, did you get it?" No "it catch me here" demonstrates left thigh! The tiger was shot and Joe had 81 days in hospital. This type of accident was not uncommon and Joe relates several instances one of which was fatal.

Ibex were his next love. He relates how he would proceed to the grounds and locate a suitable trophy, word being sent back to the gentleman concerned. In those days, before the lakes were formed, there were numerous short cuts to Mukerti and Nilgiri peak. Apparently it was not uncommon for the sportsman to leave Ooty about one A.M. with his ponies and be back in time for dinner with a saddleback. Up to 1947 Joe had accounted for about 70.

Panthers were not uncommon but were not considered to be worth any special efforts to bring to bag, in fact Joe dismisses them as only chance — 13 or 14 being his total account. Of black panther he only saw six, again by chance, three at Avalanche, two at Mukerti and one at Nilgiri peak.

The fishing in his day must have been out of this world, trout of 3 lbs. being common in the Bhavani puzha and Billithada Halla streams whilst in the Mukerti river before the dam was built anything below 7 lbs. was considered small fry. Fishing these spots took organisation and Joe was the man. Ponies, tents, supplies were in his hands and his competence, as evidenced by his references, must have been of a very high order.

Joe is a modest man and very reluctant to come into the limelight, his personal experiences being considered nothing unusual — all part of the day's work.

Looking through the large bundle of chits, many on crested paper, one reaches the conclusion that Joe was a most popular master of his craft, now the last of a dying race. And — a natural gentleman.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

# BIRD LIFE IN A EUCALYPTUS PLANTATION
## AS COMPARED TO A SHOLA OR INDIGENOUS TYPE OF FOREST

Priya Davidar

The *Eucalyptus globulus,* was, along with other eucalyptus species, introduced into Nilgiris in the mid 19th century. And now covers large areas of the plateau.

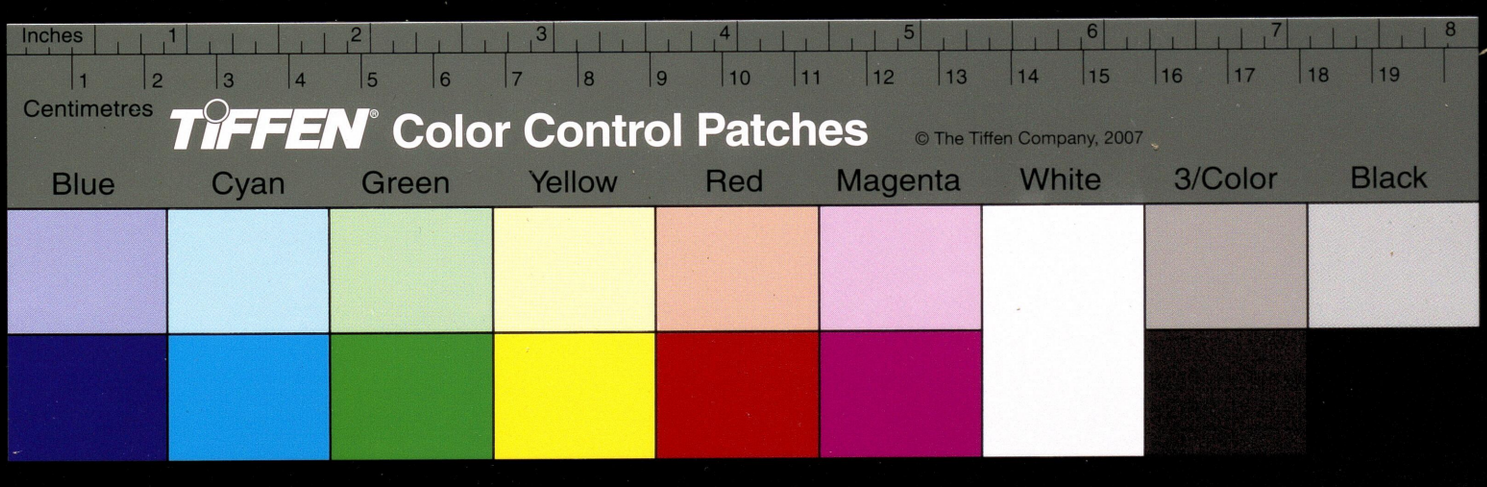
Ecologically speaking the eucalyptus has not evoked much enthusiasm. Apart from being blamed for drought, and other climatic ills of the district, this exotic, introduced from Australia, may not be a healthy substitute for the natural vegetation it has replaced. The sholas, technically, the Southern Montane Wet Temperate Forests—and the grasslands of the Nilgiris, form a refuge and habitat for a wide variety of life that is adapted to live in them. In order to make a comparitive study of the extent to which the birds of this region have adapted to the eucalyptus plantation, I undertook a brief survey in the course of my research study in *ornithophily,* with the encouragement of Dr. Salim Ali.

Two plots were taken of 10,000 sq. m. each in area. The first plot was in a shola, Sims Park R.F. I, and the second in a eucalyptus plantation, Sims Park R.F. II. Both plots were similar in location and had a stream flowing through. The study was undertaken during a period of six weeks, in June/July 1977. Bird and insect population counts were taken in each study area once in 7 days.

The eucalyptus plot may, originally, have been a shola judging from the few specimens of this type of vegetation found. It was planted with *Eucalyptus globulus* in 1964. As the area was within the Coonoor Municipality limits, it was not subject to the disturbance of felling.

The trees were about 30 m. high. *Acacia dealbata* and *Callitris rhomboidea,* both introduced from Australia, are also common in the plot. Shrubs are sparse, Acacia and Callitris saplings being common. Along the stream, the variety and number of shrubs was more and formed adequate cover. *Solanum robustum, S. auriculatum, Cestrum aurantiacum, Rubus spp., Datura, Lantana camara,* being the most common.

The principal trees found in the Shola were *Turpinia nepalense, Ilex wightiana, Garcinia cambogia, Litsaea ligustrina, L. wightiana,*



*Ilex wightiana, Garcinia cambogia, Litsaea ligustrina, L. wightiana, Ternstroemia japonica, Elaeocarpus oblongus, Gordonia obtusa,* and *Vaccinium leschenaultii* Whilst the shrubs were mainly represented by *Chomelia asiatica, Psychotria congesta, P. bisulcata,* and *Maesa perrottetiana.* The shrubs formed adequate cover and there was no appreciable difference in density, close to, or away from, the stream. Herbs and climbers were numerous. Some of the trees were found to be host to the parasite Loranthus.

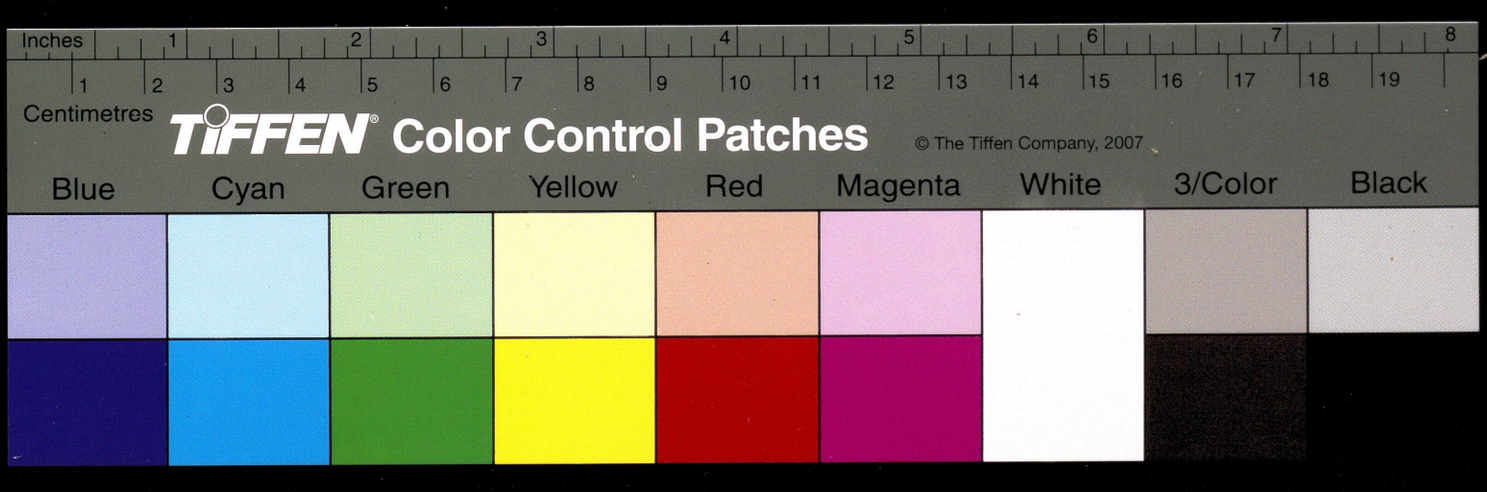
The results obtained at the conclusion of the study show that there were 26 species of birds in the Shola, and 18 species in the eucalyptus plantation.

On considering the population of insect eating birds, it was found that the Shola held 14 species, whilst the eucalyptus plantation held 12 species. On an average, the total number of insectivorous birds in the shola was 26,whereas in the eucalyptus plantation only 10. The population of insects in the shola was 8-10 times greater than that of the eucalyptus plots. In this plot the number of insects increased with proximity to the stream, but in the Shola this was not found to be so.

Seven species of fruit eating birds were recorded in the Shola, and three in the plantation. On an average there were 32 birds in the shola, and 6 in the plantation. One of the reasons for the dearth of frugivorous birds in the eucalyptus plantation was that only one fruiting plant — *Solanum auriculatum,* was represented, whereas the Shola held 11 fruiting species.

The small sunbird was found in almost equal numbers in both plots. Their chief source of nectar in both areas being the flowers of introduced species. Jungle crows were found in equal numbers in both areas.

This data is relevant only to a plantation of *Eucalyptus globulus.* Having regard to the foregoing there would appear to be ample scope for research into how suitable or otherwise monoculture may be as a habitat for birds, and its general influence on local ecology.



# ASHTAGRAHA AND I

(A Fishing Tale)

**E. R. C. Davidar**

The meeting of two or more planets in a particular " House " is a common occurrence, but it is a rare event for eight planets to meet. So rare that it is supposed to occur only once in a century or so. Such a conjunction is known in Indian astrological circles as ashtagraha. On 4th February 1962 there was such a meeting. Astrologers considered the meeting most inauspicious and many of them predicted the end of the World on that day. The average Indian is a firm believer in astrology and even if he did not readily believe this predicted catastrophe he expected ashtagraha to affect him substantially. Astrologers, of course, had a field day.

The day happened to be a Sunday and friends whose company I sought were nowhere to be seen. I did not have the heart to disturb them in their homes and spoil their meditations and penances !

I am a sceptic in such matters. Having nothing else to do I could not think of a better place than the wide open spaces of the Nilgirs to be in on such a day. The worst that could happen there would be for the sky to fall ! But then it would not be selective.

I therefore decided to go to Avalanche, famous for its rainbow trout, to fish. My wife hurriedly packed some lunch and we set out in our old Morris. When we reached Emerald Camp 14 Km .away I remembered that, in my hurry, I had forgotten to put in petrol. If I could get petrol at all on the way, Emerald was the only likely place. I stopped and made enquiries. Along came a friendly policeman and offered to take me to the Electricity Board store where, he said it might be possible to get some. He promptly got into the car and sat on something on which policemen are not supposed to in a state which is " dry ". I discovered my mistake too late and thought my world was going to end But the policeman was the understanding type and he pretended not to notice.

We found the store locked. Left with the choice of turning back or risking the trip to Avalanche, hoping that the petrol we had was sufficient to take us there and back we carried on. If the predicted

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

disaster overwhelmed the world, we reasoned, what had we to lose even if we get stranded. And so to Avalanche and to a point where the Avalanche river joined the lake. The river and a small section of the lake were closed to fishing until the end of the month. Below a certain point it was open to fly fishing only. After assembling the rod I left the family behind and crossed the river, which at that point, was no more than a few yards wide and made for the small stream which plunged into the lake in a two tiered fall. I approached the waterfall cautiously. Crouching by the waterfall I saw a congregation of large trout trying to negotiate it to reach the stream above. Every fish made several frenzied efforts to leap over the fall, only to fall back beaten. It was a lovely sight to watch these arched power-packed bodies flashing like dozens of miniature rainbows in the bright mid-day sun.

I cast my favourite fly, a March Brown, into the frothy waters at the foot of the lower fall. I was sure of a strike at the very first several times but drew a blank. I felt annoyed that these fish should ignore my bait. Then I changed my small March Brown for a large Alexandra .But that too failed to produce results. Without changing my position I flicked the fly overhead into the pool at the foot of the upper fall. A fish that had some how got in there when the level of the lake was higher took more interest in the fly by following it. But it was not interested enough to take it. I reverted to the lake. I changed several flies, tied a dropper and tried long casts and short ones; deep as well as surface casting. The fish continued to ignore the flies. I was fed up and on the point of giving up when I discovered a giant home made fly, a cross between a Coch-y-bondhu and a March Brown. For the last cast before packing up and going elsewhere I decided to try it. It was a haphazard cast, but as he fly touched the water, it was sucked in. The fish fought well, but being open water it had no chance. I brought it in and landed it with the aid of a man I had recruited near the spot. It was not a large fish and was just short of a pound in weight but it was in good condition. For the next half hour I cast repeatedly. Except for one foul hooked fish which fortunately got away (as I would have had to return it to the water) it was unrewarding work.

I went back to where the main stream joined the lake. Before starting to fish I took my wife and children to the closed section of the stream to show them trout going up to spawn. We saw an amazing sight. In a pool just below the shallows where the " redds " or spawning beds were, were hundreds of trout of various sizes, drawn up in rows,

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

with almost military precision, facing the current awaiting their turn, or probably the urge, to get up stream to the spawning grounds. There were smaller congregations in every pool. And this was almost the end of the spawning season! We were so thrilled watching them that we spent a considerable amount of time there.

After lunch I started my second fishing session. The open area was deep and the fish could not be seen as they lay well below the surface. I cast wherever a fish rose but my fly was ignored. The watcher who was around suggested that I might sink the fly deep before drawing in it. This was more easily said than done. The dressed line took a long time to sink. The dull flies I normlly used had no effect. I changed them to something shiny, a butcher and a golden March Brown for work deep down. The moment I started drawing in I was taken. The fish, a one pound male, fought well but tired quickly. The next cast produced a fish, but it got off the hook in its struggles. After a few more casts, I got a 1½ lb fish in fair condition. This type of fishing did not require much skill except the 'skill' required for sinking weightless flies and I got tired of it and moved away.

Before the Avalanche river was dammed in 1960 it was a fly fisherman's dream. Crystal clear, with every type of water from cataracts and rapids to slack water and ostensibly still pools the stream satisfied the most demanding fly fisherman. Above all, here was nature in its pristine glory; beautiful surroundings and the solitude which every angler craves.

All this had changed in a short time. Dam and power house builders in their hundreds were everywhere. Tunnel diggers set off dynamite blasts every few minutes. The surroundings were fouled and dirty and sholas were disappearing fast.

But the fishing was excellent and remained good for four years or so after the lake was formed. The backed up dam water overran sholas, meadows and fields and in doing so brought to the fish population an unexpected supply of worms and insects on which they fed sumptuously. and put on weight rapidly. Within a year or two toddlers became one pounders and one pounders averaged four to five pounds. This food supply was already tapering off. But the more alarming development was that the stock of fish was dwindling. And there was little prospect of naturally bred trout replacing the lost stock as much of the length of the Avalanche river which was spawning ground now lay submerged. It was doubted that the re-opening of the hatchery which in 1960 seemed

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

a luxury because of overstocked streams abounding with wild trout and the re-introduction of " closed " seasons would compensate the loss. It was saddening to ponder these thoughts.

[Today, in 1977, the doubts are confirmed. Avalanche is a wash out as far as the rainbow trout is concerned. Mirror carp have " found " their way into this exclusive trout water. The blame for this state of affairs is not entirely nature's. With efficient management the fishing in Avalanche could have been saved. The withdrawal of the dedicated amateur from the scene, who had been associated with the management of the trout fishery through the Nilgiri Wild Life Association, on the fisheries department assuming control, was reflected in the increase in poaching and other ills. Avalanche was not an isolated case. Most of the other dams that came into being around that time, particularly Emerald, Parsons Valley and Porthimund suffered the same fate.]

But now back to our tale of fishing. At the junction of the stream and the lake a lot of floating debris had collected and, as I was afraid of getting snagged, had not tried that place earlier. But otherwise the spot was inviting. I decided I would risk it and cast my flies on the floating rubbish and jerked the line to get my flies through. Even before the tail fly could get through fully it was jerked below. The reel sang as the fish raced away. I played it firmly yet gently guiding it away from the floating snags. In its wild fight to get away the fish leapt into the air twice and tried every little trick it knew to get off. But my luck held. It fought every inch of the way before coming in. The spring balance registered its weight as $2\frac{3}{4}$ lbs. My family had a ring side view of the encounter and enjoyed it thoroughly.

A few casts later I was into a tremendous fish. The line became unbelievably active and the rod made a fine arc, as the fish rushed madly about. Failing to dislodge the fly it leapt into the air twisting and turning. We gasped in disbelief. I had never before got into a trout of such proportions. It looked bigger than the five pounder in the hatchery pond. It leapt again. There was a jerk and the line went limp. I hauled it in cursing myself for my inept handling of the fish. But when I examined the damage I was no longer angry with myself. The cast remained intact, but the fish had succeeded in breaking the hook !

That big one had so thoroughly disturbed the area that no fish would look at my fly. I gave the water a rest while we had tea. Later I succeeded in landing a $1\frac{1}{2}$ pounder. The bag limit then was 7 lbs. I had filled my bag and so we packed up. The car did not stop on the way for want of petrol and I had feared. Nor did the world come to an end except for five fine Nilgiri trout.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black

## THE CHALLENGE OF 1977

*" The preservation of wildlife and conservation of nature and natural resources of the Nilgiris "*
*Object of the Nilgiri Wildlife Association.*

The object of the Association has undergone a subtle change. Management of wildlife will no longer be the function of the Association. Consequent upon the enforcement of the wildlife (protection) Act 1972 in 1976 the control over shooting in the State has been taken over by the Administrators of the Act, namely, the wildlife wing of the Forest Department set up in 1977 headed by a Chief Conservator of Forests with a chief wildlife warden, wildlife wardens and other staff under him.

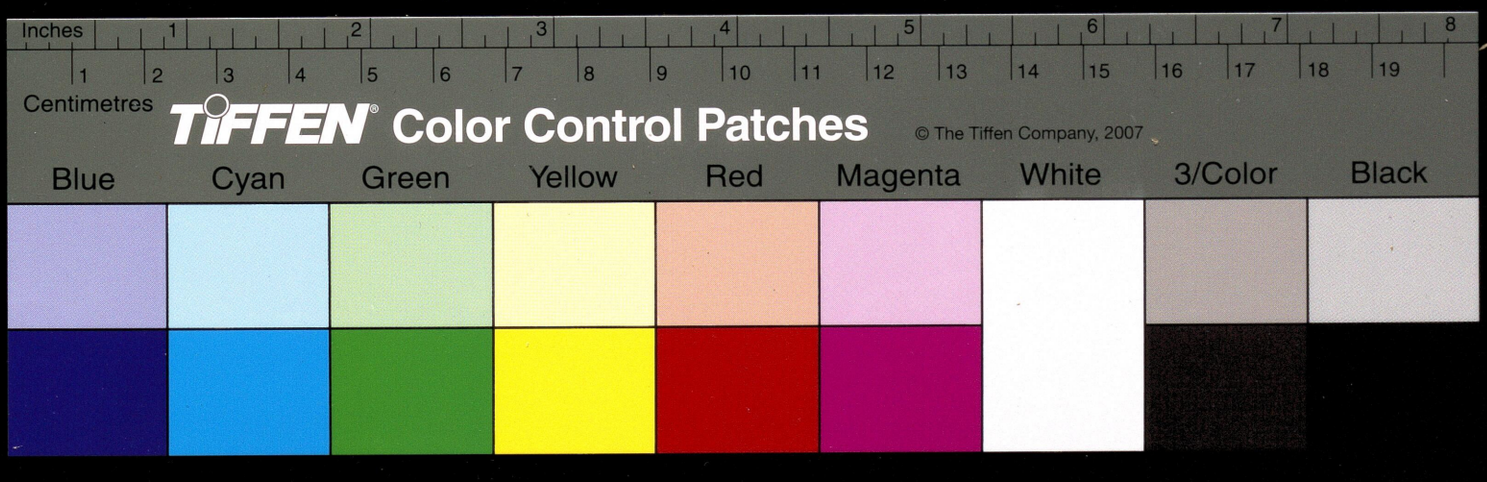
But the Association with the experience and expertise gained over the years will, it is hoped, continue to play an important part in wildlife management; in an advisory capacity, through its representation on the State and Indian wildlife advisory boards on which it is represented and in the field. The Association and its members could help in wildlife census and survey operations.

The wildlife wing of the forest department is a small organisation and is expected to confine its activities to sanctuaries. It would therefore require the co-operation and assistance of the Association and its members in administering the Act in other areas.

Nilgiris is a sensitive area, where much of the cultivation that is done is at the edge of the jungle and wild pigs, particularly, are a nuisance. There is already a demand, backed by political pressure, to relax the provisions of the Wildlife Act. Unless a realistic policy is adopted the pressure is likely to build up to such an extent that it will eventually damage the very cause of conservation. In this situation the Association can be moderating influence.

As regards finances, income from investments, subscription income and the annual grant of Rs. 10,000/- sanctioned by the Tamil Nadu Government to compensate the Association for the licence fee income lost (which is gratefully acknowledged) will be the main sources of income. Miscellaneous income from sale of books, maps, rent for occupation of Association bungalows will be another source. When the

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches © The Tiffen Company, 2007
Blue Cyan Green Yellow Red Magenta White 3/Color Black


Inches
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
TIFFEN® Color Control Patches
© The Tiffen Company, 2007
Blue
Cyan
Green
Yellow
Red
Magenta
White
3/Color
Black